

SOME ASPECTS OF LABOUR COSTS AND EARNINGS 1974 AND 1975

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BACKGROUND TO THE DATA

Since 1975 the Central Statistics Office has conducted two special surveys concerned with total labour costs – one covering certain parts of the services sector and the other covering the industrial sector. A further survey concerning the earnings of individual workers was also conducted in the same parts of the services sector. These surveys have been taken in compliance with EEC Regulations and fall in the pattern of regular such inquiries carried out on a three year frequency in the EEC since 1966. The Labour Costs surveys are concerned with annual details of all costs specifically associated with labour e.g. those costs normally considered as fringe benefits or social security costs in addition to wages and salaries as well as training costs. The first related to costs in 1974 for Retail and Wholesale distribution, Banks and other Credit enterprises and Insurance Companies while the second related to costs in 1975 for the industrial sector.

The individual earnings survey which was conducted in association with the 1974 “Costs” survey in the services sectors was concerned with earnings and other characteristics of a sample of individual employees within the firms covered. This “Structure of Earnings” survey, to give it its EEC title, related earnings of sample employees in October 1974 to such factors as age, sex, length of service and occupational status.

The number of enterprises covered in the services sector was just over 1,000, i.e. over 500 in Wholesale, over 400 in Retail, about 50 Credit enterprises and 30 Insurance companies. In the industrial sector about 2,300 establishments were covered.

The Statistical Office of the European Communities issues the results of these surveys in a series of publications¹ which include data for the nine Member States. The intention of the present paper is to bring together some of the results of the various Irish surveys and, it is hoped, to highlight and discuss some of their more interesting aspects. Regular labour costs or earnings data are not compiled in detail for the services sector and while the regular industrial inquiries provide a great deal of information on earnings, the present surveys focus on total labour costs and their structure and variability by activity and by size.

A brief word on terminology. The term “enterprise” is used extensively throughout the paper to denote a business with all its branches (strictly defined as having a common ownership with a separate balance sheet). An “establishment” on the other hand is taken to mean a local unit engaged principally in a single economic activity. Furthermore to avoid confusion in the use of the (statistically) overworked word “distribution” we shall refer simply to “Retail and Wholesale” or to the “distributive sectors”.

¹ See Appendix 5

We shall first look at the two "Costs" surveys and then at the 1974 Structure of Earnings Survey. Some of the detailed tables are rather large so we have arranged these in Appendix 1. We shall, in addition, briefly look at some international comparisons of the structure of labour costs for the services and industrial sectors.

LABOUR COSTS IN CERTAIN SERVICES IN 1974

The Survey

Detailed descriptions of methodology classifications etc. are given in the publications² so we shall not overburden this paper with them. Certain aspects do however require mention. The scope of the survey, which was determined by the EEC requirements, was rather unusual. It extended to Wholesale and Retail (excluding garages and public houses) on the one hand and to Credit enterprises (including Associated Banks, hire-purchase companies, merchant banks, building societies and savings banks but excluding the Central Bank and Post Office Savings Bank) and Insurance (brokers or independent agents were not covered) on the other hand. The unit of survey was the enterprise and only those with 10 or more employees were included. This lower limit of 10 employees is quite important in interpreting the results for the Retail sector in particular. Thus while there were 26,000 employees in the retail firms covered in the survey it is estimated from the Labour Force Survey that in all there were about 54,000 employees in the retail trade – so that just over one half were outside the scope of the survey. For Wholesale the coverage is greater since only about 3,000 of the estimated total 33,000 employees are similarly excluded. The coverage of activities such as the retail sale of medical goods (chemists) which is dominated by smaller firms is very low indeed (this category is grouped arbitrarily in the accompanying tables with retail distribution of food, drink and tobacco).

For Credit institutions and Insurance enterprises the lower limit of 10 employees had little significance as these sectors are covered almost in entirety.

Turnover information for Retail and Wholesale derived from the Census of Distribution 1971/72 was used to establish the activity classification, and the groupings presented here are based on the N.A.C.E.³ classification of the EEC. We have not compiled any of the data using the "descriptions of business" categories employed in other CSO statistics but if required an indication can be given of the approximate correspondence.

A summary of the items of data collected is given in Appendix 2. For enterprises with fewer than 50 employees a "simplified" version of the questionnaire was used, though we quickly came to the conclusion that this was probably a mistake in the sense that firms were more likely in this field to supply detail accurately than to summarise. There was some difficulty with regard to the definition of trainees but as a general rule these were employees regarded by the firm as being engaged in training and whose earnings were correspondingly affected.

Response to the survey varied somewhat between the different activity and size categories but in general was satisfactory. In Retail about 90 per cent and in Wholesale about 94 per cent of enterprises responded. Response in the Credit and Insurance sectors was close to 100 per cent. The results presented here have been grossed up for non-response, grossing factors being calculated for a number of activity by size categories.

² See Appendix 5

³ Nomenclature General des Activités Economiques dans les Communautés Européennes.

Costs per Employee and the Distribution of Costs

In Table 1 below we show the annual labour cost and the annual earnings per employee for the principal activities involved. As indicated in Appendix 2, data were collected on the numbers of part-time employees and the number of "whole days" worked by them. Using these data average costs and earnings per employee have been derived taking full-time employees plus part-time employees adjusted to full-time equivalents.

The economic sectors covered in the survey are rather different and it is perhaps not surprising that the levels of labour costs show such variability. Credit enterprises had somewhat higher average costs than in Insurance, £3,402 compared with £3,189 per employee but earnings represented a higher proportion of costs in Insurance. In the distributive trades average costs in Wholesale were, in general, higher than those in Retail. "Wholesale distribution of fuels, ores and industrial chemicals" had labour costs nearly 50 per cent above the average for the Wholesale sector as a whole and earnings represented about 84 per cent of costs. In the other distributive activities earnings were a remarkably constant 87 to 90 per cent of total costs. It is necessary to recall, in speaking of these

TABLE 1: ANNUAL LABOUR COSTS PER EMPLOYEE, 1974

Principal Activity	Annual costs per employee	Annual Earnings per employee
	£	£
Wholesale Distribution		
Agricultural and other raw materials; live animals	1,921	1,714
Fuels, ores and industrial chemicals	3,366	2,816
Timber, building materials	2,222	2,015
Machinery, equipment, vehicles	2,405	2,154
Furniture, household goods	2,150	1,947
Textiles, clothing; footwear	2,318	2,032
Food, drink, tobacco	2,009	1,813
Pharmaceuticals, cosmetics, polishes, etc.	2,087	1,868
Other wholesale	2,315	2,058
Total Wholesale	2,263	2,014
Retail Distribution		
Food, drink, tobacco and chemists	1,852	1,644
Clothing	1,789	1,576
Footwear, leather goods	1,563	1,347
Furnishing and fabrics	1,635	1,435
Household fitments	1,908	1,717
Books, newspapers, etc.	1,753	1,561
Distribution of a variety of non-food goods	1,853	1,612
Other retail	2,130	1,874
Total Retail	1,849	1,628
Credit Enterprises	3,402	2,445
Insurance Enterprises	3,189	2,494

detailed activity categories, the relevance of the exclusion of enterprises with fewer than 10 employees. For example we would estimate (based on the 1971/72 Census of Distribution) that only about half the employees in the category "Retail distribution of footwear and leather goods" are covered.

Table A in Appendix 1 gives the percentage distribution of labour costs over the various components. As pointed out already the pattern for the financial activities is rather different to that in Wholesale and Retail. Costs other than earnings (or wages, salaries and direct payments) in Credit and Insurance enterprises were 28 per cent and 22 per cent of total costs respectively.

"Employers' statutory contributions to social security" represented about 5–6 per cent of costs in the distributive sectors ("Wholesale distribution of fuels etc." excepted) and about 3.5 per cent in Credit and Insurance. It is however interesting to note that the average level of statutory contributions showed (with one or two exceptions) little variation between the different activity categories. In fact in April 1974 the scope of the statutory insurance scheme was extended to all employees and pay-related contributions were introduced for certain employees. Thus the relatively constant average figures emerge partially from the old and the new schemes.

"Employers' voluntary contributions to social security" which mainly comprise pension fund contributions were considerably more variable. Nearly 16 per cent of costs in Credit enterprises and 10.5 per cent in Insurance were accounted for by these payments. These contrast with the average 3–4 per cent in Retail and Wholesale and reflect the considerably more developed pension fund arrangements in the financial institutions. Indeed in some Retail activity groups this percentage was as low as 1–1.5 per cent. A full analysis of pension arrangements within firms covered was not intended but it may be of interest to look at this aspect a little more closely. In the financial sectors nearly all enterprises in fact had pension provisions. Only for the larger (≥ 50 employees) enterprises in Retail and Wholesale was the question on pension fund contributions asked separately; so we are confined to these. For those enterprises reporting some contribution to pension funds the percentage of labour costs was 4.8 per cent for Wholesale and 3.8 per cent for Retail. The absolute figures were an average £108 per employee in Wholesale and £70 per employee in Retail. No data, however, were collected which would show the numbers of employees provided for by these contributions. In Table 2 below we give for these larger Wholesale and Retail enterprises the reported proportion of firms with some pension fund contributions. Despite the limitations of the data it is of interest to note that a fairly large proportion of the smaller enterprises report no pension provisions.

TABLE 2: PROPORTION OF FIRMS BY SIZE REPORTING SOME CONTRIBUTIONS TO PENSIONS, 1974

Category	Size – Number of Employees				All ≥ 50
	50–99	100–199	200–499	≥ 500	
			%		
Wholesale	81.3	88.6	100.–	100.–	86.7
Retail	61.5	76.2	100.–	100.–	75.3

In the financial sectors "other costs" which include the cost of subsidised interest loans and training costs were much higher at 8–8.5 per cent of the total compared with an average 2–3 per cent in the distributive sectors. There was a certain amount of subjectivity in applying the definition of trainees and so it is possible that training costs are a little understated in some of the wholesale and retail activities. "Payments in kind", apart from the subsidised loans in financial enterprises, were reported as being quite low in all sectors.

Since separate data on overall costs were not collected for males and females or for manual and non-manual employees we cannot further analyse the different patterns of costs between the sectors by reference to factors such as these. The classifications of earnings by sex and occupational status from the "Structure of Earnings" survey do illustrate the differences somewhat more clearly. We would note that the proportion of manual workers is rather higher in Wholesale than in Retail and also the proportion of female workers is fairly consistently lower in Wholesale.

Respondents were asked to report the annual "customary" hours worked by the bulk of their employees (taking holidays and sick absences into account). Annual hours worked in Wholesale and Retail were 1,936 and 1,907, respectively, while in Credit enterprises the figure was 1,706 and Insurance 1,729 hours. While we do not regard these as the most reliable data collected in the survey the sectoral differences appear to be confirmed by the individual weekly data obtained in the Structure of Earnings Survey. Part-time workers (about 2 per cent of the work force in Wholesale and 7 per cent in Retail) were engaged for an average of nearly 80 days (or equivalent days) in the year.

Some Data Classified by Size of Enterprise

Confidentiality considerations limit the possibilities for analysing the survey data according to size of enterprise. This is particularly so in the case of the Credit and Insurance enterprises but it is worth taking a brief look at the effect on some of the results for the distributive sectors.

Table 3 shows the development of average labour costs per employee when classified according to number of employees in the enterprises.

TABLE 3: LABOUR COSTS AND EARNINGS PER EMPLOYEE BY SIZE OF ENTERPRISE, 1974

Category	Size – Number of Employees						All ≥ 10
	10–19	20–49	50–99	100–199	200–499	≥ 500	
	£						
<i>Wholesale</i>							
Costs	1,943	2,061	2,160	2,258	2,446	2,640	2,263
Earnings	1,746	1,865	1,939	2,025	2,183	2,239	2,014
<i>Retail</i>							
Costs	1,580	1,692	1,803	1,726	1,926	1,999	1,849
Earnings	1,379	1,497	1,605	1,546	1,726	1,738	1,628

The increase in average costs is almost monotonic with size in both Wholesale and Retail although the upward trend in average earnings in Wholesale is a little less pronounced indicating that other cost elements are heavier in the larger enterprises. Costs

in the largest size category, ≥ 500 employees, exceed the average by 17 per cent for Wholesale and by 8 per cent for Retail enterprises.

Table B in Appendix I shows for Wholesale and Retail the percentage distribution of costs by size of enterprise. Statutory contributions to social security tend to account for a smaller percentage of costs in the larger size categories reflecting their fairly constant absolute level. In contrast, as noted in discussing pensions, the voluntary contributions account for a higher percentage of costs in the larger enterprises. Only in the largest size class does there appear any really significant change in the pattern in either sector. The relevance of the enterprise as statistical unit should be noted in relation to analyses by size. It is not clear how different the pattern would be if the establishment or local unit were used since some cost elements (e.g. pension arrangements) may be uniform across enterprises irrespective of establishment size.

Finally in Table 4 below we give the size breakdown of the numbers of full-time employees in the distributive enterprises covered which should help to put the above results in perspective. The proportion of female employees does not rise much above 25 per cent in any of the size classes for Wholesale. In Retail, while the proportion of females for the smaller classes remains at or about 50 per cent, it rises to nearly 60 per cent in the 200–499 class and to over 60 per cent in the ≥ 500 class.

TABLE 4: NUMBER OF FULL-TIME EMPLOYEES BY SIZE OF ENTERPRISE, 1974

Category	Size – Number of Employees						
	10–19	20–49	50–99	100–199	200–499	≥ 500	All ≥ 10
	('000)						
<i>Wholesale</i>							
Males	1.8	4.3	4.4	4.9	4.6	3.0	23.1
Females	0.6	1.5	1.0	1.5	0.9	1.0	6.5
Total	2.4	5.8	5.4	6.4	5.5	4.0	29.6
<i>Retail</i>							
Males	1.3	1.7	1.3	1.5	1.3	3.9	11.1
Females	1.2	1.8	1.2	1.4	1.8	5.9	13.2
Total	2.5	3.5	2.5	2.9	3.1	9.8	24.3

In Table C Appendix I, which gives the numbers of full-time employees, male and female, in the enterprises covered, the detailed activity breakdown for Wholesale and Retail is included. The totals, of course, correspond closely with the grossed up figures given later from the Structure of Earnings survey (which, however, include part-timers). Nearly eighty per cent of the employees in Wholesale and forty five per cent in Retail were male. In those enterprises about 20 per cent of employment in Wholesale was in the distribution of “Agricultural raw materials, etc.” about the same as was in wholesale distribution of “food, drink and tobacco”. In Retail the distribution of “food, drink and tobacco” together with the distribution of “a variety of non-food goods” accounted for about 70 per cent of the employment covered.

Data Quality

Before leaving the 1974 “Costs” Survey we shall make one or two remarks on data

quality. This was the first such comprehensive survey of labour costs in Ireland so it is difficult to find objective measures of the quality of the data supplied. An intensive field effort and follow-up (covering both this and the Structure of Earnings survey) was mounted. This was found necessary in particular because the "additional" items of labour costs were often at first disregarded by firms. Data on basic wages and salaries, bonuses and statutory social security contributions in general did not give many problems for respondents but the other items were often not recorded in easily accessible form. Thus most firms had at least one visit from the field officers at some stage in the survey. The information on annual hours worked gives at best a reasonable estimate of "customary hours". It is felt that the data on hours worked is better collected either for shorter periods or for individuals as in the "Structure of Earnings" survey.

LABOUR COSTS IN INDUSTRY, 1975

The Survey

As with the 1974 survey just described, while not going into a detailed description of the methodology, we do need to outline some essential elements which should help to put the results in a proper perspective. The scope of the survey extended to all industrial activities viz. manufacturing, mining and quarrying and to electricity, gas and water supply. In this paper we have omitted "water supply" establishments as these are in fact integral parts of local authority administrations. In contrast to the earlier survey the establishment, or local unit, was taken as statistical unit. Establishments with 10 or more employees only were included. The questionnaire was more detailed and incorporated a breakdown of costs etc. between manual and non-manual workers. In addition to annual data on wages and salaries for time worked, details of sick pay and holiday pay were also sought. Separately identified also were employers' contributions to social security both voluntary and statutory, payments-in-kind, training costs and other social expenditure as well as data on numbers employed and hours worked — a full list of the items included is given in Appendix 3. The questionnaire content and other general characteristics were determined by the relevant EEC Regulation although the precise form and survey design were individual to each Member State.

It is estimated that the exclusion of establishments with fewer than 10 employees meant that about 3 per cent of employees in industry were outside the scope of the survey. As will be seen from the results described below there is a strong correlation between size and some cost elements so it cannot be assumed that the patterns for small establishments would be "average" ones. The effect of this on average costs is likely to be small but could be significant in examining specific activities where the number of small establishments is relatively high e.g. parts of food manufacturing and wood and furniture.

One important consequence of the use of the establishment as statistical unit is that some meaningful regional analysis of the results may be done. Confidentiality and reliability considerations limit this however and we are therefore restricted to a summary classification by activity. Indeed, in the publication of the detailed results by the EEC (in a series of volumes for the Nine as mentioned) no regional data for Ireland are included as this country is treated as one region in this context.

A word about the activity classification used. The register of establishments used for the survey was based upon that employed for the Census of Industrial Production. De-

finitive work on converting the frame for the Census of Industrial Production to the EEC classification N.A.C.E.⁴ was not complete at the time the present survey was conducted. So an approximate re-classification was done (considering also the exclusion of establishments with fewer than 10 employees) and this forms the basis of the tables in this paper and in the EEC publications. No turnover details were sought in the survey to refine the classification but the fieldwork did involve a degree of checking on the nature of activity carried out.

The effective response rate was about 80 per cent in terms of numbers of relevant establishments or 90 per cent in terms of relevant employment. The results have been grossed up for non-response, factors being assigned to each detailed industrial activity category according to a number of size classes. Considering that this was the first such large scale survey of detailed labour costs in Ireland the ultimate response was quite good. Nevertheless a substantial follow-up was required and surprisingly many firms had difficulty in making the returns.

The results presented here are strongly influenced by the requirements for harmonisation at the level of the Nine Member States of the EEC. In consequence there are some differences in approach by comparison with other national statistics. Thus for example, costs and earnings for trainees and apprentices are counted as "training costs" and in calculating average costs per employee, trainees are omitted from the denominator. Another difference is that foremen and supervisors are counted as non-manual employees.

Separate data were not collected for part-time workers but in calculating averages per employee we used information from the Census of Industrial Production to adjust (as required for EEC comparisons) the numbers of manual employees so that part-time workers were included only to the extent of their full-time equivalence. No similar adjustment was made in the case of non-manual employees but the effect of this is expected to be negligible.

The Level of Labour Costs in Industry, 1975

We have concentrated our comparisons of levels of labour cost on calculations per employee per year rather than on hourly costs. Since hours worked can vary considerably from industry to industry, relative differences on this basis may be altered. The EEC publications have extensive tabulations on hourly costs.

In Table D in Appendix 1 we show the level of annual labour costs per employee in a number of industrial activity groups together with corresponding percentage earnings per employee, distinguishing manual and non-manual employees (full-time and part-time included). The variability of costs is quite high between activity groups and types of employees. Average costs range from £5,174 per employee in the "drink" industry to £2,016 per employee in "footwear and clothing". The average costs in "mining and quarrying" (£3,801) and in "electricity and gas production" (£4,367) are significantly above that for total manufacturing (£2,967). Other groups showing exceptionally high costs were "mineral oil refining" (£4,697) and "other means of transport" (£3,891). The large food industry had costs about the average for manufacturing as a whole.

For manual employees the range in average costs over the various activities was quite large. Costs for the lowest group, "footwear and clothing" were only 67 per cent of the average for manufacturing industry. For non-manual employees costs in the "footwear and clothing" industry were about 78 per cent of those for manufacturing as a whole.

⁴ Nomenclature Generale des Activites Economiques dans les Communautes Europeenes

Only in one case, "other means of transport", do average costs for manual employees exceed those for non-manuals.

Costs for manual employees in manufacturing industry were just over three-quarters of those for non-manuals. In mining and quarrying and electricity and gas production the difference was somewhat less. The largest percentage differences occur in the "instrument engineering", "footwear and clothing" and "textiles" groups where manual costs are about two-thirds of those for non-manuals. We should perhaps at this stage advert again to the fact that in this analysis all foremen and supervisors have been counted as non-manual employees.

We shall look at the composition of labour costs in industry in a little more detail for a summary grouping of activities but it is of interest to include the relationships between total costs and earnings (wages and salaries inclusive of bonuses, holiday pay, etc.) for the detailed categories distinguished in Table D. Earnings as a percentage of costs are relatively low in the case of "mineral oil refining", "drink (excl. soft drinks)" and "tobacco" industries, and this is explained by rather high voluntary social security contributions. On the other hand the relatively low percentages for "footwear and clothing" and "timber and wooden furniture" are accounted for largely by rather high proportions of training costs.

Because of the nature of these surveys we are concentrating on the structural aspects of labour costs. There does, however, seem to be scope for examination of the relationships between output and these detailed characteristics of labour costs. These surveys from the outset are moulded to EEC definitions and classifications, a process which the definitive industrial production statistics are undergoing at present. When this is complete the output/labour costs relationships can be examined more closely.

As with the surveys in the services sectors, separate data were not collected for male and female employees (the burden on respondents is quite heavy as it is and for most accounting purposes in firms, separate data do not require to be recorded). In the context of the labour costs data given in Table D, it is however interesting to look at a summary of the numbers of employees, male and female, manual and non-manual, in the establishments covered in the survey. This is given in Table 5 below.

The relative proportions of male and female employees is clearly a highly explanatory factor in determining the levels of costs in the various activity groups. Indeed the differ-

TABLE 5: MALE AND FEMALE EMPLOYEES* IN INDUSTRY, 1975

Industrial activity	Manual		Non-manual		Total	
	Male	Female	Male	Female	Male	Female
	('000)					
Oil refining, minerals, derived products, chemicals	16	3	5	2	21	5
Metal manufacturing, engineering	25	7	7	3	32	10
Food, drink, tobacco	30	10	9	4	39	14
Textiles, leather, clothing, footwear	13	18	3	3	16	20
Other manufacturing	16	4	5	2	21	7
Total manufacturing	101	42	29	14	130	56
Mining and quarrying	7	—	1	—	8	—
Electricity and gas	9	—	3	1	13	2

*excluding trainees and apprentices

ences in earnings are well documented in the regular industrial inquiries published by the CSO. A full analysis by occupational status, age and length of service must, however, await a "Structure of Earnings" type survey (one is to be carried out this year).

Distribution of Costs in Industry, 1975

We turn now to the more detailed distribution of labour costs in industry over its various components. In contrast to the costs survey in services, the industrial survey sought a breakdown of wages and salaries into payments for days worked and other payments by seeking separate information on sick pay and holiday pay and redundancy payments. These features are summarised in Table E in Appendix I. Separate data are given for manual and non-manual employees. Perhaps the most striking aspect of this table is the relative stability of the proportion of labour costs accounted for by basic wages and salaries for days worked at 76–78 per cent for almost all groups. In the food, drink and tobacco group the proportion of labour costs accounted for by basic wages and salaries was lower (particularly for non-manuals) with a correspondingly higher proportion explained by voluntary social security arrangements (i.e. pensions, life assurance contributions, etc.). The detailed industrial classification does of course reveal some additional variations, the drink and tobacco industries taken separately having lower proportions, 64 per cent and 69 per cent respectively.

In this summary classification payments for days not worked (i.e. holiday pay, sick pay and redundancy payments) for manufacturing activities are also a fairly uniform proportion of costs ranging between 8 and 9 per cent both in the case of manual and non-manual employees. We shall, however, look a little closer at holiday and sick pay below. In the case of electricity and gas production, payments for days not worked are relatively high because of holiday pay and sick pay while in the case of mining and quarrying it is abnormally high redundancy payments which account for the high proportions. Average employers' statutory social security contributions are fairly constant in absolute terms (even with pay-related contributions) for manual and non-manual workers. Thus these contributions form consistently higher proportions of costs for manual than for non-manual workers. Voluntary contributions (i.e. pensions etc.) on the other hand have consistently higher percentages for non-manual employees. The public service type systems are reflected in the exceptionally low proportion of statutory social security contributions in electricity and gas production. The proportion of costs absorbed by employers' voluntary social security contributions are exceptionally low in the "textile, footwear and leather" group both for manual and non-manual employees.

"Other labour costs" which cover payments-in-kind, canteen costs, subsidised housing and transport as well as training costs represent about 4 per cent of all costs in manufacturing. Training costs (which include trainee earnings) are about 0.6 per cent of costs for non-manual employees but are over 3 per cent in the case of manual employees in manufacturing. The number of trainees involved was 4.5 per cent of all employees.

While it is instructive to look at the distribution of costs in this way we have included the average level of costs per employee under each activity group to keep the comparisons in context.

Particular Components of Costs in Industry, 1975

a) Holiday pay and sick pay

Since this survey gives the first comprehensive statistics relating to these aspects of labour costs in industry it is appropriate to examine the data in a little more detail. First the statistician's cautionary note. It is evident from our experience with the survey that not many firms find it necessary to keep systematic and separate records of these costs. This is rather surprising particularly in the case of the larger concerns with well developed information systems and in view of the interest in incidence of sick pay over the last few years. Perhaps the publication of these results may serve to heighten interest and help statisticians, management and employees alike! Thus we were obliged in follow-up queries on returns to give special attention to these questions to ensure that estimation where necessary was reasonably well based. The survey repeated this year should provide an opportunity of assessing the validity of the data. Data were collected on total hours worked by manual and non-manual employees but as we already remarked for the earlier survey these annual figures can give only a rough estimate of "usual" hours worked. For this reason and also because the rate of sick pay must vary considerably, from full to partial rates, information cannot be derived for average number of sick hours.

It may however be of interest to tabulate the average per employee cost of holidays and sickness for the two categories of employees and for the more detailed classification of industrial activity. This is done in Table F in Appendix 1. Holiday pay, while not shown separately in the table, represented a fairly constant percentage of total costs, being 6-7 per cent for most industries. Sick pay on the other hand accounted for a much lower percentage and varied considerably from industry to industry. In addition to the basic variability of earnings among activities, the information in Table F is affected by the length of annual holidays (to some extent) and the systems in operation for payment (or not) for sick absences. The public service type industries of electricity and gas production are certain examples where all employees have an entitlement to full pay during short sick absences and by comparison (even allowing for their higher than average costs and for errors of estimation) it is clear that the situation is quite different in manufacturing industry as a whole. It must quickly be pointed out, however, that this table present sick pay from the point of view of costs to the employer and not from the income point of view. Social security contributions were higher in manufacturing where employees would be entitled to correspondingly more benefits from the social security system. Thus a full comparison from the cost and income viewpoints cannot be undertaken on the basis of the information collected in the present survey.

The data for holiday pay with few exceptions follow the pattern of total wages and salaries.

In terms of total direct payments for sickness in 1975 the data yield is a figure of £4.3 million for manufacturing while the direct payment for holidays is £37.5 million (for the firms covered i.e., those with 10 or more employees).

b) Employers' contributions to pension funds

As can be seen from Appendix 3 information was collected separately on employers' contributions to pension funds. (It would of course be interesting to look at the full operation of such funds but that is a much wider subject!) In the proposed special

publication of Irish results the percentages of costs accounted for by these contributions are given for detailed activity groups. We shall here simply note that total employers' contributions for manufacturing establishments covered amounted to nearly £15 million in 1975 (or about £80 per employee). In Table 6, as we did for services, we show the percentage of respondent establishments by size which recorded some contribution to pension funds for manual and non-manual employees.

TABLE 6: RESPONDENTS, CLASSIFIED BY SIZE, WHO REPORTED CONTRIBUTIONS TO PENSION FUNDS IN MANUFACTURING, 1975

Contributions in respect of:	Size – Number of Employees				
	10–49	50–99	100–199	≥200	All ≥ 10
(a) Percentage of respondent establishments with contribution to funds					
	%				
Manual employees	27.9	48.8	52.6	74.0	40.5
Non-manual employees	32.8	59.2	69.7	88.5	49.2
(b) Costs per employee of these contributions					
	£				
Manual employees	50.4	52.7	63.0	110.2	92.2
Non-manual employees	151.8	170.7	189.3	263.4	232.2
(c) Cost of contributions as percentage of earnings					
	%				
Manual employees	2.2	2.2	2.7	4.0	3.5
Non-manual employees	5.4	5.8	6.0	7.5	6.9

Since contributions were shown separately for manual and non-manual employees it is interesting to look at the figures for respondent establishments in this light. For each size group the percentage of establishments reporting contributions for manual employees was less than for non-manual employees. The proportion increases from about one-third of establishments for non-manual employees in the lowest size group to nearly nine-tenths in the highest size group. For manual employees the proportion of establishments with contributions to pensions also increases fairly dramatically with size. The table above shows also the costs per employee and as percentage of earnings (though not all employees in these establishments are necessarily provided for by the contributions in questions). For both manual and non-manual employees the costs show sharp increases in the largest establishments – this could well reflect a higher proportion of employees being covered by contributions.

Some Data Classified by Size of Establishment

In this section we shall take a brief look at some of the data for manufacturing industry classified by size of establishment. In Table 7 we show average costs per employee together with average earnings classified by size of establishment.

There is clearly a strong correlation of costs with size of establishment. The increase with size is monotonic for all categories but the most striking feature is the size of the

TABLE 7: MANUFACTURING – LABOUR COSTS AND EARNINGS PER EMPLOYEE BY SIZE OF ESTABLISHMENT, 1975

Category	Size – Number of Employees						
	10–49	50–99	100–199	200–499	500–999	≥1,000	All ≥10
	£						
<i>Manual</i>							
Costs	2,322	2,489	2,546	2,870	2,961	3,812	2,771
Earnings	1,950	2,137	2,208	2,492	2,580	3,244	2,384
<i>Non-manual</i>							
Costs	2,826	3,239	3,474	3,677	3,813	4,988	3,616
Earnings	2,547	2,859	3,070	3,216	3,311	4,216	3,162
<i>Total</i>							
Costs	2,439	2,655	2,747	3,063	3,155	4,119	2,967
Earnings	2,088	2,296	2,395	2,665	2,746	3,498	2,564

jump between the two highest size categories. In each case the level of average costs for the 500–999 size category is just over three-quarters that for the ≥1,000 category.

In Table G Appendix 1 we give the percentage distribution of labour costs over the various components classified by size of establishment. As already observed average statutory contributions to social security tend to be fairly constant so, as expected, the percentage accounted for by them decreased with increasing size of establishment. In discussing pensions we dealt only with respondents reporting some contributions so it is worthy of note that even when all establishments are included there is a very marked increase in the percentage of voluntary contributions to social security in the largest size class. Training costs represent a higher proportion of costs for manual workers in

TABLE 8: NUMBERS OF EMPLOYEES* IN MANUFACTURING BY SIZE OF ESTABLISHMENT, 1975

Category	Size – Number of Employees						
	10–49	50–99	100–199	200–499	500–999	≥1,000	Total
	('000)						
<i>Manual</i>							
Male	18.3	15.1	16.6	25.8	11.9	13.4	101.1
Female	7.3	7.2	8.7	9.5	6.2	2.9	41.8
Total	25.6	22.3	25.3	35.3	18.1	16.2	142.8
<i>Non-manual</i>							
Male	4.9	4.1	4.7	7.8	3.7	3.9	29.2
Female	2.8	2.2	2.3	3.2	1.5	1.7	13.6
Total	7.7	6.3	7.0	11.0	5.3	5.6	42.9
<i>Total</i>							
Male	23.1	19.2	21.4	33.6	15.6	17.3	130.3
Female	10.1	9.4	11.0	12.7	7.7	4.6	55.4
Total	33.2	28.6	32.4	46.3	23.3	21.8	185.7

*excludes trainees and apprentices

the smaller establishments. This does in fact reflect the higher percentage of trainees in these establishments (10 per cent in the 10–49 class, 5 per cent in the $\geq 1,000$ class). “Other costs” which include payments-in-kind and subsidised canteens and transport tend to increase as a percentage of costs with the size of establishment.

For completeness we give in Table 8 the number of employees, male and female, in manufacturing by size of establishment. One third of all employees covered were in establishments with fewer than 100 employees and about a quarter of employees were in establishments with 500 or more employees.

Some Regional Data for Industry, 1975

Extensive analysis of the data by region, according to a summary industrial activity grouping, will be given in the detailed publication of results by the CSO. We considered it of interest to give here a summary of how costs per employee vary by region. The regional groupings used are the planning regions with Donegal grouped with region North-West. The data are assigned to regions on the basis of the address of the establishment.

Table 9 sets out the average cost data and corresponding numbers of employees. We would draw your attention to the footnotes in interpreting these results. It is evident that the estimates of numbers employed are likely to be affected more than are the average costs by the fact that non-response had to be allowed for. They do, however, put the regional costs data in perspective. A more detailed examination would take into account the different industrial structures in the regions.

Taking all establishments covered, the East region, with not quite half the total numbers employed, had costs 6 per cent above the average and 34 per cent above those for the North-West/Donegal region which had lowest costs. We can look now separately at the data for the two size classes. There is not much disparity between costs for regions East, South-West and South-East, which have highest averages in the 50 or more employee class. In this class the North-East and Mid-West have somewhat lower averages while the

TABLE 9: LABOUR COSTS PER EMPLOYEE AND NUMBERS OF EMPLOYEES¹ IN MANUFACTURING BY REGION², 1975

Region	Establishments with 10–49 employees		Establishments with 50 or more employees		All establishments with 10 or more employees	
	Labour costs	Numbers	Labour costs	Numbers	Labour costs	Numbers
	£	('000)	£	('000)	£	('000)
East	2,534	14.4	3,261	71.9	3,140	86.3
South-West	2,513	5.0	3,145	23.6	3,034	28.6
South-East	2,446	3.1	3,212	15.0	3,082	18.1
North-East	2,380	2.6	2,786	11.7	2,711	14.3
Mid-West	2,519	2.5	2,879	13.7	2,823	16.2
Midlands	2,191	1.8	2,476	5.4	2,405	7.2
West	2,096	1.9	2,522	6.0	2,420	7.9
North-West/Donegal	2,076	1.9	2,441	5.1	2,341	7.1
All regions	2,439	33.2	3,082	152.5	2,967	185.7

¹ Numbers of employees exclude trainees and apprentices

² Note that regional data are affected to some extent by the fact that certain firms could only report on an enterprise basis and were assigned to one region.

Midlands, West and North-West/Donegal have average costs about three-quarters the level in the East region. In the 10–49 employee size class there is not a great range between the five regions with highest average costs but the Midlands, West and North-West/Donegal have costs about 85 per cent of those for the East region.

A full examination of the composition of labour costs by region is not within the capacity of the present paper. However we can point out that earnings as a percentage of total labour costs in manufacturing do not show a great deal of variation between regions. With the exception of the North-East region, where the figure was 84 per cent, earnings represented between 86 and 87 per cent of total labour costs in all regions.

Comparison of the Distribution of Costs in Services and Industry

Aware that shifts due to wage rounds, changing levels of social security contributions etc. between 1974 and 1975, probably preclude precise comparison we nevertheless consider that Table 10 gives a reasonable picture of the relative distributions of costs in the services and industrial sectors. We have aggregated the components for industry to align with the less detailed 1974 analysis. In fact if approximate allowance is made for the increases in statutory social security contributions in 1975 then the proportion for this component would be increased by about one percentage point for Wholesale and Retail and probably by a little more for the financial sectors.

TABLE 10: PERCENTAGE DISTRIBUTION OF LABOUR COSTS 1974 and 1975

Industrial Activity	Wages and salaries	Statutory social security	Voluntary social security	Other	Total	
			%			
1974	Wholesale	88.99	4.96	3.93	2.12	100.—
	Retail	88.04	5.86	2.95	3.15	100.—
	Credit	71.87	3.62	15.85	8.65	100.—
	Insurance	78.20	3.54	10.41	7.86	100.—
1975	Manufacturing	86.42	5.59	4.05	3.94	100.—
	Mining and quarrying	88.60	4.65	3.80	2.96	100.—
	Electricity and gas	89.75	1.47	5.83	2.95	100.—

As is already clear the financial sectors are the main exceptions to the pattern, although the relatively high training costs do make themselves evident in manufacturing industry.

Some International Comparison of the Distribution of Costs in Industry and in Services

These data are published in the relevant EEC publications (Appendix 5) but in the context of this discussion it is probably worth looking at how the structures vary in the Community countries. Since the detail of “payments for days not worked” and training costs are available we reproduce the full percentage distribution of costs in manufacturing for the Nine in Table 11, while in Table 12, we give the percentage of costs accounted for by earnings (wages and salaries including bonuses) for the services sectors covered.

It must be said at the outset that the financing of social security in the different countries has a significant bearing on the pattern shown in Table 11. The six

founder states all show considerably higher percentages of costs being borne in the form of statutory social security. In Denmark the percentage is very low indeed. In fact in Italy in 1975 nearly 40 per cent of all receipts from taxes were in the form of employers' contributions to social security and in the five other founder states the proportion ranged from 17 to 30 per cent. In Ireland the figure was about 8 per cent. Voluntary contributions to social security were relatively high in France, the Netherlands, the UK and Ireland. Ireland had the lowest percentage in "payments for days not worked" (holiday and sick pay) although the difference between France, Luxembourg, the UK and Ireland in this respect was negligible. The practice of "13th month" holiday bonuses in some continental countries possibly accounts for higher figures in the other countries. Training costs were recorded as being a higher percentage in Ireland than in any of the other countries. The reason for this is not clear but there may well have been some definitional differences in practice between the countries.

In Table 12 the pattern of earnings as percentage of labour costs for Wholesale and Retail is not very different from that for Industry in 1975 in the various countries. The percentages are a little higher in the services sectors but this may be due in part to changes in social security (certainly the case in Ireland). In the Credit enterprises and to a lesser extent in Insurance the low percentages for Ireland and the UK reflect the relatively large voluntary social security contributions while in Italy statutory contributions are exceptionally high. In most countries earnings in the financial sectors form a lower percentage of costs than is the case in Wholesale and Retail.

TABLE 12: EARNINGS AS PERCENTAGE OF LABOUR COSTS IN SERVICES IN THE EEC, 1974

Sector	Germany	France	Italy	Netherlands	Belgium	Luxembourg	UK	Ireland	Denmark
	%								
Wholesale	85.3	75.1	72.0	81.2	80.5	88.2	87.8	89.0	94.9
Retail	84.2	74.1	72.5	80.9	80.5	87.4	88.2	88.0	94.0
Credit	80.0	68.4	72.8	76.6	79.1	89.2	73.3	71.9	88.0
Insurance	82.7	69.0	75.3	75.2	78.8	87.6	74.5	78.2	91.2

THE STRUCTURE OF EARNINGS IN SERVICES, 1974

The Survey

As we already mentioned this survey was carried out at the same time and in the same enterprises as the 1974 "Costs" survey. Data was sought for a sample of individuals (anonymously) within each enterprise. As with the other surveys the scope, timing and the information collected were determined within the terms of an EEC Regulation and results for the Nine Member States are published by the Statistical Office of the European Communities.

In all, just over 1,000 enterprises were covered (i.e. those with 10 or more employees) having about 80,000 employees in Wholesale, Retail, Credit institutions (including banks, hire-purchase companies and building societies) and Insurance. Respondents were asked to supply data for one in five of their employees. Instructions were given as to how the samples could be chosen — in most cases this amounted to systematic sampling from the employee records. Stratification within enterprises (for example by occupation or sex),

while perhaps desirable, was not used on grounds of practicality. The returns received covered over 15,000 employees or just 19 per cent of all employees in the enterprises covered. Response in Wholesale was about 95.5 per cent and in Retail 91 per cent of enterprises. The financial enterprises responded almost to the extent of 100 per cent. We summarise the number of employees in enterprises covered and sample employees in Table 13 below. The frame, the same as for the "Costs" survey, was based on the 1971/72 Census of Distribution.

TABLE 13: COVERAGE OF 1974 STRUCTURE OF EARNINGS SURVEY

Sector	Employees in enterprises covered	Sample employees	Effective sample % of employees
	No.	No.	%
Wholesale	30,500	5,900	19.3
Retail	26,700	4,700	17.8
Credit	15,300	3,000	19.9
Insurance	7,100	1,400	19.7
Total	79,600	15,000	18.9

The items of information collected in respect of each sample employee are summarised in Appendix 4. The bulk of the data referred to the month of October 1974 but annual earnings (irregular bonuses added) were also recorded for each employee. The data covered age, sex, occupational status, length of service in the firm, hours worked, whether full-time or part-time, county of work base and October 1974 earnings. In addition codes were entered to distinguish employees present (and paid in full) for the month as a whole and for the year as a whole. This allowed the analyses to refer to those whose earnings were not seriously affected by absences. Employees receiving payment by commission were also separable.

This was our first experience in seeking data for individuals within firms. Some firms with developed information systems had little difficulty in supplying the requirements but in general we found that extensive follow-up was needed. In cases where the individual items for employees were not retained centrally in enterprise headquarters the problems were significant. The ultimate response, however, was considered very satisfactory. The returns were automatically checked for consistency and general validity (this process involving many referrals back to respondents). Since the survey is to be repeated this year (including industry for the first time) it is hoped that difficulties may be less, second time round.

Since the same sectors were covered the earnings and employment data should be consistent with the "Costs" survey. In fact the agreement between the two is quite good but we should mention one or two reasons why small differences can be expected. Not all firms who responded to one survey supplied usable returns for the second one. Furthermore some firms whose "Costs" return was found acceptable could not make a return for October 1974 (going into liquidation, on strike, etc.). In our analysis of the "structure survey" it should also be mentioned that "trainees and apprentices" have not been separately distinguished as is done in the "Costs" surveys. The proportion of trainees

recorded in the latter surveys was small (less than 4 per cent of all employees) so this has little effect on the structural data and the distribution of the various characteristics of employees

The Results

Very detailed tabulations according to a common format are published by the EEC from the data supplied by each Member State. We wish here to present some features of the principal results as analysed in the CSO, with different emphases in some respects, the principal one being that a more specific classification of occupational status is used for the distributive trades.

The data presented have been grossed up for the sampling and also for non-response. Effective sampling fractions were calculated for each respondent firm and in addition non-response factors were calculated for a number of detailed activity by size categories. We should mention that there are small differences in some of the data given here from those contained in the EEC publication. For purposes of comparability within EEC countries insurance agents (paid partly on commission) are omitted from the European publication – we, on the other hand, have retained these employees in this summary. Other slight differences arise from rounding and processing.

The occupational groups used are defined in Appendix 4 in the form in which they appeared in the questionnaire. The EEC classification was based roughly on “level of qualification” and “degree of responsibility” but some specific groups were shown separately in the one adopted for collection of data. Sex and occupational status being two of the most important characteristics in determining average earnings, the tables concentrate on classification by these two variables.

We shall first look at the distribution of employees by sex and occupation and then examine the earnings data for October and finally the length of service and age and regional characteristics will be touched on.

In the tables for space reasons we have used the codes (see Appendix 4) for the “occupational status” groups. A more condensed classification is used for the financial than for the distributive sectors and so we have labelled these with letters to avoid confusion.

Table H in Appendix 1 gives the distribution of employees by “occupational status” and by sex for each of the sectors. Over 50 per cent of male employees in Wholesale are in categories 7, 8 and 9 (stores, transport and “other”). This reflects partly a phenomenon which was not adequately provided for in the basic EEC classification viz. there is a large proportion of skilled manual workers employed in wholesale enterprises. These, depending on function, were classified in 7 or 8 or if they were foremen or supervisors in 3. The distribution of male employees in Retail can be seen to be different in this respect, the proportion in category 8 being quite low. The proportion of male employees in the management and executive categories (1 and 2) is about the same (about 14–15 per cent) for Wholesale and Retail. Only the category 5 “indoor sales” accounts for more than 20 per cent of male employees in either Wholesale or Retail.

The distribution of female employees in Wholesale and Retail is much more concentrated. Nearly eighty per cent in each sector fall in categories 4 and 5 (“clerical” and “indoor sales”). The proportion of females in categories 1 and 2 is less than 2.5 per cent in either sector.

In Credit and Insurance the effective bar to female employment after marriage which existed in 1974 is clearly evidenced in the distributions. The “occupational status”

groups (apart from category F which would include any manual workers) in these cases represent much more directly a line of promotion in the enterprises. Two thirds of female employment is in category E (junior clerical) while a quarter are in category D in Credit enterprises and 30 per cent in this category in Insurance. Only about 1.5 per cent of females are in the junior management groups.

In Credit enterprises category E has the highest proportion of male employees at nearly 30 per cent but well over a quarter are in category C (executive etc.). Over 15 per cent of males are in either management category A or B.

The distribution of males in Insurance is rather more heavily weighted in the "middle" categories – this reflecting the sales aspect of this business. The proportion of employees in the management categories is somewhat lower than in the case of Banking – not surprising in view of the very numerous bank branches by comparison with insurance offices.

Earnings in October 1974

In this section we shall confine our remarks to full-time employees and to October 1974 earnings. The data for earnings in October have been adjusted to include 1/12th of the annual bonuses recorded for each sample individual for the year 1974. Furthermore the analyses of earnings refer only to employees who were present (and paid) for the entire month. It should also be noted that in all cases earnings include any regular bonuses or commissions paid as well as overtime. In all cases where data were reported for a four-weekly period the individual earnings were adjusted to a calendar month basis.

Table I, Appendix 1, gives the mean October 1974 earnings by "occupational status" for males and females in each sector. Looking first at all employees in each sector, female earnings range from just over 50 per cent of male earnings in Insurance to about 60 per cent of male earnings in each of the other sectors.

In Wholesale and Retail the numbers of females in categories 1, 2 and 6 were very small and these categories (management and outdoor sales) each have earnings considerably above the average for employees as a whole.

The earnings of females in the non-manual groups 3, 4 and 5 which have relatively more female employees range from about 70 to 75 per cent of male earnings. The earnings for all employees in each "occupational status" category are higher for Wholesale than for Retail.

Some further light may be thrown on these comparisons by standardising the occupational distribution for males and females and thereby re-weighting the earnings data for each sector as a whole. When this is done (using the female occupational distribution as given in Table H to re-weight the male earnings) female earnings both for Wholesale and for Retail represented just 70 per cent of the adjusted male earnings. Clearly, if a very much finer occupational classification were used, the degree of standardisation could be greater but within the limits of these nine groups this process does improve the basis of comparison of "average" earnings of male and female employees in these sectors in 1974. Two further points should be made in this connection. First, the average age (and length of service) of male employees exceeds that of female employees in each sector – by 6 years for Retail to 11 years for Insurance. Secondly, the average hours worked for male employees are slightly more (about one hour per week) than for female employees in Wholesale and Retail. Thus even our adjusted comparisons cannot be taken as comparisons of wage rates between males and females.

We have compiled coefficients of variation for the earnings data and these show that

the dispersion of earnings for males (about 50 per cent CV) is somewhat greater than for females (about 40 per cent CV) particularly in Wholesale. This is consistent with the wider range of "job categories" for males than for females (probably even within the different occupational groups).

In the Credit sector it is significant that male and female earnings are much the same in occupational groups C, D and E and the overall relativity is explained by the concentration of female employment in category 5 in particular, the lowest paid of the clerical groups. This is borne out by standardising the occupational distribution as for Wholesale and Retail. In this case the process yields a figure of 92 per cent for female earnings as a percentage of male earnings indicating that the differences in the unadjusted averages are almost entirely explained by the occupational distribution.

The situation in the Insurance sector is somewhat different and is certainly influenced by commission payments to sales staff. The effect of standardising the distribution here (in fact this amounts to using the averages for categories D and E for male earnings) is to give an adjusted figure of 70 per cent for female as compared to male earnings. The low numbers of females in categories other than D and E for Insurance preclude reliable estimates of average earnings from the samples.

In discussing labour costs we noted the fairly substantial differences both in costs and earnings between the various activity categories within Wholesale and Retail. Using the occupational data from the Structure survey this can be examined a little deeper. We have not tabulated the data for these categories here but they do show a reasonable consistency with those from the "Costs" survey. By standardising the occupational distribution for each of the activities we can get an indication of how far the differences are explained by varying occupational structures. We did this separately for males and females in eight activity groups in Wholesale and Retail using the overall sector distributions (Table H) to re-weight the earnings data. In no case did the resulting averages change significantly. So it appears that the occupational distributions do not account for much of the differences in average costs already observed. Again we should probably qualify this by saying that if more detailed job descriptions were used for the classification the analysis could be refined.

In Table J we give the distribution of full-time employees by sex according to ranges of monthly earnings (in £25 partitions from £75 to >£600). We shall just note one or two points as the quantiles presented in Table K bring out the principal features of the distribution with the added dimension of "occupational status". Three fifths of the male employees in Wholesale and two thirds of those in Retail earned less than £200, while nearly all the female employees in both sectors earned less than this. The distributions, male and female, are quite similar in the Wholesale and Retail sectors. The "upper" tail of the distribution of male employees in Credit and Insurance is considerably heavier, about one third in Credit and 30 per cent in Insurance earning more than £300 in the month. There are however considerable differences in the distributions, both male and female, between the two financial sectors. A feature of the Credit distribution is the concentration of 30 per cent of males and 55 per cent of females within the range of £125 to £175 of monthly earnings.

The distributions for each sector are indicated in Figure 1 which highlight the similarities in the distributive sectors and give a clearer picture of the more complex distributions in the financial sectors.

The quantiles of the distribution of full-time employees according to monthly earnings are presented in Table K to give some clearer idea of the dispersions of the earnings data

Figure 1: Percentage distribution of full-time employees by range of earnings, October 1974.

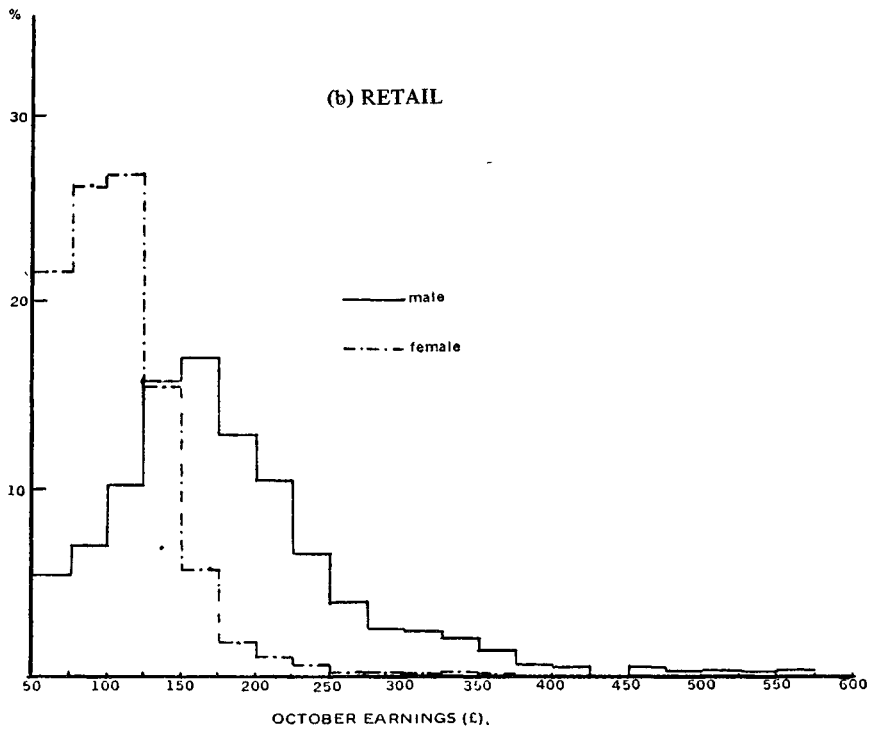
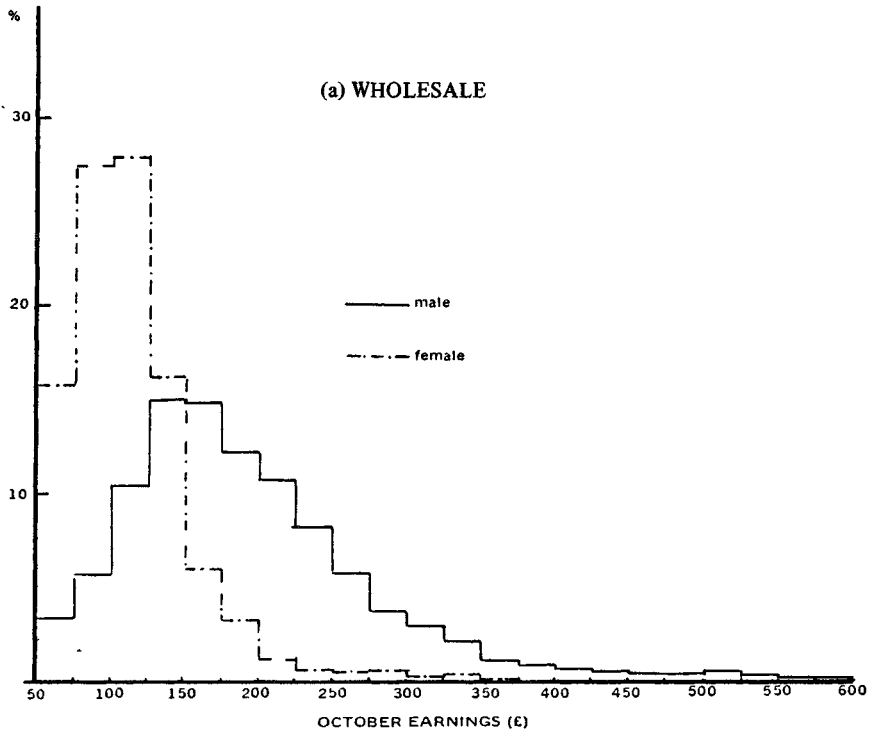
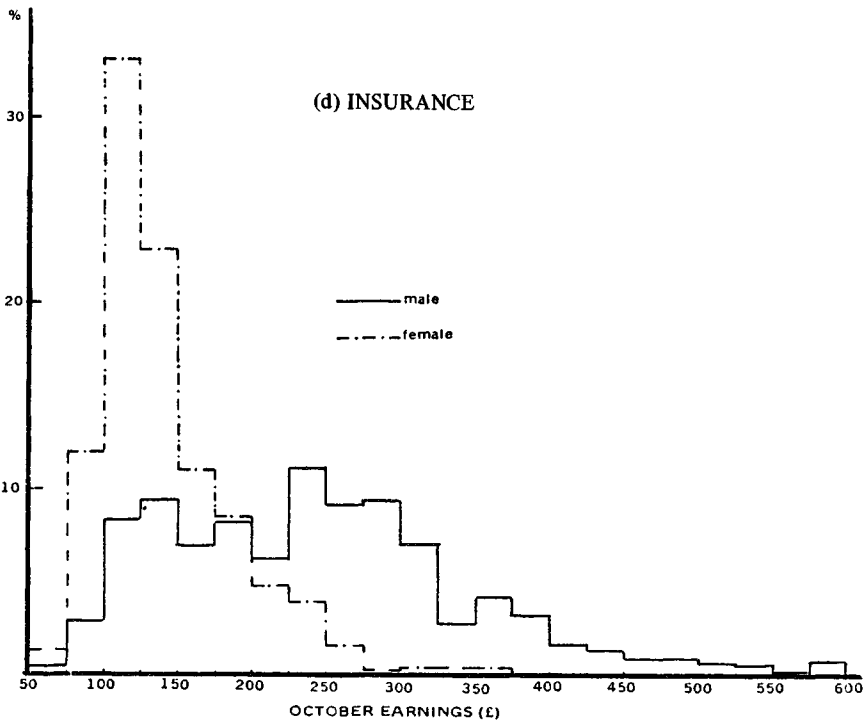
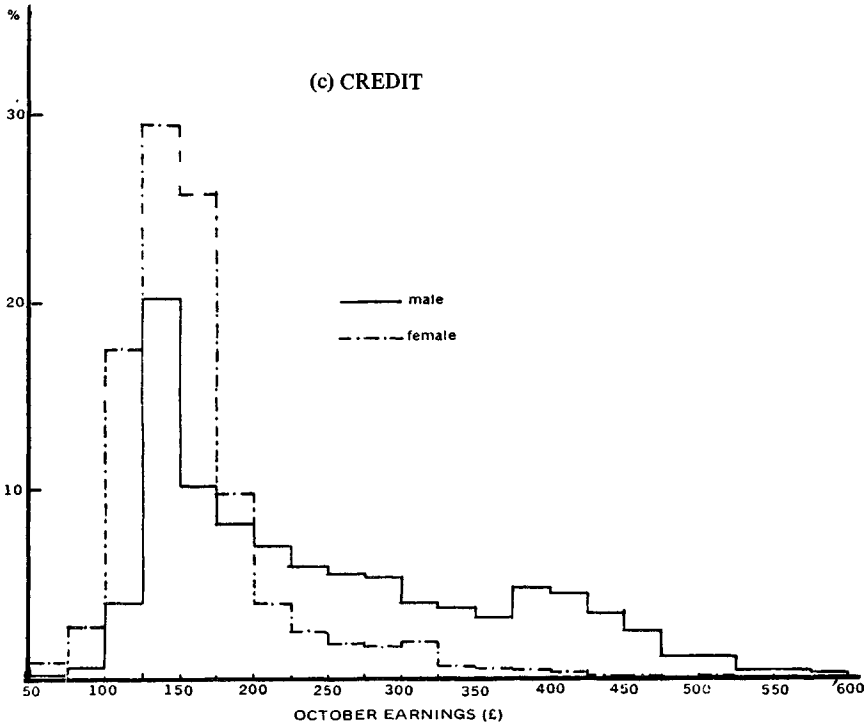


Figure 1: (continued) Percentage distribution of full-time employees by range of earnings, October 1974.



for the various "occupational status" categories. In each of the sectors there is considerable overlap between the occupational categories with higher and lower average earnings. This overlap is less pronounced in the case of Credit enterprises than in the other sectors, being probably contained by the more regular salary structures (the quantiles for Insurance categories are affected by commission payments while those for Wholesale and Retail are probably influenced by the less homogenous application of the classification used).

In Wholesale and Retail each quantile for category 6, which covers outdoor salesmen, who may be paid partly on commission, about equals or exceeds the corresponding figures for category 3 (supervisory). The median monthly earnings for male employees exceeds £200 in four of the Wholesale and three of the Retail occupation categories. For female employees the quantiles shown for categories 5, 7 and 9 in Wholesale and 4, 5 and 9 in Retail are very close. Again in all but one case the inter-quartile ranges for male employees are greater than for females indicating wider dispersions of earnings.

In Credit and Insurance the management structures are quite complex (differing from enterprise to enterprise). It must therefore be borne in mind that even though the enterprises involved tend to be large and are relatively few, the quantiles of earnings in the Table for "management" categories show an average situation rather than that pertaining to an individual large enterprise. The inter-quartile ranges are generally higher for males than for females, and in particular for the Credit sector as a whole. For categories E and F in Credit enterprises male and female quantiles are fairly close at each corresponding point confirming our earlier observation on the mean earnings of these groups.

Numbers and Earnings of Employees by Age

In the questionnaires firms were asked to specify the year of birth of sample employees. In general there did not appear to be much difficulty for respondents in supplying this information and we are fairly confident of the reliability of the returns made.

Table L, Appendix 1, gives the average ages by occupational status and sex of full-time employees. The averages for Wholesale and Retail are quite close for each occupational category. For each sector as a whole the average age for males is a little higher and for females a little lower in Wholesale than in Retail. Average age of Management category 1 is 44.6 for Wholesale and 43.7 for Retail.

With the exception of category D there is not much difference in average age for the various occupational groups between Credit and Insurance. Occupational category D in Insurance includes the outdoor agents as well as clerical workers giving apparently the higher average age in the group. It is, perhaps, surprising that the only categories with average age below 25 in any of the sectors are the "recruitment" categories E in Credit and Insurance.

Table M, Appendix 1, gives the average earnings by a number of age groups for each sector. It can be seen that male earnings peak between ages 30-45 for Wholesale and Retail and over 45 in the financial sectors. Female earnings do not show much variation by age above 30 years in the distributive trades but peak somewhat between 45 and 55 in Credit and Insurance. In the 21-29 age group which is the one with most employees in each sector, average monthly earnings ranged from £136 in Retail to £175 in Credit enterprises. The tendency for earnings to fall somewhat over the age of 55 in Wholesale and Retail is explained to an extent by the occupational distribution at these ages. The dramatic fall in male earnings in the 65 and over category for Credit enterprises is explained by the fact that over three quarters of these employees are in occupational category F ("other" employees).

Length of Service

The data in Table N, Appendix 1, refer to average length of service of full-time employees with the firm in October 1974 irrespective of the various positions they may have held, but the classification of course is by "occupational status" at the time of survey.

It is perhaps interesting that "occupational status" category 1 does not have the longest average in the case of the Credit (in particular) and Insurance sectors. This may of course reflect a number of factors – mobility between enterprises, or perhaps more likely the development and diversification of services provided by the financial sectors in recent years. The average top management employee then has been with the firm for between 16 and 19 years.

Lengths of service for males in each sector (and in most occupational categories) are greater than for females. None of the occupational categories in the distributive trades have average lengths of service less than 4 years (the smallest being for females in category 5 (indoor sales) in Retail).

Some Regional Data

Finally we give in Tables O and P, Appendix 1, the percentage distribution of employees by region and the corresponding October 1974 earnings per employee. Regional analyses were found possible only in the case of Wholesale and Retail and as indicated in Appendix 4 the data refer to the normal "work base" of the employees (not necessarily to the address of the enterprise in question).

Nearly 50 per cent of all employees covered in Wholesale and nearly 60 per cent of those in Retail were in the East region (the fact that enterprises with fewer than 10 employees are not covered is particularly relevant).

As for regional differences in average earnings for Wholesale there were in effect three groups of regions, East and Mid-West with highest earnings, then South-West, South-East, West and Midlands and slightly lower, North-East and North-West/Donegal. Earnings were lower in each region for Retail than for Wholesale. In Retail six of the eight regions had earnings between £125 and £136 for October 1974 while in region East they were higher at £154 and in South-East lower at £120.

Male/female differences in average earnings were fairly constant across the regions, female earnings generally being about 55–60 per cent of male earnings. Exceptions were the West region for Wholesale where the difference was a little smaller and the Midlands for Retail where female earnings were just 50 per cent of male earnings. These comparisons are, of course, subject to the same kind of qualifications that we mentioned in connection with the sectoral figures but in addition the regional pattern of the various activities within the sectors may well be a factor. We have examined the regional distribution of employees by occupation for males and females and have approximately standardised the earnings data by using the average occupational distribution as before. In fact this adjustment does not change the average earnings very much and the inter-regional relativities are not affected.

CONCLUSIONS AND FUTURE WORK

We have aimed in this paper to focus attention on some of the more complex aspects of labour costs and earnings. By examining these in the detailed light of the surveys des-

cribed we have hoped to give users of "labour" information some further insight into the data available, its quality and possibilities. Certainly the subject of labour costs is a topical one. The analyses we have presented illustrate, if that is necessary, that the subject does not lend itself to simplistic treatment. The variety of sources of variation in earnings emphasise the need for careful classification and qualification of comparisons in particular if the data are to be used on a micro scale.

In the context of job creation planning, at the macro or micro level, or indeed for wage bargaining, the information requirements are probably greater than are covered in these surveys. Three points may be mentioned. First, regarding the sectors covered. The 1974 survey could be described, depending upon one's point of view, as "unbalanced" (financial enterprises not having much in common with supermarkets) or "interesting" (comparison between sectors with centralised structures and those with more diverse structures such as in Retail) — this will be remedied somewhat by the surveys planned this year covering industry and these services together. Secondly, regarding further analysis of the 1974 and 1975 surveys, some further tabulations are possible than are given here or in the EEC publications. An official publication giving further details of the 1975 survey is to be issued shortly. Furthermore within the dual constraints of reliability and confidentiality some additional tabulations of the 1974 surveys are possible (in particular a limited "activity" classification of the "Structure" survey).

Thirdly and perhaps most importantly the question of updating arises. Certainly the data on absolute levels of costs and earnings referring to 1974 and 1975 are less relevant now than are the structural relationships between costs, earnings and the various other characteristics described. In industry regular data on earnings are available from the Quarterly Inquiries — the changes derived from these series could be applied to the earnings data described in the paper. There are, however, difficulties in updating the other components. In order to do this adequately a "structure of earnings" type survey in industry is needed to cater for example for changes in social security arrangements at different salary levels. In the services sector we are not as well equipped with current earnings data. Certainly estimates could be made but we would expect that the effect of equal pay legislation on many of the structural relationships described would be a major source of change in updated data.

Finally we can conclude by raising some questions. These data have arisen from participation in the EEC statistical work and they do give additional detail not hitherto available. Shortly we shall have another and, in some respects, more comprehensive set (covering, in addition, subjects such as overtime, shift work and the effect of labour subsidies on costs). The question is how valuable are structural surveys of this kind and how regularly are they needed? In the EEC there is to be some examination of their scope and usefulness and it would be useful to look at this matter in an Irish context.

APPENDIX 1

TABLE A: PERCENTAGE DISTRIBUTION OF LABOUR COSTS IN SERVICES, 1974

Category	Wages, salaries and other direct payments	Employers' contributions to social security		Other costs	Total
		Statutory	Voluntary		
%					
Wholesale					
Agricultural raw materials, live animals; textiles, raw materials	89.25	5.96	3.09	1.69	100.—
Fuels, ores and chemicals	84.41	3.50	10.32	1.77	100.—
Timber, building materials	90.67	4.99	2.40	1.93	100.—
Machinery, equipment vehicles	89.56	4.66	2.65	3.12	100.—
Furniture, household goods	90.56	5.03	2.06	2.66	100.—
Textiles, clothing, footwear	87.68	5.00	4.37	2.95	100.—
Food, drink, tobacco	90.26	5.52	2.44	1.78	100.—
Pharmaceuticals, cosmetics, etc.	89.52	4.66	4.79	1.02	100.—
Other, or distribution of a variety of goods	88.91	4.78	4.05	2.27	100.—
Total Wholesale	88.99	4.96	3.93	2.12	100.—
Retail					
Food, drink, tobacco and chemists	88.75	5.89	1.31	4.05	100.—
Clothing	88.09	6.37	1.65	3.89	100.—
Footwear and leather	86.21	7.15	1.07	5.57	100.—
Fabrics and household textiles	87.79	5.99	3.23	2.99	100.—
Household fitments and appliances	89.97	5.63	1.55	2.85	100.—
Books, newspapers, stationery	89.05	6.28	2.56	2.11	100.—
Other retail	88.00	5.49	1.79	4.71	100.—
Distribution of a variety of non-food goods	87.00	5.71	5.32	1.97	100.—
Total Retail	88.04	5.86	2.95	3.15	100.—
Credit Enterprises	71.87	3.62	15.85	8.65	100.—
Insurance Enterprises	78.20	3.54	10.41	7.86	100.—

TABLE B: PERCENTAGE DISTRIBUTION OF LABOUR COSTS BY SIZE OF ENTERPRISE, 1974

Sector and Category	Size – Number of Employees						Total
	10-19	20-49	50-99	100-199	200-499	≥ 500	
	%						
Wholesale							
Wages and salaries	89.83	90.48	89.76	89.68	89.24	84.80	88.99
Employers' contributions to social security:							
Statutory	5.69	5.34	5.23	4.94	4.67	4.34	4.96
Voluntary	1.63	2.17	2.73	3.35	4.05	8.90	3.93
Other costs	2.85	2.00	2.30	2.02	2.04	1.96	2.12
Total	100.-	100.-	100.-	100.-	100.-	100.-	100.-
Retail							
Wages and salaries	87.31	88.49	89.02	89.56	89.63	86.95	88.04
Employers' contributions to social security:							
Statutory	6.91	6.37	5.90	6.26	6.02	5.33	5.86
Voluntary	0.61	1.38	1.51	2.01	2.01	4.75	2.95
Other costs	5.17	3.76	3.57	2.17	2.34	2.96	3.15
Total	100.-	100.-	100.-	100.-	100.-	100.-	100.-

TABLE C: NUMBER OF FULL-TIME EMPLOYEES IN CERTAIN SERVICES, 1974

Principal Activity	Male	Female	Total
Wholesale Distribution			
Agricultural and other raw materials; live animals	4,784	1,163	5,947
Fuels, ores and industrial chemicals	2,586	303	2,889
Timber, building materials	4,376	765	5,140
Machinery, equipment, vehicles	3,585	855	4,440
Furniture, household goods	1,134	427	1,562
Textiles, clothing; footwear	759	339	1,096
Food, drink, tobacco	4,308	1,597	5,906
Pharmaceuticals, cosmetics, polishes, etc.	252	202	454
Other wholesale	1,295	847	2,142
Total Wholesale	23,079	6,496	29,576
Retail Distribution			
Food, drink, tobacco and chemists	4,115	3,827	7,942
Clothing	969	1,505	2,474
Footwear, leather goods	204	318	522
Furnishing and fabrics	316	312	628
Household fitments	1,503	649	2,152
Books, newspapers, etc.	241	256	497
Distribution of a variety of non-food goods	3,007	5,995	9,001
Other retail	696	388	1,084
Total Retail	11,052	13,250	24,300
Credit Enterprises	7,074	7,769	14,843
Insurance Enterprises	4,316	2,535	6,851

TABLE D: ANNUAL LABOUR COSTS PER EMPLOYEE IN INDUSTRY AND EARNINGS AS PERCENTAGE OF LABOUR COSTS (ESTABLISHMENTS WITH 10 OR MORE EMPLOYEES), 1975

Industrial Activity	Manual		Non-Manual		All employees	
	Annual	Earnings	Annual	Earnings	Annual	Earnings
	cost per	as % of	cost per	as % of	cost per	as % of
	employee	employee	employee	employee	employee	employee
	£	%	£	%	£	%
Mineral oil refining	4,326	81.8	5,154	84.9	4,697	83.3
Metal production and processing	2,687	86.4	3,509	87.7	2,852	86.7
Non-metallic mineral products	3,151	86.4	3,947	87.1	3,307	86.6
Chemicals and man-made fibres	3,085	87.6	3,784	87.5	3,344	87.5
Metal articles	2,662	86.6	3,239	89.0	2,782	87.2
Mechanical engineering	2,648	84.9	3,055	90.4	2,741	86.3
Office and D.P. Machinery	2,603	85.9	3,526	92.3	2,838	87.9
Electrical engineering	2,298	85.4	3,457	89.8	2,564	86.7
Motor vehicles and parts	3,089	89.3	4,122	89.7	3,278	89.4
Other means of transport	4,041	85.1	3,472	89.4	3,891	86.1
Instrument engineering	2,366	87.1	3,721	88.2	2,624	87.4
Food (incl. soft drinks)	2,926	87.7	3,505	86.8	3,067	87.2
Drink (excl. soft drinks)	4,888	77.9	5,668	77.8	5,174	77.9
Tobacco	3,002	84.6	4,090	84.2	3,379	84.5
Textiles	2,169	87.8	3,143	87.9	2,335	87.8
Leather and leather goods	2,473	88.1	3,062	88.4	2,549	88.1
Footwear and clothing	1,859	81.0	2,833	89.9	2,016	83.1
Timber and wooden furniture	2,565	82.9	3,017	90.6	2,660	84.7
Paper, printing and publishing	3,094	86.6	3,733	89.8	3,295	87.7
Rubber and plastic	2,774	88.8	3,777	89.1	3,026	88.9
Other manufacturing	2,162	87.0	2,923	91.2	2,314	88.1
Manufacturing	2,771	86.0	3,616	87.5	2,967	86.4
Mining and quarrying	3,656	88.6	4,552	88.4	3,801	88.6
Electricity and gas	4,077	89.2	4,861	90.6	4,367	89.8

TABLE E: PERCENTAGE DISTRIBUTION OF LABOUR COSTS IN INDUSTRY, 1975

Category	Oil refining minerals, chemicals	Metal manufacturing, engineering	Food, drink and tobacco	Textiles leather, clothing, footwear	Other manufacturing	Total manufacturing	Mining and quarrying	Electricity and gas
All employees								
%								
Basic wages and salaries for days worked	76.91	77.73	75.75	77.72	78.84	77.15	78.34	78.44
Irregular bonuses	1.08	0.53	1.65	0.27	0.44	0.92	0.47	0.05
Payments for days not worked	8.87	8.96	8.07	7.80	8.08	8.35	9.79	11.26
Social security contributions by employers								
Statutory	5.09	5.62	5.12	7.22	5.49	5.59	4.65	1.47
Voluntary	4.78	2.43	5.95	2.06	3.65	4.05	3.80	5.83
Other labour costs	3.27	4.74	3.46	4.93	3.50	3.94	2.96	2.95
Total	100.-	100.-	100.-	100.-	100.-	100.-	100.-	100.-
Annual cost per employee (£)	3,283	2,949	3,814	2,198	3,044	2,967	3,801	4,367
Manual employees								
%								
Basic wages and salaries for days worked	76.89	77.00	76.60	77.08	77.99	77.02	78.77	78.68
Irregular bonuses	0.75	0.40	1.31	0.16	0.27	0.68	0.24	-
Payments for days not worked	9.04	9.00	7.95	7.69	7.93	8.32	9.62	10.49
Social security contributions by employers								
Statutory	5.41	5.98	5.45	7.76	5.87	5.99	4.84	1.74
Voluntary	4.16	1.91	5.00	1.53	3.26	3.36	3.16	4.75
Other labour costs	3.75	5.70	3.67	5.78	4.66	4.63	3.37	4.33
Total	100.-	100.-	100.-	100.-	100.-	100.-	100.-	100.-
Annual cost per employee (£)	3,079	2,804	3,121	2,040	2,842	2,771	3,656	4,077
Non-manual employees								
%								
Basic wages and salaries for days worked	76.96	79.84	73.71	79.95	80.65	77.46	76.56	78.10
Irregular bonuses	1.83	0.91	2.45	0.65	0.80	1.53	1.43	0.12
Payments for days not worked	8.48	8.84	8.37	8.21	8.39	8.46	10.45	12.37
Social security contributions by employers								
Statutory	4.36	4.56	4.35	5.32	4.67	4.56	3.84	1.07
Voluntary	6.16	3.92	8.13	3.89	4.47	5.79	6.49	7.36
Other labour costs	2.21	1.93	2.99	2.00	1.01	2.18	1.23	0.98
Total	100.-	100.-	100.-	100.-	100.-	100.-	100.-	100.-
Annual cost per employee (£)	3,852	3,465	3,891	2,997	3,584	3,616	4,552	4,861

TABLE F: ANNUAL HOLIDAY AND SICK PAY PER EMPLOYEE, 1975

Industrial Activity	Manual		Non-manual		All employees	
	Holiday pay	Sick pay	Holiday pay	Sick pay	Holiday pay	Sick pay
	£					
Mineral oil refining	363	61	429	91	392	75
Metal production and processing	166	5	243	37	181	11
Non-metallic mineral products	251	22	290	32	258	24
Chemicals and man-made fibres	201	28	261	29	223	28
Metal articles	168	11	219	21	179	13
Mechanical engineering	183	7	221	29	191	12
Office and D.P. machinery	150	39	233	107	171	56
Electrical engineering	156	19	225	29	172	22
Motor vehicles and parts	247	27	293	72	255	35
Other means of transport	273	46	241	70	265	52
Instrument engineering	168	52	220	67	178	55
Food	178	23	226	36	189	26
Drink	262	59	383	31	303	56
Tobacco	224	48	337	43	263	46
Textiles	160	3	229	19	171	5
Leather and leather goods	172	9	205	16	176	10
Footwear and clothing	126	4	207	32	139	7
Timber and wooden furniture	160	7	210	32	170	13
Paper, printing and publishing	213	21	260	40	228	27
Rubber and plastic	226	14	283	51	241	23
Other manufacturing	134	4	203	14	148	6
Manufacturing	187	19	252	37	202	23
Mining and quarrying	236	13	328	39	251	17
Electricity and gas	281	146	477	124	353	138

TABLE G: PERCENTAGE DISTRIBUTION OF LABOUR COSTS IN MANUFACTURING BY SIZE OF ESTABLISHMENT, 1975

Category	Size – Number of Employees						
	10–49	50–99	100–199	200–499	500–999	≥ 1,000	All ≥ 10
	%						
<i>Manual</i>							
Wages and salaries (incl. bonuses)	84.0	85.9	86.8	86.8	87.1	85.1	86.0
Employers' contributions to social security							
Statutory	7.0	6.7	6.4	5.9	5.7	4.6	6.0
Voluntary	2.5	2.5	2.5	3.3	3.7	5.7	3.4
Training costs	6.0	3.9	3.0	2.6	1.4	2.3	3.1
Other	0.6	1.2	1.3	1.4	2.1	2.3	1.5
Total	100.–	100.–	100.–	100.–	100.–	100.–	100.–
<i>Non-manual</i>							
Wages and salaries (incl. bonuses)	90.1	88.3	88.4	87.4	86.8	84.5	87.5
Employers' contributions to social security							
Statutory	5.4	5.1	4.8	4.7	4.5	3.2	4.6
Voluntary	3.2	4.9	5.0	5.7	5.9	9.2	5.8
Training costs	0.6	0.9	0.7	0.6	0.6	0.4	0.6
Other	0.7	0.8	1.2	1.6	2.1	2.6	1.6
Total	100.–	100.–	100.–	100.–	100.–	100.–	100.–
<i>All Employees</i>							
Wages and salaries (incl. bonuses)	85.6	86.5	87.2	87.0	87.0	84.9	86.4
Employers' contributions to social security							
Statutory	6.6	6.2	6.0	5.5	5.3	4.1	5.6
Voluntary	2.6	3.1	3.2	4.0	4.3	6.8	4.1
Training costs	4.5	3.1	2.4	2.0	1.2	1.7	2.4
Other	0.7	1.1	1.2	1.5	2.1	2.4	1.5
Total	100.–	100.–	100.–	100.–	100.–	100.–	100.–

**TABLE H: EMPLOYEES (FULL-TIME) IN OCTOBER 1974, BY OCCUPATIONAL STATUS BY SECTOR/PERCENTAGE
DISTRIBUTION BY SEX**

Sector	Occupational Status									Total
	1	2	3	4	5	6	7	8	9	
<i>Wholesale ('000)</i>	1.3	2.0	2.5	5.6	3.5	2.3	3.9	3.6	5.3	30.1 (M 23.4,F 6.7)
Percentage in each group (%)										
Male	5.6	8.3	8.8	7.4	9.3	9.8	15.9	15.5	19.4	100.-
Female	0.4	1.4	6.1	58.8	19.1	0.1	2.7	-	11.5	100.-
Total	4.5	6.8	8.2	18.8	11.5	7.7	13.0	12.1	17.6	100.-
<i>Retail ('000)</i>	0.6	1.7	2.1	3.1	10.5	1.7	1.8	0.9	3.2	25.6 (M 12.7,F 12.9)
Percentage in each group (%)										
Male	4.5	10.9	10.0	2.6	24.7	13.0	12.8	7.3	14.1	100.-
Female	0.3	2.1	6.6	21.6	57.1	0.1	1.4	0.1	10.6	100.-
Total	2.4	6.5	8.3	12.2	41.1	6.5	7.1	3.7	12.4	100.-
	A	B	C	D	E	F	Total			
<i>Credit ('000)</i>	0.2	1.0	2.2	3.3	7.5	1.2	15.3 (M 7.5,F 7.7)			
Percentage in each group (%)										
Male	2.3	12.8	27.4	16.9	29.2	11.4	100.-			
Female	-	0.1	1.6	25.7	68.2	4.5	100.-			
Total	1.1	6.4	14.4	21.4	48.9	7.9	100.-			
<i>Insurance ('000)</i>	0.1	0.3	0.8	2.8	3.0	0.2	7.1 (M 4.5,F 2.6)			
Percentage in each group (%)										
Male	1.4	6.0	16.8	45.3	27.7	2.7	100.-			
Female	-	-	1.4	29.6	67.9	1.1	100.-			
Total	0.9	3.8	11.2	39.6	42.3	2.1	100.-			

TABLE I: AVERAGE EARNINGS (FULL-TIME EMPLOYEES) IN OCTOBER 1974 BY OCCUPATIONAL STATUS BY SECTOR

Sector	Occupational Status									Total
	1	2	3	4	5	6	7	8	9	
	£									
<i>Wholesale</i>										
Male	381	260	218	161	140	239	175	190	148	198
Female	..	207	149	113	97	..	101	—	93	112
Total	378	257	207	128	124	239	171	190	140	178
<i>Retail</i>										
Male	332	248	192	142	147	202	167	168	138	181
Female	..	218	143	105	100	..	115	..	90	106
Total	321	243	173	109	114	201	162	167	117	144
	A	B	C	D	E	F	Total			
	£									
<i>Credit</i>										
Male	681	434	331	222	155	152	263			
Female	—	..	330	208	142	89	162			
Total	681	434	331	214	146	144	213			
<i>Insurance</i>										
Male	557	452	314	295	162	161	271			
Female	—	—	..	178	122	—	141			
Total	557	452	311	263	139	161	224			

**TABLE J: PERCENTAGE DISTRIBUTION OF EMPLOYEES BY RANGE OF EARNINGS,
OCTOBER, 1974**

Range of Earnings	Wholesale		Retail		Credit		Insurance	
	Males	Females	Males	Females	Males	Females	Males	Females
	%							
<75	3.4	15.8	5.5	21.5	0.1	0.8	0.3	1.4
75- 99	5.1	27.4	7.2	26.1	0.5	2.7	2.9	11.9
100-124	10.5	27.8	10.2	27.0	4.1	17.3	8.3	33.1
125-149	15.0	16.1	15.7	15.4	20.1	29.4	9.3	22.7
150-174	14.7	6.0	16.8	5.8	10.2	25.8	6.8	10.8
175-199	12.1	3.3	12.8	1.8	8.2	9.8	8.1	8.3
200-224	10.7	1.2	10.4	1.0	7.1	4.0	6.3	4.7
225-249	8.1	0.6	6.6	0.5	6.0	2.4	11.1	4.0
250-274	5.7	0.5	3.9	0.1	5.5	1.9	9.0	1.6
275-299	3.7	0.6	2.4	0.1	5.4	1.7	9.2	0.2
300-324	3.0	0.2	2.3	0.1	4.1	2.0	7.0	0.4
325-349	2.1	0.3	2.0	0.2	3.8	0.8	2.8	0.4
350-374	1.2	0.1	1.4	0.1	3.2	0.5	4.1	0.4
375-399	1.0		0.6		4.8	0.4	3.1	
400-424	0.9		0.5		4.6	0.3	1.7	
425-449	0.5		0.0		3.5	0.1	1.4	
450-474	0.4		0.5		2.6	0.1	0.9	
475-499	0.4		0.2		1.3	0.0	0.9	
500-524	0.5		0.3		1.3	0.1	0.7	
525-549	0.2		0.1		0.5		0.6	
550-574	0.1		0.2		0.5		0.2	
575-599	0.1		0.0		0.3		0.8	
≥ 600	0.6		0.2	0.1	2.0	0.1	4.2	
	100.-	100.-	100.-	100.-	100.-	100.-	100.-	100.-

TABLE K: QUANTILES OF DISTRIBUTION OF FULL-TIME EMPLOYEES ACCORDING TO OCTOBER 1974 EARNINGS BY OCCUPATION (£)

Sector	Occupational status	Males						Females					
		Quantiles					semi inter-quartile range	Quantiles					semi inter-quartile range
		10	25	50	75	90		10	25	50	75	90	
Wholesale	1	199	260	350	482	600	111	63	181	288	321	339	70
	2	166	200	244	312	378	56	136	153	178	261	331	54
	3	138	168	207	263	311	47	105	117	143	171	204	27
	4	92	119	156	198	240	40	70	87	109	133	159	23
	5	77	104	131	169	215	32	56	70	95	118	142	24
	6	134	168	219	272	350	52	-	-	-	-	-	-
	7	107	132	163	207	253	38	76	83	94	116	135	16
	8	116	144	183	229	271	42	-	-	-	-	-	-
	9	76	110	135	180	218	35	59	77	91	109	128	16
	All	104	135	178	236	310	51	65	83	106	131	162	24
Retail	1	166	219	321	422	521	101	86	104	146	195	250	46
	2	154	182	220	291	360	55	104	127	169	267	349	70
	3	123	150	181	224	272	37	94	113	138	167	204	27
	4	80	104	136	168	210	32	66	83	103	123	146	20
	5	78	106	144	176	219	35	57	76	99	122	143	23
	6	130	166	201	234	277	34	-	-	-	-	-	-
	7	89	125	151	202	258	38	64	81	104	144	172	31
	8	105	128	159	199	254	35	-	-	-	-	-	-
	9	60	101	138	172	207	35	24	63	86	112	136	25
	All	91	128	167	216	284	44	58	78	102	126	150	24
Credit	A	431	512	695	712	720	100	-	-	-	-	-	-
	B	344	390	429	475	542	42	-	-	-	-	-	-
	C	236	273	323	389	437	58	187	244	332	379	411	68
	D	163	185	216	245	289	30	154	164	187	245	305	40
	E	115	131	146	170	200	19	107	123	139	158	174	18
	F	128	134	144	169	205	18	60	75	86	98	121	12
	All	132	150	224	349	440	99	109	129	156	174	228	23
Insurance	A	355	526	576	652	711	63	-	-	-	-	-	-
	B	234	317	393	531	704	107	-	-	-	-	-	-
	C	195	256	298	359	438	51	-	-	-	-	-	-
	D	176	216	257	311	409	47	130	146	172	201	233	27
	E	100	114	139	177	246	32	87	103	117	135	159	16
	F	88	125	151	187	258	31	-	-	-	-	-	-
	All	120	165	243	313	423	74	93	109	129	163	209	27

**TABLE L: AVERAGE AGE BY OCCUPATIONAL STATUS OF FULL-TIME EMPLOYEES,
OCTOBER 1974**

Sector	Occupational Status									
	1	2	3	4	5	6	7	8	9	Total
	Years									
<i>Wholesale</i>										
Male	44.5	41.0	40.0	30.9	29.5	37.1	36.8	38.8	34.9	36.7
Female	..	43.8	38.5	26.2	25.1	..	26.7	—	30.6	27.6
Total	44.6	41.2	39.7	27.6	27.9	37.1	36.3	38.8	34.3	34.7
<i>Retail</i>										
Male	43.6	40.0	39.3	30.2	30.4	37.8	37.0	38.3	33.4	35.8
Female	..	42.6	38.1	26.4	27.9	..	30.3	..	35.9	29.5
Total	43.7	40.4	38.8	26.8	28.7	37.7	36.3	38.1	34.5	32.6
	A	B	C	D	E	F	Total			
	Years									
<i>Credit</i>										
Male	44.5	45.2	37.6	28.0	22.0	47.5	33.7			
Female	—	..	38.5	30.3	21.2	47.8	25.0			
Total	44.5	45.1	37.7	29.4	21.5	47.6	29.3			
<i>Insurance</i>										
Male	43.3	45.1	40.4	43.9	24.0	44.9	37.9			
Female	—	—	..	36.7	22.7	..	27.4			
Total	43.3	45.1	40.7	41.9	23.2	45.1	34.1			

**TABLE M: AVERAGE MONTHLY EARNINGS OF FULL-TIME EMPLOYEES BY AGE,
OCTOBER 1974**

Sector	Age Groups							Total
	≤ 18	19-20	21-29	30-44	45-54	55-64	≥ 65	
	£							
<i>Wholesale</i>								
Male	87	115	178	225	222	207	202	197
Female	78	92	115	140	136	143	112	112
Total	82	104	158	216	212	200	194	178
<i>Retail</i>								
Male	91	107	167	214	211	195	188	182
Female	73	90	112	125	131	122	129	106
Total	78	95	136	185	182	164	161	143
<i>Credit</i>								
Male	134	150	197	334	344	344	190	263
Female	123	135	160	245	257	200	—	162
Total	127	139	175	314	326	328	—	213
<i>Insurance</i>								
Male	98	121	200	318	333	319	—	271
Female	102	109	131	197	215	191	—	141
Total	100	113	165	295	308	307	—	224

TABLE N: AVERAGE LENGTH OF SERVICE IN ENTERPRISE BY OCCUPATIONAL STATUS – FULL-TIME EMPLOYEES, OCTOBER 1974

Sector	Occupational Status									
	1	2	3	4	5	6	7	8	9	Total
Completed Years										
<i>Wholesale</i>										
Male	17.0	14.8	13.4	7.7	6.9	9.8	9.9	10.4	9.0	10.5
Female	..	16.7	12.4	5.5	4.0	..	5.9	–	5.3	5.8
Total	17.1	14.8	13.3	6.1	5.8	9.8	9.8	10.4	8.4	9.4
<i>Retail</i>										
Male	16.9	14.2	14.4	6.9	8.1	11.9	12.0	11.0	9.0	11.1
Female	..	13.5	12.7	5.8	5.3	..	7.3	..	5.2	6.1
Total	17.1	14.1	13.7	6.0	6.1	11.8	11.6	11.0	7.4	8.6
Completed Years										
<i>Credit</i>										
Male	15.5	22.9	16.2	9.0	2.4	11.1	11.2			
Female	–	..	17.0	10.4	2.0	8.4	4.7			
Total	15.5	22.9	16.3	9.8	2.1	10.3	7.9			
<i>Insurance</i>										
Male	19.4	20.4	17.3	18.9	2.6	10.2	14.0			
Female	–	–	..	15.6	3.2	..	7.1			
Total	19.4	20.4	17.5	18.0	2.9	8.8	11.5			

TABLE O: PERCENTAGE DISTRIBUTION OF EMPLOYEES, OCTOBER 1974, BY REGION

Sector	East	South West	South East	North East	Mid West	Midlands	West	North West/ Donegal	All regions
%									
<i>Wholesale</i>									
Male	47.1	18.5	10.3	3.9	8.0	5.1	4.2	3.0	100.–
Female	52.8	17.3	8.0	4.0	5.6	5.2	4.6	2.6	100.–
Total	48.4	18.2	9.8	3.9	7.5	5.1	4.3	2.9	100.–
<i>Retail</i>									
Male	56.0	11.8	8.1	5.6	6.4	4.1	4.5	3.6	100.–
Female	60.6	11.8	8.9	3.0	7.1	2.8	3.8	2.0	100.–
Total	58.3	11.8	8.5	4.3	6.7	3.5	4.1	2.7	100.–

TABLE P: AVERAGE EARNINGS, OCTOBER 1974, BY REGION

Sector	East	South West	South East	North East	Mid West	Midlands	West	North West/ Donegal	All regions
£									
<i>Wholesale</i>									
Male	220	183	176	158	196	169	166	159	198
Female	122	107	94	95	109	91	105	85	112
Total	196	167	161	144	181	151	152	144	178
<i>Retail</i>									
Male	196	172	157	161	168	156	168	152	182
Female	115	99	87	89	96	80	95	90	106
Total	154	135	120	136	130	125	134	128	144

APPENDIX 2

Items of information collected in Labour Costs Survey in Services, 1974 (there was some summarisation for firms with fewer than 50 employees)

1. Wages and salaries paid in 1974
 - i) paid regularly at each pay period
 - ii) other wage payments (irregular bonuses)
 - iii) lump sum redundancy payments less rebates
2. Employers' contributions to social security
 - i) statutory contributions
 - ii) voluntary contributions (separating pension fund contributions in some cases).
3. Payments in kind
4. Cost of vocational training (showing earnings of trainees separately)
5. Other labour costs (canteens, transport, etc.)
6. Number of full-time employees (monthly through the year), male and female, together with days worked in 1974
7. Average number of trainees, 1974
8. Average number of part-time workers and total number of "whole days" worked by them
9. Annual hours worked per employee (on "customary" basis)

APPENDIX 3

Items of information collected in Labour Costs Survey in Industry, 1975 (manual and non-manual employees distinguished in each case)

1. Wages and salaries paid in 1974
 - i) paid regularly at each pay period
 - ii) bonuses paid infrequently
 - iii) holiday pay
 - iv) sick pay
 - v) lump sum redundancy payments less rebates

2. Employers' contributions to social security
 - i) statutory contributions
 - ii) voluntary contributions
 - a) superannuation fund
 - b) other pensions
 - c) insurance premiums on behalf of employees
 - d) other (including family payments)

3. Payments in kind

4. Cost of vocational training (showing earnings of trainees separately)

5. Other labour costs (canteens, transport, etc)

6. Annual hours worked

7. Number of employees, male and female, at the end of each month

8. Average number of trainees and apprentices

APPENDIX 4

Items of information collected in Structure of Earnings Survey 1974 and occupational classification used

Data on total number of employees were collected for each enterprise together with the following items for a one in five sample of individual employees

1. Sex
2. Year of birth
3. Length of service in enterprise
4. Occupational status (coded as below)
5. Full-time or part-time
6. Whether present and paid in full in October 1974
7. Whether present and paid in full (apart from short absences) in year 1974
8. Average weekly duration of work
9. Whether paid partly by commission or not
10. Gross earnings for October 1974
11. Whether the earnings data refer to month or 4 weeks
12. Gross earnings for the year 1974
13. Bonuses paid in the year 1974
14. County of work base

Occupational status classification:

i) Wholesale and Retail enterprises

- Code 1 Highest levels of management
- Code 2 Middle management
- Code 3 Supervisory staff
- Code 4 Clerical or junior administrative staff
- Code 5 Indoor sales staff
- Code 6 Outdoor sales staff
- Code 7 Stores staff
- Code 8 Transport staff
- Code 9 Other staff

ii) Credit and Insurance enterprises

- Code A Highest levels of management
- Code B Senior management
- Code C Junior management
- Code D Highly experienced clerical staff
- Code E Other clerical staff
- Code F Other staff

APPENDIX 5

List of EEC* publications concerning surveys of labour costs and structure of earnings

Social Statistics number	Survey reference period	
A. Industry:		
(a) Surveys of labour costs		
4/1969	1966	Labour Costs in industry 1966
6/1970	1966	Labour Costs in industry 1966: Regional results
3/1971	1969	Labour Costs in industry 1969
4/1974	1972	Labour Costs in industry, preliminary results 1972
6/1975	1972	Labour Costs in industry 1972-1975
	1975	Labour Costs in industry 1975
		Vol. 1 Detailed results by industry
		Vol. 2 Structure of labour costs
	(to be published	Vol. 3 Results by size classes of establishments)
(b) Structure of earnings in industry		
8 vols.	1966	Survey of the structure and distribution of earnings 1966
13 vols.	1972	Structure of earnings in industry 1972
B. Distribution, Banking, Insurance		
(a) Surveys of labour costs		
4/1972	1970	Labour Costs in retail distribution, banking and insurance, 1970
	1974	Labour Costs in distributive trades, banking and insurance in 1974
(b) Structure of earnings		
10 vols.	1974	Structure of earnings in Wholesale and Retail distribution, banking and insurance in 1974

*Statistical Office of the European Communities

DISCUSSION

Professor Kieran A. Kennedy: It gives me great pleasure to propose the vote of thanks to congratulate the authors on an excellent paper. The paper is based on an immense amount of work, involving three surveys: two relate to labour costs – one for industry and one for certain services – and the other relates to earnings in these services. It is often difficult to compress even one survey to a paper length suitable for presentation at a society such as this; and it is a remarkable feat on the part of the authors to compress three such surveys into a concise and interesting paper.

Since the surveys have been completed with the care we have come to expect from the Central Statistics Office I will not enter into methodological issues about surveying or sampling. Instead I will turn to some of the uses to which these data can be put, and comment – necessarily selectively – on a few of the findings. I have had the opportunity of consulting the EEC volumes in which some of the findings of these surveys are more fully reported than was possible in the authors' paper, and some of my comments draw on that material as well as the paper before us. I may add that we all look forward to the full presentation of the Irish results in the promised forthcoming publications.

Non-wage labour costs have come in for increasing attention in recent years among economic analysts. Starting from the work of Walter Oi (1962) and Gary Becker (1962), a stream of papers has emerged bearing on the subject. I am happy to say that in the next issue of the *Economic and Social Review* a paper by Frank Kirwan analyses the effects of the rise in certain non-wage labour costs in Ireland on employment in manufacturing.

The *first* thing that needs to be said about these extra labour costs is that they are substantial. To arrive at total labour costs as measured in these surveys, it is necessary on average to gross up labour earnings by 12.5 per cent in wholesale distribution, by 13.5 per cent in retail distribution, in industry by 15.5 per cent, in insurance by 29 per cent, and in banking by no less than 39 per cent. But high as these additions are, they tend to be substantially higher in most sectors in the other countries of the EEC with the exception of the United Kingdom (where they are much the same as in Ireland) and Denmark (where they are lower). For example, in manufacturing the average (unweighted) mark-up on earnings to arrive at total labour costs in the other 8 member countries is 27 per cent compared with 15.5 per cent in Ireland. A major part of the reason for this, of course, is the much higher level of social security taxes in most of these countries. Interestingly enough, however, while in general the mark-up on earnings is far less in Ireland, in banking the percentage mark-up in Ireland is exceeded only by that of France, the average (unweighted) for the 8 other EEC countries being 28.5 per cent compared with 39 per cent in Ireland.

It may be noted that the definition of earnings used above is a rather wide one, embracing not only direct remuneration and regular bonuses, but also payments to workers' saving schemes, other bonuses and gratuities and payment for days not worked. Had we included in earnings only direct remuneration and regular bonuses, then the mark-up on basic earnings would range as high as 100 per cent in manufacturing in Italy, as against 30 per cent in Irish manufacturing. This highlights how misleading it can be to attempt comparisons of relative competitiveness on the basis of direct earnings without taking into account the very substantial differences among countries in other labour costs.

Second, these non-wage labour costs have interesting analytical features. Some of them, such as superannuation, would largely vary directly with gross earnings, and their effect on the demand for labour input would be analogous to a higher real wage

rate. Many however are fixed or quasi-fixed: for example canteen costs over a range may be largely invariant to the amount of labour input; while training costs may vary with the level of employment but be fixed in relation to the number of hours worked by an employee. Thus in addition to their impact on the *amount* of labour input, they may also affect the *composition* of labour input. Economic analysis suggests that they will tend to encourage overtime working at the expense of employment. They will also make fluctuations in employment less sensitive to fluctuations in output: where there is uncertainty about the permanence of changes in demand, labour will tend to be hoarded in a downswing, and only slowly adjusted to desired levels in an upswing. There is also the point that some of the non-wage costs which are set at a fixed absolute amount— such as the system of social insurance in use in Ireland up to recently — bear particularly heavily on low wage industries.

Third, a rising ratio of non-wage labour costs to direct earnings widens the gap between the cost of a unit of labour to the employer and the income to an employee. The evidence for European countries, which is available for a number of years, suggests that in fact these extra labour costs have been rising as a proportion of earnings, and the more limited analysis of Kirwan (1979) for Ireland suggests that the same thing has been happening here. This disparity between the cost of a unit of labour and its net employee income, has been accentuated by the fall in the ratio of take-home pay to earnings, resulting from rising direct taxes on PAYE workers.

The wide — and still widening — gap to which I refer could be a source of serious difficulty in industrial relations. Collective bargaining always involves widely different viewpoints, with the employer thinking the wage is too high, and the worker that it is too low, but in the old days they were at least looking at substantially the same thing. Nowadays, they may be looking at quite disparate things. The employer looking at the cost of a unit of labour will be concerned not only with the wage but also with the substantial amount he will have to add for non-wage labour costs. On the other hand, the employee or the union bargaining for a given wage will be particularly concerned about how much of this the worker is going to take home; and even when the non-wage costs directly benefit the worker, as in the case of superannuation, the benefit may be deferred while the cost is immediate. In such circumstances, it seems to me that the possibilities of misunderstanding could be seriously enhanced. To date, there has been little analytical attention in Ireland to this widening gap, though valuable work has been done on a related aspect by Brendan Walsh (1976), namely the effect of the relation between take-home pay for work and the unemployment benefit received when not working at all. Much more explicit attention will have to be given to the increasing gap between the cost of labour and the net income therefrom, which of course has many other implications besides those to which I referred.

These then are a few of the interesting analytical uses to which the data can be put. I have no doubt that the availability of an authoritative picture for a range of countries, such as we are now provided with, will stimulate further research on the relation between non-wage labour costs and other factors such as employment, inflation, and competitiveness.

On the subject of competitiveness, perhaps we might dwell for a moment on the cross-country results that emerge from the enquiry. In the EEC publications, the data on the absolute level of labour costs per hour (or per month) in the different countries have been converted to a common currency in the form of European Units of Account. While such a procedure might be inadequate for measuring relative standards of living, I think it

is reasonably alright for the analysis of relative competitiveness, since goods and services, if they are traded at all, must be traded at the exchange rate. The results show that Ireland enjoys a very marked advantage in total labour costs per unit of labour over the continental EEC countries. For manufacturing as a whole, labour costs – counting both the wage and non-wage element – are in general more than twice as high in the EEC continental countries. In relation to the United Kingdom however, our advantage is now very slight, amounting to only 10 per cent. In the case of the services – banking, insurance, retailing and wholesaling – our relative advantage is, however, considerably less; and indeed in relation to the United Kingdom, labour costs (per unit of labour) are slightly higher in Ireland. Possibly the more sheltered nature of services accounts for the contrasting position between manufacturing and these services. I am aware, of course, that any full analysis of competitiveness must take account not only of the cost of labour but also its productivity. The latter subject is not covered in these inquiries; but we must be grateful to have at last consistent data across countries for the former.

The authors provide an analysis of various variables by size of establishment or enterprise. Indeed an incidental benefit of the Labour Cost Survey for industry is that it gives an up-to-date picture of the size structure in terms of employment. Up to now the latest available official data have been from the 1968 Census of Industrial Production – the long awaited analysis of the 1973 Census of Industrial Production by size has yet to appear, and it will be already rather out of date when it does appear. In view of the great changes that are known to have taken place in the structure of Irish manufacturing since 1968 it is of considerable interest to see how the size structure has been affected. It is somewhat surprising to find that the size structure of establishments with ten or more employees has hardly changed at all in the seven years from 1968 to 1975 – at least in the aggregate. The average size of such establishments in 1975 was 85 as against 83 in 1968. Of course averages are dangerous with such a skewed distribution: but even when one looks at the ranges, there is remarkably little change. Indeed the percentage of employment accounted for by establishments with 500 or more employees has actually fallen by 2 percentage points from 26 per cent to 24 per cent. We may conclude, therefore, that in general there has been no strong tendency towards increasing scale of establishment where scale is measured in terms of numbers employed. Of course employment is not the only possible measure of scale, and no doubt if we were to measure it either in terms of real output or capital employed, we would almost certainly find that the scale of establishments in general had risen far more.

I fear I have devoted most of the time at my disposal to the Labour Cost Surveys and will have to leave it to other speakers to take up the Earnings Survey for the services sectors. Let me say however that it provides most welcome data. Far too long we have been without such data. They will be of great interest for studies of the labour market and of the distribution of income. They also provide material for social comment. One does not have to be an enthusiastic supporter of women's lib to marvel at the fact that among the approximately 300 persons in banking and insurance at the highest management levels (Table H), there is not a single female, while there are only insignificant numbers of females at senior management level comprising in total approximately 1,300 persons. As the authors point out, of course, the bar on female employment after marriage operating up to recently has been an important factor. But not all women have wished to marry; and in some other occupations where the marriage bar has operated, some women still managed to reach the top level – including the distinguished recent ex-president of this Society, Dr Thekla Beere. But perhaps we should not blame these institutions alone;

no doubt, to some of their clients the thoughts of having a female bank manager might be even more upsetting than having a female confessor!

In conclusion let me again congratulate the Central Statistics Office, and in particular the joint authors, who have put us so much in their debt with a wealth of information which I know will keep some ESRI research workers busy for a long time to come.

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Dr Eugene McCarthy: I was pleased to be asked to second the vote of thanks on the occasion of the presentation of this excellent paper by Brian Geoghegan and Patrick Frain of the Central Statistics Office.

The paper represents a very welcome development, particularly in respect of the broadening of the base of enquiry and the range of subject matter covered which it involves. Too frequently, we have been drawing conclusions based on the developments in the manufacturing sector to the exclusion of perceived significant development in the services and retail/wholesale distributive sectors. My one regret is the age of the information presented in the paper.

My detailed comments are of a nature that might be expected from an industrial relations practitioner rather than a statistician. The traditional approach of trade unions up to recent years has been to concentrate on the first wage element of the remuneration package rather than the elements of the second wage, more normally described as fringe benefits. Since 1974/75 there have been significant developments, particularly in respect of statutory costs. The principal areas of change would relate to working hours, annual leave and social welfare. The developments in the main have had their inspiration in EEC trends. I suspect that an exercise similar to this if done in respect of 1978/79 would show large changes in the proportions now identified between first and second wage costs.

I wonder why the choice of unit of survey i.e. enterprise was chosen. From an industrial relations point of view the characteristics of the local labour market might not identify themselves in a survey where the enterprise was the unit of survey. However, it is important to note that the standard of response, even for a first survey of this type, was of a high order, no doubt strongly influenced by the diligence of the staff of the Central Statistics Office.

It is interesting to note how the flat rate nature of the social welfare scheme in operation at the time of the survey showed, at that time, a disproportionately high percentage second wage cost in the industries that were both low paying and economically weak. This characteristic is also evidenced in those industries with a high female content. The recent change (April 6) to an income-related social welfare scheme, while bringing a welcome

relief to both employees and employers in these particular industries, will produce a marked change in the relationship between first and second wage costs in the next survey of this type undertaken covering the years 1979 onwards.

I appreciate the difficulty that the authors have had in the definition of trainees. Trainees can be variously categorised as apprentices, employees on probation, employees on the lower levels of incremental scales – this is particularly so in the distributive trades. The earnings profile identified for the insurance industry as against the credit enterprises might be accounted for by the differences in size of the undertaking. Furthermore, the nature of the insurance business seems to generate a higher level of seasonal overtime working than is evident in the case of credit enterprises. Under the heading of the distribution of fuels, ores and industrial chemicals, it is noted that labour costs are 50 per cent above the average for the wholesale sector. I suggest the reason for this is the high transport costs which again arise from making the fullest use of expensive capital equipment. The oil, chemical and mining industries are also traditionally high paying industries.

In the matter of the employers' voluntary contributions, particularly in respect of pension funds, reference is made to contributory and non-contributory schemes. The nature of developments in relation to pension schemes can be influenced by the size of the enterprise and the type of employee. The normal development is for employees to be covered initially by a non-contributory pension scheme but in time, when financial security has been secured, there is evidence of a movement towards a contributory scheme. Employees feel that under a contributory scheme their entitlement to benefit is that much greater and less discretionary than under a non-contributory scheme. Likewise, for the larger enterprises their buying power in the pensions market is greater than the smaller enterprises which have little or no buying clout. Additionally, in the case of the smaller enterprises, there is a disinterest on the part of the pensions industry in suitable schemes by virtue of the high administrative costs for what appears to be a small return. In the case of sick pay schemes and other time-off benefits, all the evidence suggests that these are greatest in the larger enterprises.

The extent of the fringe benefits in the financial sectors does not surprise me. The trade unions in these enterprises traditionally push for improvements in non-taxable fringe benefits. However, the provisions of recent Finance Acts have discouraged the developments of 'payments in kind' assuming that the returns made in this respect by the survey participants are valid.

I think we would identify interesting information if the results of this survey were analysed under the headings male and female, manual and non-manual. There is the traditional difference in the older industries between both the working hours and fringe benefits of white collar workers and manual workers. The holiday, sick leave and other fringe benefit arrangements tend to be more formalised in respect of unionised personnel who have been principally manual but increasingly the unionisation of white collar categories is diminishing the informal and honour systems that prevailed in respect of the latter categories.

The increase in average costs being monotonic with size is no surprise. Perhaps the extent of union organisation, particularly in the larger enterprises might well be a contributory factor. The position of female employees in the wholesale sector as against retail is clearly strongly influenced by the nature of the work done. There has been a marked change in recent years in the scale of the wholesale section of the distributive trade. Many of the retail combines now buy direct from the manufacturer. Wholesaling can be largely associated with the packing and transporting of goods normally done by

men whereas in the retail outlets there is a high propensity to employ females. It would be interesting to see if the advent of equal pay alters the female content in the retail outlets.

Reference is made to the poor quality of the data provided by some firms. It is suggested that there is a lack of awareness of the cost impact of certain benefits in these firms. My own experience would confirm this view. Additionally, many of the smaller companies have poor information systems.

In the time available to me my comments on the Labour Cost in Industry survey are fairly limited. However, clearly this survey is impressive in its comprehensiveness. Again, the strong correlation between size and cost elements is identified. The regional characteristics of the information demonstrate the influence of the local labour market. The response rate again is of a high order despite the difficulty for some firms in completing the returns.

I appreciate too well the difficulties that arise in the classification of foremen and supervisors. In many companies working foremen and supervisors, with limited supervisory content in their work, are classified as manuals whereas in the capital-intensive industries the evidence suggests that both foremen and supervisors, whose job content is largely supervisory, are classified as non-manuals.

The range of costs in the drink industry by contrast with the footwear and clothing industries is either a comment on the economic strength of these sectors or the patterns of our expenditure.

I will conclude by simply offering the comment that these surveys validated the approach by employers to collective bargaining. Since the beginning of this decade FUE has sought to have bargaining conducted on an integrated basis with simultaneous account being taken of pay, taxation and social welfare. It will be interesting to see the impact that the Anti-Discrimination (Pay) Act will have had on pay rates when the next survey is available. I would like to conclude by offering my congratulations to both Mr Geoghegan and Mr Frain and to the Central Statistics Office.

Professor Brendan M. Walsh: It gives me great pleasure to join with previous speakers in welcoming the publication of these results and in congratulating the authors on their valuable research.

The "Structure of Earnings" survey is particularly welcome because it extends our knowledge of earnings to economic sectors other than manufacturing industry or transportable goods industry, data from which have been so widely quoted up to now as almost synonymous with "earnings" in Ireland. Data on earnings by age, sex, occupation and other relevant variables for a wide range of economic sectors have been badly needed by Irish economists, and the present study provides, for one recent year at least, a major increment to our information on these topics.

I would, however, like to draw attention to some limitations of the data as presented by the authors. The authors correctly draw attention to the very flat age-earnings profile exhibited by women working in the Retail sector (Table M). But this Table raises as many questions as it answers. One would like to know whether a 40-year-old woman working in this sector had comparable length of service with men of the same age. Furthermore, although all the data refer to "full time" employees, there may be very significant differences in total hours worked between sectors or by age and sex. Some of these, and other similar queries, could be answered by further cross tabulation of the results; others could not, because the relevant information was not gathered. In the

former case, it is clearly impossible for the authors within the confines of a paper for this Society, or in the EEC publication based on this study, to provide all the cross tabulations that would be feasible and valuable. The only way to reap the maximum benefit from the availability of these data is to allow access to them by interested research workers. Clearly there is great potential for micro-econometric research using data based on the 15,000 sample summarised in this paper. Scholars in other countries, notably the United States, have access to this type of data on a regular basis, and have made great use of this access in exploring the determinants of variation in earnings. The confidentiality of the information can, of course, be fully safeguarded in much the same way as that of any Census. (In fact, it is curious that despite our relative conservatism in these matters, we in Ireland publish Census of Population tables containing single-digit entries, whereas in the United States the rule of confidentiality generally requires that any such cell be merged with another to rule out any possibility of identifying an individual!)

In welcoming the appearance of this new and very valuable source of information on earnings I would, therefore, like to express the hope that legitimate research workers could have access to some version of the data tape in order to allow them to begin to reap the very rich harvest that awaits them in the results of this study.

Dr Patrick Honohan: The earnings differentials between average wages in different industries, and in different regions, seem sufficiently great to suggest that non-zero differentials would still emerge were these data available after correction for differences in skill levels and other economic attributes of the employees. How do these differentials persist? Of course they may be attributable to barriers inhibiting mobility; but there may also be more subtle causes. For instance, I have often wondered, without knowing how to prove it, whether there may not be a kind of diffusion process which, because of the externalities to be obtained by an ambitious or high-effort employee from working with others of his kind, leads to a progressive homogenization of the workforce in different sectors as far as the level of effort is concerned. Accordingly, might we not, at least to some extent, attribute the persistence of earnings differentials to a persistence of effort differentials?