EQUALIZATION OF OPPORTUNITY IN IRELAND: STATISTICAL ASPECTS

R. C. GEARY and F. S. Ó MUIRCHEARTAIGH

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Acknowledgements

Introduction

IN this study we deal with the problem of equalization as it is ordinarily understood, namely in its relation to jobs and incomes which, in turn, are closely related. We have brought together all the relevant statistics bearing on this job-income aspect that we could think of, sometimes taking the figures as they are, sometimes analysing them further.

We do not have to trouble with niceties of definition. To start with, it was enough for us to know that every year in Ireland 2,000 boys started their careers in unskilled occupations and that, fairly recently, half the children in Ireland left primary school without completing the course. We are emotionally committed, but emotion is not our impulsion in this study: rather is it that, in so far as citizens do not follow the jobs for which they are best suited after training, there is what we may term *social inefficiency*. We mean that, given the amount of investment in education (in the wide sense) and in material objects, real GNP is less than it otherwise might be. This is the materialistic aspect—the good of the nation. We suspect that job-satisfaction is also conducive to the good of the individual.

As we go, we comment freely on what we regard as the relation of this or that showing of the figures to the theme of equalization. Sociologists may, or may not, agree with our interpretations. We will be well content to regard *all* such statements as followed by a question mark, i.e. points for discussion. While the climate of opinion (compared to, say, even a generation ago) is favourable to equalization it is our opinion that marked improvement will not take place without explicit commitment, with progress systematically monitored. Not only educationists but every class of society should be involved. Actual equalization may, or may not, be possible of attainment,

but we regard it as obvious that there is great room for improvement.

In the first (of five) sections, basically we examine whether occupationally and income-wise the nation is tending autonomously towards equalization of opportunity. From the economic point of view this might be regarded as the demand (i.e., of society) aspect. In the second section our objective is measurement of inequality. We rely heavily on B. Hutchinson's recent Dublin study on social mobility, attempting to measure degree of inequality by regarding the intergenerational matrix as a Markov process. We also use (in section 2) the results of an inquiry by C. Raven and C. Benson amongst post-primary students about their job hopes.

In Section 3 we treat the supply situation, family size, housing conditions, expenditure (particularly on children) etc., physical and mental health. In Section 4 we deal with certain aspects of education.

In these four sections our selection is highly selective and eclectic. Only those aspects which have some relation, even tenuous, to our main theme are dealt with. Of course, in no sense does our treatment approach adequacy as regards occupations or incomes, household expenditure, education or anything else, regarded as topics in themselves.

In the final Section 5 we briefly summarize our relevant statistical findings and, greatly daring, go far beyond our statistical brief with suggestions about future inquiry.

Ours has no pretension to being a work on sociology. Our wish is that it will provoke discussion and that our statistics will prove useful therewith.

1. *Occupational Structure and Status*

O CCUPATION is central to opportunity and prospects. In the first part of this chapter we present an outline of the evolution of the job structure. Much of the analysis relies on broad occupational groupings (some dozen or fewer groups), known variously as "socio-economic", "social status", etc., or even more general groupings for a few Census years so as to show the long-term and latest short-term trends. Incomes are primarily job-determined, except for those with inherited wealth. Social status, and, indeed, the quality of material life that underlies it, is largely income-determined. The relative earnings position of the poor, and of women* are briefly discussed. We present our own analysis of the distribution of industrial earnings in the period 1938/68 (the earliest and latest dates for which we could procure the information).

Many (though not all) of the topics have been discussed in detail elsewhere.† We have for the most part relied on primary sources (the Census of Population, the Census of Industrial Production etc.). Selectivity in choice of material is necessary not alone to delimit the inquiry, but also to make some points which seem to us important.

The Urban-Rural Change

The outstanding demographic phenomenon of our time has been the change-over on a vast scale from a rural to an urban way of life, involving a decline in the number in agriculture

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*An indepth study of the position of women in Irish society was concluded while this study was being prepared. Those who are particularly interested in this aspect of the problem should consult the reports of the Commission on The Status of Women [1, 2]. See also Chapter 5.

†Discussions of several of the topics, the decline of Irish agricultural labour force, the demographic transformation since 1958, and marriage and fertility patterns in postwar Ireland, may be found in papers by B. M. Walsh [3, 4, 5]

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of one-half in 40 years—see Table 1.1. The consequences are all-pervasive (some good, some bad) not least for our problem. On balance, however, this change has been conducive to improvement of opportunity for ordinary people, having regard to general sophistication, proximity to schools and other cultural institutions, improved personal contacts, job-choice etc. This is only our opinion which we set down merely to provoke argument. We are confident that the showing of Table 1.1 cannot be ignored in any informed discussion of our topic. What of the future of equalization of opportunity, from this aspect alone?

TABLE 1.1: *Number of persons in each occupational status in agriculture, non-agriculture and all branches of economic activity. Ireland, 1926, 1946, 1961, 1966.*

	Occupational Status (000)				
	Employers	*Workers on own account*	*Assisting relatives*	*Employees**	*Total*
Agriculture					
1926	52·0	218·2	263·9	128·1	662·1
1946	47·5	204·8	203·4	127·4	583·2
1961	16·8	194·8	108·0	67·4	387·1
1966	11·5	190·2	83·3	56·0	341·0
Non-Agriculture					
1926	27·2	77·1	5·7	529·0	638·9
1946	26·5	67·3	10·4	603·0	707·2
1961	15·8	58·5	8·9	637·8	721·0
1966	15·8	55·3	8·0	698·2	777·2
Total					
1926	79·1	295·3	269·6	657·0	1,301·1
1946	74·0	272·1	213·8	730·4	1,290·4
1961	32·7	253·3	117·0	705·2	1,108·1
1966	27·3	245·5	91·2	754·2	1,118·2

*Including out-of-work.

Sources: [6, 7, 8, 9].

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For the comment that follows it should be explained that in the Census of Population "employer" is a person who employs paid persons: hence directors of limited companies are regarded as "employees". Persons employing only private domestic servants are not regarded as "employers". "Own account" workers are heads of enterprises who do not employ paid workers: they may use the services of members of their families, i.e., those with the status "assisting relatives".

Whatever its other effects, good or bad, there can be little doubt that the vast (and continuing) decline in the status assisting relatives in agriculture from 264,000 to 83,000 (females alone declined from 38,000 to 9,000) was conducive to a better opportunity for children. In the past this status can best be described as benevolent serfdom—when it was benevolent.* It is by no means the case at present. A minority of the 83,000 may expect to assume control of farms and ordinary observation goes to show that the rest (through improvement in communication etc.) are very much more free agents than they were in the past, i.e., they can better themselves if and when they elect to do so. Many will move out of agriculture in due time. In fact, 42 per cent of farmers' relatives assisting were under 25 years in 1966: of this cohort many will go.

We have suggested that the modern trend from agriculture and towards urbanization is favourable to equality of opportunity; this, however, is a matter of opinion. Unquestionably favourable to improvement of opportunity has been the increase in real income of the average agriculturist (mainly due to decline in numbers). This increase amounted to 99 per cent, compared with 65 per cent in non-agriculture between 1947 and 1966, these years being the nearest long-term to those of Table 1.1 for which we have comparable income data. Of course, agriculture started (in 1947) at a much lower income per head than in non-agriculture, so that the trend is towards

*The propensity of small farmer parents to make their sons priests and doctors has been well publicised in story and play. Certainly educational miracles have been performed by such poor parents. But having regard to numbers of farm families on the one hand and to numbers of priests and doctors on the other, such cases were few and untypical.

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equality. It may be added that in the recent period 1966–1972 the corresponding increases were 67 per cent for agriculture (including forestry and fishing) and 37 per cent for non-agriculture.

Also, with the improvement in transport and communications, it seems likely that the position of agriculturists (in dispersed dwellings) has improved and will continue to improve. Nevertheless, it seems to us (though others may take a different view) that people in agriculture, especially children, even at given income level, are at a disadvantage as regards opportunity and, in serious consideration of the problem, their case should receive particular attention.

In non-agriculture the decline in the number of employers and own account workers and the increase in the number of employees point to a decline in small family-type businesses and an increase in company size,* on the whole conducive

TABLE 1.2: *Percentage in each occupational status in non-agriculture, Ireland, 1926, 1961, 1966.*

Year		Occupational Status			
	Employers	Workers on own Account	Assisting relatives	Employees	Total
1926	4·3	12·1	0·9	82·8	100
1961	2·2	8·1	1·2	88·5	100
1966	2·0	7·1	1·0	89·8	100

Basic Source: Table 1.1.

*Some idea of the increasing size of industrial *establishment* is got by examining tables specially compiled from CIP returns from the years, 1936, 1958, 1963 and 1968. The trend toward increasing size is shown clearly in this table.

Number of persons per establishment	Percentage of Total CIP employment			
	1936	1958	1963	1968
100 +	60·0	65·4	68·4	71·6
500 +	26·4	31·0	32·6	35·4

Basic Source: [10, 11, 12, 13].

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to improved prospects of employment of children from the poorer social classes. Proprietors of independent businesses are in a position to favour their relatives and friends though one does not know to what extent they do so. As far as this happens there is an employment bias against children from less affluent families. On the other hand, employment in the public service and in large corporate bodies (in which all workers have the status of "employee") is relatively free from this type of bias, if not free from other types. We return to this aspect later.

Table 1.2 is confined to non-agriculture since, as Table 1.1 shows, inclusion of agriculture imparts a great distortion to any consideration of percentage distributions. Its outstanding showing is the increase in the proportion of employees. Noting that the 5-year period 1961–1966 is but one-seventh of the duration of the previous 35-year period 1926–1961 it is clear that change towards employee status in non-agriculture is proceeding at an accelerated pace (i.e., change in percentage 1.3 in the later compared with 5·7 in the earlier). We also recall that 1961–1966 was a period of much steeper economic advance than the earlier period.

Socio-Economic Structure

In Table 1.3 we really come to grips with an important aspect of our problem, namely that of the kind of non-agricultural labour which society demands. As regards years shown, 1951 is the earliest year for which this classification is available officially.

As Table 1.3 contains the first mention of socio-economic groupings (with 1 as "highest"), of which we made much use in this paper, we should point out that there is no suggestion of "superior" or "inferior". The classification, as regards the gainfully occupied, merely implies a convenient grouping of occupations, the occupations in each group being reasonably homogeneous. The grouping is real in the sense that the measurable characteristics (e.g. percentage with post-primary

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TABLE 1.3: *Percentages of persons gainfully occupied in non-agricultural socio-economic groups. Ireland, 1951, 1961, 1966.*

Non-agricultural socio-economic group	1951	1961	1966
	per cent	per cent	per cent
1. Higher Professional	4·5	5·1	5·1
2. Lower Professional	5·6	5·9	6·0
3. Employers, Managers	4·3	3·9	4·3
4. Salaried employees	2·2	2·1	2·1
5. Intermediate non-manual	38·5	24·4	24·3
6. Other non-manual		16·8	16·1
7. Skilled manual	21·2	18·9	20·5
8. Semi-skilled manual	12·9	13·2	12·2
9. Unskilled manual	11·0	9·6	9·4
No. gainfully occupied (000)	757	710	772

Basic Source: [14, 15, 16].

Notes

Figures for 1961 and 1966 are absolutely comparable, except for minute adjustment in respect of "unknown" (0·3 per cent in 1966). In 1951 there was a fairly substantial category (10) distinguished, namely "workers on own account (except in agriculture and the professions)" (7·8 per cent). These have been distributed proportionately to their most reasonable heads.

educational qualifications see Table 2.2) are usually regularly related to the ordinal system (1, 2, . . .) used for social groups.

Despite the fact that something like an economic revolution took place between 1961 and 1966, the similarity of the later two percentage distributions is remarkable. Changes in large Census aggregations of this kind are small, so we may regard the changes between 1951 and 1961–1966 as significant, in particular the decrease in the percentages in the semi-skilled and unskilled groups 8 and 9. This would mean a small rise in average status, in the half-generation period the table covers.

As an adjunct to Table 1.3 we display in Table 1.4 particulars for groups 8 and 9 for men only but extending back to 1936, giving a 30-year survey. These are economically the least well-off groups and so must engage our particular attention.

Socio-economic group	1936	1961	1966	1936	1961	1966
	No. (000)			*Percentage Total GO Males*		
8. Semi-skilled manual	48·4	53·9	53·7	10·8	11·6	10·1
9. Unskilled manual	69·6	67·5	71·5	15·6	14·5	11·5

Basic Source: [14, 15, 17].

The 1936 figures were derived from the individual occupations as listed in socio-economic groups in the appendix to Vol. IV, 1966.

While the 30-year change in numbers or percentages is not great, it is important to note that the numbers in Table 1.4 give no indication, in actual numbers, of a decline in demand for semi-skilled and unskilled men. As a *percentage* of males gainfully occupied outside agriculture this numerically undiminished body of men constitutes a declining percentage— it will be interesting to see if this trend is borne out in the 1971 Census. This declining percentage is, of course, satisfactory but, having regard to their endemically large unemployment experience (see [17a]), unskilled men in non-agriculture are in over-supply in Ireland, with effect of diminishing wages, accordingly unegalitarian.

*Unemployed Teenagers**

Improvement of status is exceedingly slow. Autonomous change in demand for labour will bring about equality of opportunity only in the very long term. One of the country's gravest social problems, first revealed at the 1926 Census, is the number of idle youths, i.e. those who never had a job and who are not at school.

*The choice of epithet has been questioned. It may be argued that many of the young people concerned are looking for suitable jobs, and our figure reflects "job search unemployment" which may indicate a very desirable investment in a future career. This factor certainly influences the numbers "not at school and not yet at work".

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Category	1926	1961	1966
	No. (000)		
Not yet at work	14·8	11·2	9·1
No occupation	0·8	0·5	0·5
Total idle	15·6	11·7	9·6
Total males aged 14–19	177·2	141·3	161·6
Percentage idle	8·8	8·3	5·9

Basic Sources: [6, 15, 17].

Table 1.5 shows that the problem is still with us. It is surprising that so little impression was made in its solution in the 35 years 1926–1961 but encouraging that so marked a change, in so short a period, took place between 1961 and 1966 (from 8·3 per cent to 5·9 per cent). The latter phenomenon is, of course, a reflection of the great rise in recent years in numbers in post-primary education, and therefore must be qualified by the reflection that, now as always, many youngsters are still at school because they cannot get a job. The total of about 10,000 youths unemployed in 1966 is still a formidable problem. Great interest must attach to the 1971 Census figure (and percentage) of idle youths. The increase in number in post-primary education since 1966 should accelerate decline in number unemployed.

Incomes

We remarked earlier that the greater rise in agricultural incomes per head compared with those in non-agriculture in the postwar period (more precisely between 1947 and 1966) coupled with the great decline in numbers in agriculture in the same period (Table 1.1) were, on the whole, conducive to improvement in job-opportunity. Not so the relative stability in the socio-economic grouping of the gainfully occupied in non-agriculture in recent years (Table 1.3).

The near stability could, theoretically, have been associated with a lessening of disparity in incomes, a point which we now consider. Unfortunately in this country, as in most others, statistics of income distribution by size are about the least developed, though obviously most important from the social point of view: without them how can the problem of poverty be properly investigated?

Happily there are available for Ireland an almost unbroken series of statistics of numbers of wage-earners in industry classified by size of earnings in a week in October in each year. Table 1.6 is based on these statistics.

The figures shown in the first four columns of Table 1.6 were estimated by graphical interpolation from cumulative frequency distributions in the respective years. To interpret: the 1·34 in the 1938 column means that 10 per cent of men in transportable goods industries are estimated to have earned less than £1·34 a week in 1938 (an incredibly low figure by any standard).

TABLE 1.6: *Estimated lower percentile earnings per head of male industrial workers 18 and over in transportable goods industries in the years 1938, 1947, 1966, 1968.*

Lower Percentile	Earnings per head (£)				Ratio 1968 to:—		
	1938	1947	1966	1968	1938	1947	1966
10	1·34	2·57	9·0	10·4	7·8	4·0	1·16
20	1·78	3·26	10·9	12·6	7·1	3·9	1·16
30	2·15	3·89	12·3	14·1	6·6	3·6	1·15
40	2·48	4·38	13·4	15·5	6·3	3·5	1·16
50	2·84	4·85	14·6	16·9	6·0	3·5	1·16
General Average	2·91	4·89	15·3	17·7	6·1	3·6	1·16

Basic Sources: [18, 19, 20, 21].

Notes

(1) Figures in last three columns derived from those in preceding four. Thus in the second last column the first figure 4·0=10·4/2·57.

(2) In view of the vast increase in average money earnings per head between 1938 and 1968, it may be well to remind the reader that with 1938 as 100, the consumer price indexes were 171, 316, 347 in 1947, 1966 and 1968 respectively, the years of the table.

Otherwise, if we imagine earners arranged individually in ascending order of income, £1·34 is the income of the earner one-tenth of the way up. Clearly the concept is suitable for analysis of the poorly paid.

Considering that all the figures in the first four columns of the table are based on graphs, the statistical regularity (without forcing!) in the last three columns is remarkable, especially when one considers the magnitude of changes in industrial structure since 1938; for, in constructing the table, no allowance was made for such changes, the "general average" by the way, relating to all transportable goods industries as they were in the years indicated. We are reminded of the marked propensity of earnings to spread (in proportion) equally throughout industry, perhaps indeed throughout the whole economy, so that inferences based on the table may have a wide applicability.

Over the whole period of 30 years there has been significant (but small, considering the length of the period) relative improvement in the earnings of the lowest paid workers, e.g. those at the lower 10 per cent, whose earnings in 1968 were nearly 8 times what they were in 1938, compared with a general average multiplier of 6. As time went on the difference diminished, to vanish entirely in the latest two-year period shown. There are, however, some signs of diminution of range in the very recent past—see following paragraph.

National Pay Agreements

This line cannot be further pursued by use of percentile analysis,) as CSO have, unfortunately, discontinued in 1968 the series on which the analysis is based. However, the bulletin of the Federated Union of Employers [22], June 1973, suggests that since 31 December 1970, increases governed by the terms of the first and second National Pay Agreements have been progressive in effect. It is claimed that under the terms of that agreement people in receipt of a basic *wage* (in December 1970) of £15 received increases of £8·14 or 54 per cent, while

those on a basic rate of £20, £25, and £30 received increases of 42 per cent, 36 per cent and 33 per cent respectively. Without figures of Census of Industrial Production *earnings,* it is impossible to say to what extent these agreements have shifted the distribution in favour of the lower paid but it appears they have been designed to do so.

Specific Lowly Paid Occupations

We estimate that, between 1948 and 1968, non-agricultural employee remuneration per head in 1968 was 3·64 times its level in 1948. This ratio may be regarded as our norm for what follows. Following are the ratios for wages (as distinct from earnings) per week in a number of lowly paid occupations:—

	Ratio 1968/1948
Men	
Builders' labourers	2·57
Co. Council road labourers	3·16
Grocers' assistants*	3·40
Laundry workers	2·50
Women	
Grocers' assistants*	3·28
Laundry workers*	2·71
Hosiery workers	2·72

*Average of highest and lowest ratios.

Basic Source: CSO reports on "Wages, Earnings and Hours of Work" [19, 21].

None of these ratios exceed the forementioned general average of 3·64. As far as this evidence from specific occupations goes, there is no indication of relative improvement in the lot of the poorly paid.

Mention may be made of two once numerically important but badly paid groups, namely, male paid agricultural workers and female private domestic servants. Between Census years 1946 and 1966, the former declined by more than one-half (from 113,000 to 46,000), the latter by more than two-thirds

("female private domestic servants" 79,000 in 1946, "maids and related workers" 25,000 in 1966). Average minimum wages of agricultural workers increased in the ratio 4·35 (from £2·26 to £9·85 a week), well above the general average for employees. We have been reliably informed that remuneration (in cash and kind) of female private domestic servants increased from £80 to £270 a year between 1946 and 1966, or in the ratio 3·38, perhaps a little less than the general average. The rise in agricultural wages is associated with the greater than national average rise in agricultural income, noted earlier. Drastically reduced demand for these two kinds of labour is, in turn, associated with great increases in capital appliances on farms and in homes. There is also the supply aspect that, in 1966, wage rates in these two occupations were regarded as low.

From the viewpoint of this paper, such large drifts from lowly paid occupations is to be welcomed, as indicative of autonomous drift towards equality.

On average for all occupations, however, the situation was probably that shown by Table 1.6 for transportable goods industry, namely, no perceptible difference in change in favour of the lowly paid in the recent period.

In this subsection on incomes we have raised some issues fundamental from the purely income point of view, dealing with each in the most cursory fashion. This is deliberate. If there were any significant tendency towards equality it would have become evident from our very generalized analysis.

Women's and men's earnings in Transportable Goods Industries are compared in Table 1.15.

Public Employees

P. Coyle (in an, as yet, unpublished study) of the Institute of Public Administration has estimated that on March 1, 1971 these persons numbered 178,000 or one-sixth of the labour force. They include civil servants, employees of local authorities, state corporations and institutes supported by public funds,

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Defence Forces and Garda Siochana. Comparative figures are not available for previous years. The composition of this figure is not identical with that of B. Chubb [32] who has shown that "employment in the public service" increased from 90,000 in 1947 to 134,000 in 1965, the substantial increase being mainly in state-sponsored bodies. The trend is clear, and it seems likely to continue. Since, in theory at any rate, social origin is not of direct relevance in appointments to the public service, increase of numbers therein should be conducive to improved prospects of employment for properly qualified children of poor parents. As we have had occasion to point out more than once, the effect *in practice* may be different. Public authorities' insistence on educational qualifications beyond the requirements of the job (e.g. a leaving certificate where a primary education would suffice) is to countenance class-bias in appointments. Should not public authorities (in aspiration "ideal employers") give a lead in trying to match educational requirements to real job needs?

Prospects for Women

We consider in succession, marriages, employment and comparative pay of women.

The most heartening feature of Irish demography has been the increase in the marriage rate in recent years, after decades of stagnation when this rate was notoriously by far the lowest in Europe and almost the lowest in the world. To lend perspective to the phenomenon we show, in Table 1.7, particulars back to 1881. After remaining at about 5·5 with little annual variation from the mid-1930s to the early 1960s, the rate "took off" in 1965 to increase regularly to 7·3 in 1972. Chains of causation are difficult to establish statistically with demographic phenomena but we may safely surmise that this recent increase is associated with the (partly related) happenings (i) the economic upsurge which began about 1960, (ii) decline in emigration, (iii) increased urbanization, (iv) improved real income of the working classes.

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TABLE 1.7: *Annual average number of marriages per thousand population in intercensal periods 1881–1891 to 1961–1966 and rates for single years 1961–1971.*

Intercensal period	Rate	Single Year	Rate
1881–1891	4·0	1961	5·4
1891–1901	4·4	1962	5·5
1901–1911	4·8	1963	5·5
1911–1926	5·0	1964	5·6
1926–1936	4·6	1965	5·9
1936–1946	5·4	1966	5·8
1946–1951	5·5	1967	6·1
1951–1956	5·4	1968	6·5
1956–1961	5·4	1969	6·8
1961–1966	5·7	1970	7·0
		1971	7·3
		1972	7·3

Source: Statistical Abstract 23, 24. Quarterly Reports of Births, Marriages, Deaths 25, 26.

In absolute numbers the situation is now like this. In our near-constant population of 3 million about 35,000 girls reach the age of 15 each year. A marriage rate of $5\frac{1}{2}$ will absorb about 16,000. We are tending towards $7\frac{1}{2}$ or nearly 22,000 women a year. In relation to the 35,000 female exitants from childhood the 22,000 represents about 63 per cent compared with some 50 per cent under the $5\frac{1}{2}$ per cent rate regime.

The changed situation as regards emigration must also be taken into account. (Table 1.8.)

TABLE 1.8: *Annual average net number of emigrants, male, female and total in the intercensal periods 1961–1966 and 1966–1971.*

thousands

Intercensal period	Male	Female	Total
1951–1961	21·8	19·1	40·9
1961–1971	6·3	7·2	13·5

Source: [28].

Note

"Net" in title means emigrants less immigrants.

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As it happens, the decline in the annual average net number of both male and female emigrants between 1951 and 1971 greatly exceeds the increase in the number of marriages. There seems to be no doubt about the phenomena being related. The Commission on Emigration [33] found that in the past many young women emigrated because of poor marriage prospects in Ireland.

We must not, however, lose sight of our main objective (equality of opportunity for children) in our contemplation of these revolutionary demographic changes of the last few years. Truth to say, the relevance of the latter is tenuous. Nevertheless, we suggest that a connection exists, if indirect. In the past the phenomenon of emigration (so dominant that, within living memory, it absorbed three-fifths of each cohort of births and practically every member of the population contemplated emigration at some time) led to great unsettlement amongst young people, leading *inter alia* to postponement of marriage (often *sine die*).

Emigration was centrifugal in a sense. Individuals in Ireland did not regard themselves as "parts one of another" except perhaps in Dublin (though, even here, not at all times). Dublin was the only area of the Republic where autonomous growth obtained, but never to a sufficient degree to absorb the surplus elsewhere.

From the increase in number of marriages we might argue an improved sense of responsibility in young women (and men also) and, in conjunction with the decline in emigration, an acceptance on the part of a large majority of young Irish people (for the first time ever?) that Ireland is a place worth living in. We would argue further that this sense of responsibility must be conducive to an improved consciousness of our duty to children.

To repeat, we must be careful about implying causation when dealing with social phenomena. Instead, these helpful elements, care of children, increased propensity to marry, lower emigration, improved material standard of living

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TABLE 1.9: *Number of married and widowed women as percentage of total women in certain age groups*, 1926, 1946, 1961, 1966.

Age group	1926	1946	1961	1966
15–34	24·3	28·9	33·0	34·7
35–44	70·5	70·0	77·3	79·6
45–64	76·2	74·9	76·1	77·6
65 and over	80·2	76·7	75·7	75·2
All Ages, 15+	53·1	55·1	61·1	61·8

Basic Source: [29].

(including care for housing conditions) may simply have a common cause which may simply be an advance in level of living all along the line.

Table 1.9 relates mainly to age at marriage. In 1961 and 1966 one-third of women aged 15–34 were married, compared with one-quarter in 1926. In 1961 there was already a significant lowering in age at marriage, perhaps partly due to increased urbanization, for age at marriage is higher in country than in town areas. When the relevant figures become available from the 1971 Census we may expect a marked increase in the percentage of women married at ages 15–34. The table reveals the propensity to marry of different cohorts of women.

Gainfully Occupied Women

The kind of paid jobs women have and their rate of earnings, in comparison with those of men, are clearly relevant to a study of equalization of opportunity. It is, in fact, a large part of the male versus female aspect of the problem which is as important as the better-known rich versus poor aspect.*

*The Carnegie Commission on Higher Education claimed recently that women have intellectual abilities equal to men's; they made this statement because not all men accept it. Participation of women in America indicates a high degree of social suboptimality. While 50 per cent of high school graduates are women, only 43 per cent of graduates and 13 per cent of doctoral graduates are. (Time 1st October 1973.) The declining percentage is, no doubt, affected by the prosperity of women to become involved in domestic duties.

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In the Census, women are regarded as gainfully occupied (as distinct from "engaged in home duties") when the larger part of time available is spent on paid jobs or "assisting relative". We consider later part-time paid employment of women whose principal job is housewife.

In 1966, about a quarter of the labour force was female. Between 1961 and 1966, number of gainfully occupied women increased slightly (from 287,000 to 289,000) but proportion of total workers is identical at 25·9 per cent. The Irish industrial revolution which began about 1960 has not resulted in many jobs for women (or men either), in the aggregate, losses in agriculture being little more than compensated in non-agriculture job-wise: between 1961 and 1966, gainfully occupied women increased by 5 per cent compared with 10 per cent for gainfully occupied men.

The Census socio-economic grouping of individual occupations—see Table 1.10—is less favourable for women than for men. It might not immediately spring to mind that the high proportion of women in group 1 (non-agricultural) is due for the greater part to 13,000 nuns (in 1966). Group 2 (non-agricultural) contains teachers and nurses hence the preponderant percentage. Group 5 contains clerks and typists, group 6, waitresses, cooks etc. and private domestics all of whom will be surprised to discover that they are "non-manual". Group 8 (semi-skilled) are mainly factory machine workers.

Socio-economic grouping suffices to show that percentages for females are lower than average in the better-paid groups, 3 employers, managers, 4 salaried employees, and 7 skilled manual. Reference to individual occupations would be necessary to confirm ordinary observation that, on average, men have by far the better jobs, whether "better" be adjudged by pay (see later) or by skill required to practise, or both. We are so accustomed to this situation that we take it as natural, despite the fact that women have more years formal education in Ireland than men—see Section 4.

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TABLE 1.10: *Number of gainfully occupied in each socio-economic group, distinguishing sex, 1966. Percentage female in each group, 1966 and 1961.*

Socio-economic group	Number Gainfully occupied 1966 (000)			No. female as per cent TGO	
	Male	Female	Total	1966	1961
Agricultural					
1. Farmers, farmers' relatives etc.	252·7	32·5	285·2	11·4	13·0
2. Other agriculture, fishing	60·8	0·6	61·4	1·0	0·7
Non-agricultural					
1. Higher professional	24·1	14·7	39·4	37·3	39·8
2. Lower professional	17·3	29·4	46·6	63·1	63·6
3. Employers, managers	28·2	4·8	33·0	14·5	16·3
4. Salaried employees	15·8	0·4	16·3	2·5	2·0
5. Intermediate non-manual	91·4	94·3	185·6	50·8	48·9
6. Other non-manual	71·3	52·4	123·8	42·3	46·1
7. Skilled manual workers	140·1	17·8	158·0	11·3	13·5
8. Semi-skilled manual	53·7	40·6	93·3	43·5	42·5
9. Unskilled manual	71·5	0·9	72·4	1·3	0·9
Total	829·1	289·1	1,118·2	25·9	25·9

Basic Source: [30, 31].

Note

Totals include small number with socio-economic group unknown. Such group was decided by individual occupation, not necessarily by occupation of head of household. For instance, the typist daughter of a skilled manual worker (7 above) would be allocated to group 5 and not to 7.

It remains to be seen if the situation is unfair to women. Fully free, they might opt for domesticity, i.e. regard the unpaid married state as the most desirable of all. If before marriage they take a paid job, there will be no inequality or inefficiency if they be regarded as on a par with men of the same age and training. If, on the other hand, regarding

marriage as their goal, they are less keen, less ambitious, less anxious for responsibility on the job, women cannot complain about getting less promotion than men who are without these disabilities. Or they may be at a disadvantage if, being married, they have a part-time or wholetime paid job, through dissipation of energy between home and job, and on the paid job also their employment is likely to be interrupted to the prejudice of their seniority.

Yet the general discrepancy between job levels of men and women is so great that it is hard to credit that it came about by "natural" causes like the foregoing; perhaps we should add their lesser physical strength.* To the extent to which a job is given to a man when a woman is better qualified there is inefficiency in job allocation.

It is something that the principle of equal pay for equal work is almost universally accepted. This is still a far cry from equity and social efficiency, since the principle says nothing about job distribution. *Pace* allocation of female domestics by the Census authorities to "non-manual", it happens that women, with lesser physical strength, perform a large part of society's manual tasks; and, to repeat, in Ireland women are the better educated (at least in a formal sense), i.e. more women than men are qualified for sedentary jobs.

Participation of Married Women in the Labour Force

This is small in Ireland, in 1966 only 5 per cent of all married women, a percentage which has changed very little in the previous forty years. Here we use the term married as excluding widows, whose job-impulsion is probably more akin to that of single than to married women. Percentages for different age groups at the Censuses of 1961 and 1966 are shown in Table 1.11. An obvious interpretation of the decline in percentages for younger ages is family responsibilities, the nadir being reached at ages 30–39.

*But what about effort, in relation to strength? A racing man remarked: "I have known of fillies that died of exhaustion, from over-effort, but never of a colt."

TABLE 1.11: *Percentage of married women in labour force in certain age groups, 1961 and 1966.*

Census	Total	Age Group						
		14–19	20–24	25–29	30–34	35–39	40–44	45+
1961	5·2	9·0	7·7	5·6	4·2	4·3	5·2	5·4
1966	5·3	9·2	8·7	6·2	4·8	4·4	4·7	5·3

Basic Source: [30, 31].

As to the older class 45+, detailed figures show for 1966 a percentage of nearly 6 for ages 45–64, thence a rapid fall to $2\frac{1}{2}$ per cent for ages 75+.

It remains to be seen (from the 1971 Census) if the marked increases between 1961 and 1966 for age groups 20–34 continue. Of course we express no moral judgement as to whether it is "good" or "bad" that married women should take jobs outside the home. We suspect it depends on the woman and is *not* a matter of principle. It is a positive good that married women should be free to take outside jobs should they wish to do so, good from the viewpoint of society (i.e. efficiency), good for the woman herself. Of course there are other considerations which may be less attractive: for instance, in an unemployment situation it may be judged expedient to sacrifice absolute efficiency in the interest of what is judged a more equitable distribution of paid jobs.

In the 1966 Census about 25,000 married women were returned as gainfully occupied. But, in addition, many women work on a part-time basis after marriage. A recent (1972) sample inquiry by B. M. Walsh [27] sheds much light on this subject. The Census figure, including only those whose "principal occupation and calling is working for payment and profit", underestimates to a considerable degree the number of married women who work for monetary reward.

TABLE 1.12: *Female participation in labour force classified by marital status*, 1972.

Farm/Non-farm	Total	Single	Married	Widowed
	per cent	per cent	per cent	per cent
Non-farm	38·7	81·4	17·4	42·0
Farm	19·2	36·4	9·2	89·9
Total (Sample)	34·3	74·5	15·3	51·8
Total Census (1966)	33·7	75·9	5·5	37·6

Source: [27].

The survey estimated women's participation in the labour force on the basis of the 5,023 women (aged 15–64) who were interviewed. Table 1.12 shows the percentages of women sampled who engaged in any economic activity at the time of the survey.

It is clear that there is a wide divergence between the participation rates derived on the basis of the sample and the Census returns for married and widowed. The gap indicates the extent of part-time economic activity.

If we consider the average hours worked by Walsh's sample we find that 88 per cent of single women working, worked full time (35 hours or more per week) as against 37·5 per cent of married working women—see Table 1·13.

TABLE 1.13: *Percentages of women working 35 hours or over per week classified by farm/non-farm and marital status.*

	Total	Single	Married	Widowed
	per cent	per cent	per cent	per cent
Farm	65·3	81·0	26·9	93·5
Non-Farm	71·6	88·3	39·4	48·7
Total	70·8	87·7	37·5	64·6

Basic Source: [27].

If we apply the percentages in Table 1.13 to the participation rates in Table 1.12 we can estimate the contribution of full-time and part-time employment to the overall participation rate. In Table 1.14 we set out estimates of full-time and part-time participation for the entire sample surveyed, and also for comparative purposes, the full-time participation of women in the 1966 Census.

TABLE 1.14: *Estimates of full and part-time participation rates by marital status of women surveyed.*

	Total	*Single*	*Married*	*Widowed*
Survey (1972):	*per cent*	*per cent*	*per cent*	*per cent*
Part-time participation	10·0	9·2	9·6	18·3
Full-time participation	24·3	65·3	5·7	33·4
Full or Part-time	34·3	74·5	15·3	51·8
Census (1966): Gainfully Occupied Women	33·7	75·9	5·5	37·6

Note

Derived from Tables 1.12 and 1.13: e.g., for married full-time participation percentage $5·7 = 15·3 \times 37·5/100$.

Differences between sample (1972) full-time participation and Census (1966) gainfully occupied percentages may be due to development since 1966, though this seems unlikely in the case of widows; percentages for married women are nearly the same. On the hours criterion the importance of part-time employments may be seen from this table. Among married women we see that almost twice as many have part-time as

have full-time employment and among widows part-time employments are also very important.

Comparison of Female and Male Earnings in Industry

At every Census of Industrial Production in the past 25 years average earnings of women were recorded as little over half those of men and, as Table 1.15 shows, there is not the smallest evidence of a tendency towards improvement. The statistical constancy of the ratio is surprising.

TABLE 1.15: *Average earnings per hour (new pence) adult male and female industrial workers in transportable goods industries.*

Date	Male Rate	Female Rate	F/M ratio
October—	p.	p.	
1938	6·4	3·4	·54
1946	8·8	5·2	·58
1957	17·9	10·2	·57
1962	24·8	14·3	·58
1966	33·5	19·3	·58
1967	35·4	20·1	·57
1968	39·5	22·4	·57
March—			
1969*	45·5	24·8	·54
1970	47·6	26·2	·55
1971	57·0	32·2	·57
1972	64·8	37·6	·58
1973	74·1	43·2	·58

Sources: [23, 24], ISB September 1972, Quarterly Industrial Inquiry—First Quarter 1973.

*1969 relates to September 1969.

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There is no suggestion that the ratio is so small in similar occupations (the "equal pay" issue) since the ratio is based on general averages and industrially and occupationally the structure of men's and women's employments is quite different (see Table 1.10).

We believe, however, that the comparison in Table 1.15 is the more relevant one as regards industry for, as already suggested, a change in the structure of women's employment would probably be conducive to economic efficiency.*

*A referee has asked: "What is 'economic efficiency' and should it be a primary objective?" We answer: if means could be found to steer people towards the jobs they were best able to do, the work of the nation would be more efficiently performed. The answer to the second part of the question is Yes, mainly having regard to individual welfare: job-contentment is probably much the same as job-suitability.

REFERENCES

[1] Commission on the Status of Women: *Interim Report on Equal Pay.* Dublin: Stationery Office, 1971.
[2] Commission on the Status of Women: *Final Report.* Dublin: Stationery Office, December, 1972.
[3] WALSH, B. M., "Economic and Demographic Adjustment of the Irish Agricultural Labour Force 1961–66", *Journal of Irish Agricultural Economics and Rural Sociology*, Vol. III, No. 2.
[4] WALSH, B. M., "Ireland's Demographic Transformation", *Economic and Social Review*, Vol. 3, No. 2, January, 1972.
[5] WALSH, B. M., "Trends in Age at Marriage in Postwar Ireland", *Demography*, Vol. 9, No. 2, May, 1972.
[6] Central Statistics Office: *Census of Population*, Vol. VI. Dublin: Stationery Office, 1926.
[7] Central Statistics Office: *Census of Population*, Vol. VI. Dublin: Stationery Office, 1946.
[8] Central Statistics Office: *Census of Population*, Vol. IV. Dublin: Stationery Office, 1961.
[9] Central Statistics Office: *Census of Population*, Vol III. Dublin: Stationery Office, 1966.
[10] Central Statistics Office: *Census of Industrial Production.* Dublin: Stationery Office, 1936.
[11] Central Statistics Office: *Census of Industrial Production.* Dublin: Stationery Office, 1962.
[12] Central Statistics Office: *Irish Statistical Bulletin*, March, 1968 (C.I.P. Supplement).

[13] Central Statistics Office: *Irish Statistical Bulletin*, March, 1973, (C.I.P. Supplement).

[14] Central Statistics Office: *Census of Population,* Vol. IV, 1966.

[15] Central Statistics Office: *Census of Population,* Vol. III, 1961.

[16] Central Statistics Office: *Census of Population,* 1946 and 1951, General Report.

[17] Central Statistics Office: *Census of Population,* 1936, Vol. II.

[17a] GEARY, R. C., and HUGHES, J. G., *Some Aspects of Non-Agricultural Unemployment in Ireland.* Dublin: The Economic and Social Research Institute, Paper No. 52, 1970.

[18] Central Statistics Office: *Some Statistics of Wages, Earnings and Hours of Work.* Stationery Office, Dublin, 1942.

[19] *Ibid,* 1951.

[20] *Ibid,* 1964.

[21] *Ibid,* 1972.

[22] Federated Union of Employers (Ireland), *Bulletin,* June 1973.

[23] Central Statistics Office: *Statistical Abstract, Ireland* 1947–48. Dublin: Stationery Office.

[24] Central Statistics Office: *Statistical Abstract, Ireland* 1969. Dublin: Stationery Office.

[25] Central Statistics Office: *Quarterly Reports of Births, Marriages and Deaths.* 1971 (4th Quarter).

[26] Central Statistics Office: *Quarterly Reports of Births, Marriages and Deaths.* 1972 (4th Quarter).

[27] WALSH, B. M. and O'TOOLE, A.: *Women and Employment in Ireland.* Dublin: The Economic and Social Research Institute Paper No. 69, 1973.

[28] Central Statistics Office: *Census of Population,* 1971, Preliminary Report. Dublin: Stationery Office.

[29] Central Statistics Office: *Census of Population,* 1966, Vol. II. Dublin: Stationery Office.

[30] Central Statistics Office: *Census of Population,* 1961, Vol. V. Dublin: Stationery Office.

[31] Central Statistics Office: *Census of Population,* 1966, Vol. V. Dublin: Stationery Office.

[32] CHUBB, B.: *The Government and Politics of Ireland.* London: Oxford University Press, 1970.

[33] Commission on Emigration and other Population Problems 1948–54. Dublin: Stationery Office.

2. Social Mobility and Opportunity

IN this section we consider the extent to which a man's social status depends on that of his father. In the first part we examine the results of our colleague B. Hutchinson's, Dublin Social Mobility Study. In the second part we extend that study using a statistical model to assess the implications of the pattern he discovered. First jobs and movement between jobs are discussed in part three, while in the last part we contrast the social mobility found by Hutchinson with the aspirations of the students studied by J. Raven and C. Benson.

Part 1. Intergenerational Social Mobility in Dublin

In 1968, B. Hutchinson, following D. V. Glass [1], studied a random sample of about 2,500 men aged 21 and over residing in Dublin in 1968 [2]. Hutchinson examined, in particular, the relationship between the social status of sons and fathers, sons being the subjects in the sample, i.e. the sample units. The principal relevant table is reproduced here as Table 2.1 in which attention is directed to the numbered description of the social status classification used.*

*As classification of this kind is somewhat controversial—we ourselves use many in this paper!—we may remark that Hutchinson's is highly effective in behaving as it should, by the test of absolute regularity in regard to certain social criteria. See, for example, Table 2.2. To bypass a denial by a colleague of the truth of this statement, on the grounds that social class of father imparts inherent characteristics to a son, we will be content to regard row equality as a *definition* of equality of opportunity.

TABLE 2.1: *Percentages distribution according to father's status category for each subject's (son's) status category.*

Subject's Status Category	Father's Social Status							Sample Number
	I	2	3	4	5	6	7	
1	26·7	16·7	23·3	21·7	10·8	0·8	—	120
2	7·8	21·1	24·2	34·4	10·9	0·8	0·8	128
3	6·6	11·8	25·0	22·6	26·9	4·2	2·8	212
4	1·5	6·8	12·9	34·6	30·9	5·5	7·9	457
5	0·4	1·3	3·9	13·3	51·9	13·3	16·0	815
6	0·3	0·9	1·9	5·9	36·6	26·9	27·5	320
7	0·5	0·7	0·7	3·9	27·2	16·9	50·0	408
All Subjects	2·8	4·9	8·6	17·0	35·6	12·2	18·9	
Sample Number	69	120	212	419	876	299	465	2,460

Source: B. Hutchinson [2], Table 19 and Appendix Table 1.

Note

Status Category	Occupational Groups
1 (highest)	Professional qualified and high administrative
2	Managerial and executive
3	Inspectional, supervisory and other higher-grade non-manual
4	Inspectional, supervisory and other lower-grade non-manual
5	Skilled manual and routine grades of non-manual
6	Semi-skilled manual
7	Unskilled manual

If there were absolute equality of opportunity there would be no significant difference between the rows of percentages. At the other extreme if every son had the same status as his father the table would consist of a set of 100·0 on the principal diagonal, the rest of the table being blank.

There is no need to have recourse to chi-squared or any other statistical test to infer that the percentage rows in Table 2.1 are significantly different. It is overwhelmingly true that social status of sons is largely determined by that of their fathers. In Hutchinson's words: "It is immediately evident from the diagonal tendency . . . that Dublin men remain at or near their father's level of social status."

TABLE 2.2: *Percentage of Dublin male adults, classified by social status, who completed their education at ages 16 or over.*

Social Status	1	2	3	4	5	6	7	All
Percentage	98·3	96·6	92·4	77·1	62·9	30·8	17·2	59·1
Sample Number	117	115	197	450	814	321	418	2,432

Source: B. Hutchinson [2], Table 8.

Note: For description of status numbers see Table 2.1.

Table 2.2 shows the degree of participation in education by the various social groups at ages 16 or over. The decline is emphatic and unbroken as one descends the social hierarchy.

As status categories 1–4 are non-manual and categories 5–7 are mainly manual we are not surprised at a marked difference between many social phenomena between categories 4 and 5. Table 2.3, relates only to sons whose fathers were in categories 1–4. The decline in the percentage (from 56 to 19) between categories 4 and 5 is marked. Categories 1–4 are very much the enclave of parents in the same categories. In fact almost exactly two-thirds of the subjects (i.e. the sons) in categories 1–4 originated in these categories. On the other hand, over four-fifths of subjects in the lower categories 5–7 have fathers in these categories.

TABLE 2.3: *Percentage of Dublin male adults, classified by social status, whose fathers were in social status categories 1–4.*

Social status of subject (son)	1	2	3	4	5	6	7	All
Percentage	88·3	87·5	66·0	55·8	18·9	9·1	5·9	33·3
Sample number	120	128	212	457	815	320	408	2,460

Basic Source: B. Hutchinson [2], Appendix Table 1.

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While privilege is marked, the most optimistic aspect of Hutchinson's findings is that intergenerational mobility is, of balance, upward. For the whole sample two-fifths have the same status as their father but one third have a higher compared with a quarter lower. No statistical proof of significance is, strictly speaking, necessary here since the excess upward is apparent in every quinquennial age group of subject (son) from ages 26 to 65. ([2], Table 23). The point is so crucial for us, however, that we push the open statistical door. In the sample of 2,460, number unchanged in son-father status was 983, leaving 1,477 who moved up or down. If the null-hypothesis were that equal numbers moved up and down, actuals were 827 and 650, so that $\chi^2 = 21\cdot2$ with 1 d.f., indicating overwhelming significance (null-hypothesis $P = \cdot0^52$). There can be no doubt whatever the social promotion is taking place amongst Dublin males. We can safely generalize this experience to non-agriculture generally in Ireland.

We are far more interested in the promotional prospects of sons from working-class households—see Table 2.4.

TABLE 2.4: *Actual and expected number of subjects (sons) in social categories 1–4 and 5–7 in sample for fathers in categories 5–7.*

Subject status category	Sample number		Percentage	
	Actual	Expected	Actual	Expected
1–4	304	611	18·5	37·3
5–7	1,336	1,029	81·5	62·7
Total	1,640		100	

Basic Source: B. Hutchinson, [2].

Note

"Expected" are the numbers which would be found if the total of 1,640 were distributed in the two classes according to the general sample totals for subjects (sons).

The actual number in categories 1–4 (304) is only half what it would be if the distribution were independent of paternal status. Perhaps the right inference from Table 2·4 is that in a single generation nearly one-fifth of 5–7 origin have moved to 1–4: mobility upward from the working classes is possible. Transformation seems certain to occur at an accelerated rate during the next generation because of greater affluence of the working classes and the spread of "free" higher education, introduced only recently.

Part 2. *Measuring Social Mobility*

Hutchinson's researches suggest the possibility of assessing the prospects for intergenerational mobility through social promotion. We will hypothesize a finite state Markov chain with stationary transition probabilities as our model, and trace the implications of this model being true. Such a model is too simple to be a good predictor (abstracting as it does from differential fertility rates, migration and overlapping generations). But it is at least a beginning; as far as we are aware, this is the first time this kind of statistical model has been used in social research in Ireland. Markov models have, of course, been used in other countries to calibrate mobility [3, 4]. The classic article of 1955 by S. J. Prais [5] uses as source material D. V. Glass's [1] Social Mobility in Britain. The indicators of mobility developed here in the main text are our own, with the exception of the average number of generations spent in a social group (Table 2.6) which was used previously by Prais. We also use an alternative procedure for deriving the transition probabilities. Prais's own approach is described in the Appendix, and the results of applying his method to the Dublin data are presented in the Appendix tables.

Since the reader may not be familiar with the underlying model, we elaborate it in some detail. Then the results of its application to the intergenerational social mobility of Dublin

adult males are set out. We rework the England-Wales data from D. V. Glass's study and present newly worked results for comparison.

Markov Model of Social Mobility*

Envisage a succession of generations in the male line, 1 present, 2 father's, 3 grandfather's etc., and K social grades. Let q_{ij} by the probability that a man in social group i had a father in group j; $i, j = 1, 2 \ldots K$, so that—

$$
(1) \qquad \sum_{j=1}^{K} q_{ij} = 1, \qquad i = 1, 2 \ldots K.
$$

Suppose that the probability q_{ij} between grades i and j is the same in consecutive generations, that the probabilities between generations are time—invariant. These hypotheses suggest a finite state Markov chain with stationary transition probabilities as an appropriate model.

The probability that a man in grade i had a father in grade j and a grandfather in grade k is $q_{ij}q_{jk}$ and the probability that a man in i had a grandfather in k is—

$$
(2) \qquad q_{ik}^{(2)} = \sum_{j=1}^{K} q_{ij}\, q_{ik} \qquad i, k = 1, 2 \ldots K.
$$

If $(q_{ij}) = \mathbf{Q}$, a $K \times K$ matrix describes fully mobility between consecutive generations in the backward direction. It is clear from (2) that $\mathbf{Q}^2 = \mathbf{Q} \times \mathbf{Q}$ describes the mobility between a man and his grandfather. A finite state Markov model such as ours generally has an equilibrium distribution that depends only on the matrix of transition probabilities $\mathbf{Q}$. This is a purely theoretical population implicit in the initial transition

*The reader may by-pass the algebra at the beginning of this section and go on to Table 2.6. The whole analysis is designed to justify a major point of ours, namely that inequality in Ireland is "on a massive scale".

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matrix. Its distribution is independent of the original distribution of population.

It is, in fact, a population identical in numbers in each social group from generation to generation, in theory an infinity of generations back, from which the present actual population has sprung. Each present actual group high or low could claim this same ancestral descent. It is a society in which fathers' and sons' generations have the same number in each social group, the transition matrix (backwards) being **Q**. It is the *perfectly mobile society* we exploit later.

The algebra of the notion is simple. Suppose that in past time there was a unique working population π, with π_i in social group i, $\Sigma\pi_i = \pi$, extending backwards in time, subject, father, grandfather, and so on, to infinity with π_i, $i = 1$, $2 \ldots K$, identical in each generation. In fact π is, in general, the unique proportionate solution* of—

$$(3) \qquad\qquad \pi\mathbf{Q} = \pi,$$

where π is the row vector of the π_i. This distribution π depends uniquely on **Q** and only indirectly on the actual population of present-day subjects, from which the q_{ij} are calculated.

The notion of a backward projection is conceptually more difficult than a forward one, which we shall now derive; $P = (p_{ij})$ where p_{ij} is the probability that a father in i has a son in j.

We need concern ourselves only with two consecutive generations in the imaginary world of stable male working population with distribution π between social grades.

The number of sons in j who have fathers in i is $\pi_j q_{ji}$. This must equal number of fathers in i who have sons in j, $\pi_i p_{ij}$. Hence $\pi_j q_{ji} = \pi_i p_{ij}$ or—

$$(4) \qquad\qquad p_{ij} = \pi_j q_{ji}/\pi_i$$

*Equation (3) has, in general, a single proportionate non-trivial solution since $(\mathbf{Q}-\mathbf{I})$ is singular, i.e., if π is any solution, so is $C\pi$, scaler C being arbitrary.

We now show p_{ij} given by (4) has the property $\Sigma p_{ij} = 1$ for all i. In fact, from (3)—

$$\Sigma_j \pi_j q_{ji} = \pi_i$$

Dividing across by π_i and substituting for q_{ij} from (3) the result follows.

Hence the p_{ij} are probabilities. The matrix $\mathbf{P} = (p_{ij})$ has its rows adding to unity. This matrix implies an ultimate distribution of population π, the same as that obtained from the tracing of heredity through $\mathbf{Q}$.*

Following this procedure the matrix of probabilities that a father in group i has a son in group j has been estimated for Hutchinson's Dublin and Glass's England-Wales samples. These probabilities are presented in Table 2.5. The measures developed in the subsequent Tables set out the implications of these probabilities.

TABLE 2.5: *Probabilities that a father in social group* i *has a son in social group* j, *in* (i) *Dublin* (D) 1968, (ii) *England and Wales* (EW) 1954.

Father's	Son's	1	2	3	4	5	6	7
1. Professional	(D)	0·2670	0·1678	0·2628	0·1339	0·0808	0·0244	0·0633
	(EW)	0·4850	0·1229	0·1793	0·0563	0·1195	0·0260	0·0110
2. Managerial	(D)	0·0777	0·2110	0·2186	0·2763	0·1373	0·0345	0·0446
	(EW)	0·1502	0·2520	0·2265	0·1251	0·1960	0·0353	0·0149
3. Higher Grade Non-Manual	(D)	0·0587	0·1307	0·2499	0·2837	0·2157	0·0372	0·0241
	(EW)	0·0515	0·1000	0·1970	0·2101	0·3484	0·0447	0·0483
4. Lower Grade Non-Manual	(D)	0·0248	0·0844	0·1030	0·3457	0·3308	0·0534	0·0579
	(EW)	0·0323	0·0393	0·1206	0·2400	0·4332	0·0849	0·0497
5. Skilled Manual	(D)	0·0050	0·0108	0·0491	0·1226	0·5195	0·1318	0·1612
	(EW)	0·0148	0·0254	0·0852	0·1451	0·5000	0·1231	0·1064
6. Semi-Skilled Manual	(D)	0·0011	0·0021	0·0215	0·0608	0·3679	0·2688	0·2778
	(EW)	0·0000	0·0151	0·0506	0·1107	0·4417	0·2410	0·1409
7. Unskilled Manual	(D)	0·0000	0·0013	0·0087	0·0533	0·2694	0·1674	0·4999
	(EW)	0·0000	0·0089	0·0435	0·1056	0·4106	0·1814	0·2500

*This elegant property is easily proved. The elements of $\mathbf{P}$ and $\mathbf{Q}$ are related as follows:

(1) $p_{ij} = \pi_j q_{ji}/\pi_i, j = 1, 2 \ldots K$, also—
(2) $\pi\mathbf{Q} = \pi$, π being a row vector, and—
(3) $\Sigma q_{ji} = 1 = \Sigma_j p_{ij}$. From (1),
(4) $\Sigma_i \pi_i p_{ij} = \pi_j \Sigma_i q_{ji} = \pi_j$ from (3).
$\therefore$ (5) $\pi\mathbf{P} = \pi$.

Before setting out these results, however, we discuss two transition probability matrices. They characterize two particular types of society, the first where there is no intergenerational mobility, each son has the same social grade as his father and the other where there is perfect social mobility, the probability a subject (son) being in a certain social grade is the same whatever the social grade of his father. This second case is the perfectly mobile society which is used as a criterion in measuring the deviations from mobility suggested by the actual transition matrices in Table 2.5.

Two Special Cases

In the first case, where subjects have the same grades as their son's, the matrix of transitional probabilities **P** is the identity matrix $\mathbf{I}_K$, which gives the subject's son probability unity of being in grade i if he himself was in grade i, and zero probability if the subject was in any other grade. Applying this matrix of transitional probabilities the subject's son, his son (our subject's grandson) is in grade i if and only if the subject's son has been in the same grade. In this case there is no intergenerational mobility in the social hierarchy.

In general, following equation (2) above, the probability a man in grade i had a grandson in grade k is—

$$(5) \qquad p_{ik}^{(2)} = \sum_{j=1}^{K} p_{ij} p_{jk}$$

but since $(p_{ij}) = \mathbf{I}_K$ then—

$$p_{ik}^{(2)} = p_{ii} p_{ik} \text{ since } p_{ij} = 0 \text{ if } j \neq i$$
$$= p_{ik} \qquad \text{since } p_{ii} = 1 \text{ if } k = i$$
$$= 0 \text{ otherwise.}$$
$$\therefore \mathbf{P}^2 = \mathbf{I}_K \qquad \text{(i.e. } \mathbf{P} \text{ is trivially idempotent)}$$

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In the second case, where sons' grades are independent of fathers', the argument is similar. The matrix of transitional probabilities is such that all rows $\mathbf{p}_i$ are the same i.e.—

$$p_{ij} = p_{kj} \text{ for all } i, k$$

In this case subjects in each status group have the same probability of having a son in any given social group. Again we consider the probability distribution of grandsons, $\mathbf{P}^2$. What is the probability a man now in grade i has a grandson in grade k? Following equation (2) above, as before,—

$$\text{k (i.e. } p_{ik}^{(2)}) \qquad p_i^{(2)} = \sum_{j=1}^{K} p_{ij} p_{ik} \qquad \text{j (i.e. } p_{jk})$$
$$= \Sigma_j p_{ij} p_{ik} = p_{ik} \Sigma_j p_{ij} = p_{ik}$$

Therefore $\mathbf{P}^2 = \mathbf{P}$
and in this case also $\mathbf{P}$ is idempotent.

These two extreme cases enable us to define

(i) perfect intergenerational social immobility, where a son's status is as that of his father—

i.e. $p_{ij} = 1$ if $i = j$
and $p_{ij} = 0$ if $i \neq j$ and

(ii) perfect intergenerational social mobility where a son's status is independent of that of his father—

i.e. $p_{ij} = p_{kj}$ for all i, k.

(All rows of the matrix $\mathbf{P}$ are equal.)

Average Expected Number of Generations Spent by a Family in Each Social Group

Now applying the Markov model suggested earlier, the

average number of generations spent t_j in a social group j is easily calculated; then—

$$t_j = \frac{1}{1 - p_{jj}}$$

is the mean of the random variable and—

$$\sigma_{t_j} = \frac{\sqrt{p_{jj}}}{1 - p_{jj}}$$

is its standard deviation.

Following Prais [5], these statistics are derived from the generation frequency distribution: probability of leaving group j at exact generation r is $p^{r-1}(1 - p)$, where p is the probability of the son of a group j father staying in j. The standard deviation (of t_j) gives us some idea of the spread of the distribution of the number of generations spent by a family in a social group. A small standard deviation would mean that the number of generations spent by a family line is similar for all families, whereas a large standard deviation indicates widely varying average times about the origin.

Using the transition probabilities derived earlier, the average number of generations spent by family lines in any social class, and similar statistics for England and Wales, were estimated, together with their standard deviation. The results are presented in Table 2.6.

It seems reasonable to consider those groups with the longest average number of generations spent in them as the groups from which movement is most difficult. Considering first the Dublin mobility situation, the four lowest social groups have the four longest average number of generations spent in them. This suggests that anyone in those groups may find it harder to move out of these groups than they would to move out of

TABLE 2.6: *Average number of generations spent in each social group by adult males in (i) Dublin (D), (ii) England and Wales (EW), together with their standard deviation, average number of generations spent in each such group in a perfectly mobile society.*

| Social Group | Average Number of generations in— | | | | Column (1) ÷ Column (2) | | Standard deviation of (1) | |
| | Present society (1) | | Perfectly mobile society (2) | | (3) | | (4) | |
	D	EW	D	EW	D	EW	D	EW
1. Professional	1·36	1·94	1·02	1·05	1·33	1·85	0·71	1·4
2. Managerial	1·27	1·34	1·04	1·05	1·22	1·28	0·58	0·7
3. High Grade Non-Manual	1·33	1·25	1·07	1·12	1·24	1·11	0·67	0·55
4. Lower Grade Non-Manual	1·53	1·31	1·18	1·18	1·30	1·11	0·90	0·64
5. Skilled Manual	2·08	2·00	1·60	1·74	1·30	1·15	1·50	1·41
6. Semi-Skilled Manual	1·37	1·32	1·16	1·13	1·18	1·17	0·71	0·65
7. Unskilled Manual	2·00	1·33	1·28	1·11	1·56	1·20	1·41	0·67

the Professional, Managerial or Higher Grade Non-manual groups. As far as equalization of opportunity is concerned it is especially notable that the unskilled manual group spend on average the second longest number of generations (2.00) in their social group. This contrasts sharply with the England-Wales picture where the unskilled manual are among those groups who spend, on average, the shortest number of generations in their own social group.

But this measure depends not only on the transition probabilities, but also on the size of the social group. Even in a society with perfect mobility (where the social class of one's father did not influence that of his son) those in the largest social group would have the longest average number of gener-

ations spent statistic. For if, in equilibrium, the population distribution is

$$\pi = (\pi_1, \pi_2, \pi_3, \pi_4, \pi_5, \pi_6, \pi_7),$$

where $\sum\limits_{i=1}^{7} \pi_i = 1$,

then the transition matrix of a perfectly mobile society (with equilibrium distribution π) is simply a 7×7 matrix with equal rows π.

Then $p_{jj} = \pi_j$, so the average number of generations spent in a perfectly mobile society is

$$t_j = \frac{1}{1 - \pi_j}$$

which is larger the larger is π_j (the size of jth the social group).

Column 3 of Table 2.6 standardizes the average number of generations spent for the influence of the varying sizes of social group. Indeed this standardized measure shows how much longer on average Dublin male lines spend in a social group than they might in a perfectly mobile society. This deviation is a measure of the social immobility affecting each social class. Using this measure, the unskilled manual group in Dublin suffer more from social immobility than any other social group. The figures may be interpreted by saying the social immobility raises the average time spent in the unskilled manual social group by 56 per cent in Dublin. The comparative calculations for England and Wales are not encouraging. In all social groups other than managerial and professional, the degree of social immobility, on this measure, is more marked in Dublin. This finding is broadly consistent with those obtained using the Prais approach literally (see Appendix Table A2.2).

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D

Unskilled Manual Mobility

Throughout this study, our primary concern is with the most vulnerable sections of the community. We isolate two large groups for special attention and study, the unskilled manual and children. These groups are respectively the weakest in our society economically and physically. In this section we examine the mobility prospects of the off-spring of the unskilled manual.

In the perfectly mobile society introduced in the last section, the offspring of an unskilled manual worker would be as likely to achieve any given social group as children whose parents were from higher social groups. This is not the case, of course, in present Dublin society. The chances of a person of unskilled

TABLE 2.7: *Intergenerational Social Mobility—Unskilled manual mobility probability ratios for (i) Dublin, 1968 (D), (ii) England and Wales, 1954 (EW).*

Target Social Group	Mobility Probability Ratio at Nth Generation							
	1st		2nd		4th		6th	
	D	EW	D	EW	D	EW	D	EW
1. Professional	*	*	·20	·28	·63	·74	·86	·92
2. Managerial	·04	·19	·27	·55	·69	·88	·88	·96
3. Higher Grade Non-Manual	·13	·41	·43	·75	·78	·94	·92	·98
4. Lower Grade Non-Manual	·36	·69	·61	·92	·86	1·00	·95	1·00
5. Skilled Manual	·72	·97	·95	1·06	1·02	1·03	1·01	1·01
6. Semi-skilled Manual	1·24	1·51	1·24	1·25	1·10	1·05	1·03	1·02
7. Unskilled Manual	2·26	2·46	1·55	1·37	1·15	1·06	1·05	1·02

Source: Authors' computation based on Table 2.5 probability matrices.

Notes

Unskilled Manual Mobility Probability Ratio is defined as follows: the ratio of the probability that an unskilled manual person has a son, $(N=1)$ (grandson $N=2$, greatgrandson $N=3$, etc.) in the target social group, to the probability of that event in a perfectly mobile society. The table shows, for example, that the chances of an unskilled manual subject's son being a skilled manual worker are ·72, roughly seven-tenths of what they would be if Dublin society were perfectly mobile.

*Negligible.

manual parentage achieving higher social groups are impaired by the present social order. Table 2.7 is designed to show the effect of the present inequalities on the chances of a son (column 1), grandson (column 2), great-great grandson (column 3), and great-great-great-great grandson (column 4), of unskilled manual parentage reaching that class. The figures are startling; the son of an unskilled manual person in Dublin, had a negligible chance of becoming a professional person, and only a four per cent chance of reaching managerial grade, compared with the chances he might have in a perfectly mobile society. On the other hand he was more than twice as likely as he ought to be to inherit the unskilled manual status of his father.

The picture for the grandsons of the unskilled is similar and the discriminatory bias is still very evident. Their chances of attaining professional status are just one-fifth of what they might be in a perfectly mobile society where promotion was independent of parentage. Even after four generations, great-great-grandchildren of the unskilled have only two-thirds of the chances to reach professional status as they might in the ideal situation. It is a sobering thought that four generations would span a period of time well over a century.

Few people would consider the promotion pattern ideal in England and Wales. But the offspring of the unskilled are relatively advantaged there, compared with their Dublin counterparts. Grandsons of the unskilled in England and Wales had more than a quarter the probability of achieving professional, and over half the probability of achieving managerial status in the promotion system discovered by Glass, as they would have in a perfectly mobile society. The comparative figures for the professional and managerial groups in Dublin are a fifth and a quarter, markedly less.

Generations to Equality

The inequality inherent in the social mobility pattern, especially grave in the case of the unskilled, has now been

demonstrated statistically. One question remains. How long would one have to wait to achieve a situation of common average status, independent of origin (where the influences of origin would almost be equal.)*

To answer this question, we use the matrix of transition probabilities, **P**, and the powered transition matrices $\mathbf{P}^N$. These matrices tell us the probability of a father of any given status having a son, grandson etc., in any given social group. There would be little point in presenting the successive matrices in full. Instead we give a single Table 2.7A of the summary statistic average social group for the offspring of fathers of each social group, for four generations.

Comparable estimates for England and Wales are shown.

TABLE 2.7A: *Intergenerational Social Mobility. Expected average social group of the male line Nth generation succession of subject in each social group. (i) Dublin (D) (1968), (ii) England and Wales (EW (1954)*

Subject's Status	Expected average social group after N generations—							
	$N=1$		2		3		4	
	D	EW	D	EW	D	EW	D	EW
1. Professional	2·9	2·3	3·8	3·3	4·4	3·9	4·7	4·2
2. Managerial	3·5	3·1	4·1	3·8	4·6	4·2	4·8	4·4
3. Higher Grade Non-Manual	3·7	4·0	4·2	4·4	4·6	4·5	4·8	4·6
4. Lower Grade Non-Manual	4·3	4·5	4·6	4·6	4·8	4·6	4·9	4·6
5. Skilled Manual	5·2	4·9	5·2	4·8	5·2	4·7	5·1	4·7
6. Semi-Skilled Manual	5·7	5·3	5·5	4·9	5·3	4·8	5·3	4·7
7. Unskilled Manual	6·1	5·5	5·7	5·0	5·4	4·8	5·3	4·7
Unweighted Average	4·5	4·2	4·7	4·4	4·9	4·5	5·0	4·6
Range	3·2	3·2	1·9	1·7	1·0	0·9	0·6	0·5

Note

Average social group of descendant after N generations of ancestor (subject) in group i is—

$$\sum_{k=1}^{7} kP^{(N)}_{ik}$$

*If mobility be possible, all social classes on average have the same origin, if generationally we go back far enough and, as we shall see, our journey back falls far short of that to Adam!

Thus in Dublin, the average social grades of sons who had fathers in the professional group is 2·9, low when compared with the corresponding average status of sons of the unskilled manual, 6·1. The spread of average social grades of grandsons is less remarkable than that of sons. The answer to our question as to how many generations are required to achieve common status must remain a matter of opinion. But one might take the view that the answer is at generation four (i.e. great-great grandson) when average social grades in Dublin all equal five, to units place. Comparable figures for England and Wales suggest a similar pattern with the effect of inequality discernible even in the third and fourth generations. This would cover a span of well over a century.

Conclusion

This very elementary Markov-type analysis of the intergenerational mobility of adult males has implications for our study. The results of our model and also that of Prais (in the Appendix) suggest a high degree of social immobility, extremely inimical to equalization of opportunity. We should say that our model is that of Prais but that his data-approach and some of the measures he uses are different. It appears that the barriers are greatest in the highest and lowest social strata, so that we have in Ireland not alone a preserve of the privileged, but also a reserve of the underprivileged. The comparatively high immobility of skilled manual and other non-manual workers indicates that there is a block to the advancement of semi-skilled and unskilled manual workers. This block is clearly due in part to persons of such social origins not taking advantage of opportunities which, in fact, are there. Comparison for England and Wales is unfavourable for all but the highest strata (professional and managerial) where the evidence is not conclusive. Despite the deficiencies of the model, both our approach, and that of Prais, document a pattern of disadvantage among Dublin males that threatens to postpone equalization of opportunity, especially for workingclass families, for

generations, if not centuries. For these groups opportunity has to be made, for it is not born.

Part 3. First Jobs and Movement Between Jobs

In this part our interest is mainly in first jobs of young people and (rather speculatively) their subsequent movement between jobs. Aged 14–19, there were 87,000 males and 71,000 females gainfully occupied in 1966. In non-agriculture the numbers were 60,000 males and 69,000 females, so that, at the start, girls considerably outnumber boys in the non-agricultural labour force. As to how they start after leaving primary school, there were 2,700 boys and 3,700 girls aged 14 gainfully occupied in non-agriculture. Principal jobs were as follows:—

Boys	No.	Girls	No.
Unskilled, labourers	230	Footwear (factory)	156
Lorry drivers' helpers	269	Hosiery workers	171
Messengers	332	Sewers, machinists	500
Shop assistants	368	Packers	327
Other	1,532	Shop assistants	546
		Maids	756
Total, non-agr., aged 14	2,731	Other	1,248
		Total, non-agr.	3,704

Source: CP 1966, Vol. V.

Naturally jobs specified were largely unskilled or semi-skilled at a somewhat low level. The numbers described as "Other" covers a very large number of occupations but with small numbers (never exceeding 100) in each; most of the boys and girls involved are probably apprentices or part-time learners and, as such, have reasonably satisfactory prospects. (Could we appeal to the Census authorities for information in future as to part-time formal training on the job or otherwise of young persons gainfully occupied?)

TABLE 2.8: *Percentage distribution by age of gainfully occupied males among non-agricultural socio-economic groups*, 1966.

Age Group	000 Total G.O., non-agricultural	Percentage distribution in socio-economic groups—									
		1	2	3	4	5	6	7	8	9	10
14–19	59·7	0·7	1·1	0·4	0·5	20·3	10·4	37·1	17·7	11·2	0·6
20–24	64·8	2·8	3·9	1·9	2·4	23·1	12·6	29·9	11·4	11·5	0·4
25–29	55·2	5·7	5·0	4·2	3·7	18·4	13·8	28·2	9·9	10·9	0·3
30–34	52·1	6·2	4·3	6·1	4·1	17·3	13·4	28·1	9·1	11·1	0·2
35–39	50·4	5·9	3·7	7·5	3·9	15·9	14·6	26·0	9·3	12·9	0·2
40–44	50·8	5·5	2·8	7·5	3·7	15·5	15·6	24·8	9·7	14·7	0·2
45–54	95·1	5·3	3·2	7·5	3·6	14·8	14·9	25·1	9·3	16·1	0·2
55–64	66·5	4·8	3·4	7·3	3·0	15·9	15·0	22·2	8·8	19·5	0·3
65–69	13·4	6·9	2·6	6·8	2·6	18·7	15·0	20·0	7·5	19·6	0·3
70–74	4·7	12·3	2·4	9·6	3·0	26·5	14·2	18·4	4·9	8·6	0·2
Over 75	2·8	20·7	1·9	13·4	2·7	28·3	7·8	15·6	2·7	6·7	0·2
Total 14+	515·5	4·8	3·4	5·5	3·1	17·7	13·8	27·2	10·4	13·9	0·3

Basic Source: C.P. 1966 Vol. V Table 7.

Notes

Due to rounding some rows may not tot to 100·0.
Non-agricultural socio-economic groups as follows:
1. Higher professional
2. Lower professional
3. Employers and managers
4. Salaried employees
5. Intermediate non-manual

6. Other non-manual
7. Skilled manual
8. Semi-skilled manual
9. Unskilled manual
10. Unknown.

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Table 2.8 is a snapshot, i.e. it reveals the position at a point of time; it is also a moving picture, giving a general idea of what happens throughout life. It is not surprising to note in the earlier age groups the growth with age in status groups 1–4 since typically in these groups status is attained through higher education or promotion. Of greater interest from our point of view is the steadiness of the proportion in unskilled group 9 up to age 40. After age 40 the percentage tends to increase (up to age 70) presumably recruited by fall-outs from other groups.

Cohort analysis should improve our understanding of movement between socio-economic groups between the Census years 1961 and 1966—See Table 2.9.

TABLE 2.9: *Net movement of gainfully occupied males in each socio-economic group (in each age group 15–19 to 35–39 in year 1961) between 1961 and 1966.*

Thousands

Socio-economic group		Age in 1961				
		15–19	20–24	25–29	30–34	35–39
Agriculture		—10·1	—5·2	—2·0	—1·4	—2·1
Non-Agriculture	1	1·6	1·7	0·5	0·2	0·0
	2	2·1	0·8	0·1	0·0	0·0
	3	1·2	1·7	1·7	1·4	0·9
	4	1·3	0·9	0·4	0·1	0·0
	5	3·7	—2·4	—0·8	—0·4	—0·4
	6	3·2	1·7	0·8	0·4	0·2
	7	5·6	·15	1·8	1·3	0·9
	8	—3·3	—0·4	—0·1	—0·6	—0·6
	9	2·1	—0·1	0·3	0·5	0·5
Total		7·4	0·2	2·7	1·5	—0·5

Basic Source: Census of Population, Vol. V 1961 and 1966.

Note
For description of socio-economic grouping see Table 2.8.

Here are shown for each socio-economic group the number in a particular quinquennial age group in 1966 less the number in 1961 five years younger.* Each figure represents net movement into (+) or out of (−) each socio-economic group for each age cohort. Movement out will include deaths but these young age groups deaths are few and may be ignored.

Of course Table 2.9 shows the marked decline of number of men in agriculture; note that this is most marked at young ages. In non-agriculture declines are recorded only in groups 5 (intermediate non-manual) and 8 (semi-skilled manual). We recall that 1961–1966 was a period of great economic advance (though changes in employment were less spectacular than in other conditions). We surmise that most of those leaving group 5 went to 4 or 6, that some of those leaving agriculture went to group 9 (unskilled). It seems likely that most of those leaving group 8 (semi-skilled, which persistently lost numbers) were promoted to 7 (skilled).

The Census is static. It gives a picture at a point of time, sometimes described as a "stock" picture. Tables 2.8 and 2.9 are derived from the Census. The stability of the percentages in Table 2.8 and the smallness of the net flow cohort estimates of Table 2.9 may give the wrong impression that people are likely to adhere throughout life to the social status they acquired with their first job. Happily, this is far from being the case. Hutchinson [6] is again our authority.

Using his sample of about 2,500 Dublin men and seven social status categories (defined in note to Table 2.1) Hutchinson found that mean status of first employment was 5·6, compared with parental mean status of 4·9, in turn practically equal to the *present* mean status of 4·8 of informants themselves: "in order to achieve such a rise of average status nearly three-fifths of the men had in the intervening period moved to employment of a higher status". As Hutchinson shows, movement is summarized as follows:—

*A small adjustment in the numbers in the Census age group 14–19 had to be made to derive the tabled figures for ages 15–19.

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	per cent
Present status higher than at first job	57·3
Present status the same as at first job	36·7
Present status lower than at first job	6·0

It is highly satisfactory that only 6 per cent move down compared with first job status. Though some cannot, of course, move to a job of lower status it may be presumed that most of the large volume of movement up is at young ages.

Of special interest is movement out of and into status 7*— unskilled manual. In this lowest status 855 (one-third of the sample) had their first job but only 329 (or two-fifths of these remained at the time of inquiry. Total number then in status 7 was 417, so that 88 (or one-fifth) started in higher status jobs (nearly all of whom had first jobs in manual statuses 5 and 6). One surmises that the very large movement out of status 7 is of young persons and much smaller movement in is of older persons.

All these numbers and percentages are not invariant to level of aggregation, very high in the cases of social status with only seven grades. At individual job level movement between first and ultimate jobs would be very much greater.

Reverting to Table 2.9, movement in the five years is most marked at young ages—out of agriculture and into non-agriculture. Net movement is on the whole small for age cohorts other than 15–19 (in 1961) in non-agriculture principally affecting young people. The reader may prefer the simpler approach: in non-agriculture between 1961 and 1966 the number of males gainfully occupied aged 14–24 increased by 22·1 per cent; older ages by 6·4 per cent. Corresponding figures for women 13·6 per cent and *minus* 2·7 (i.e. number of gainfully occupied women aged 25 or over actually decreased despite the growth in the economy).

Clearly, this great improvement in the employment situation

*Hutchinson's social numeration, not to be confused with that of CP (see, e.g. Table 2.8).

of young people in urban employments is related to those other social phenomena affecting young people which we deal with elsewhere, principally the improved marriage rate, and the decline in emigration. The decline in the numbers at work in agriculture was conducive to the greater prosperity of those who stayed on farms, which in the past suffered from an endemic condition of under-employment.

Part 4. Responsibility, Ambition and Job Hopes

We conclude this chapter with a short commentary on two recent relevant surveys by Institute colleagues.

In a recent social survey [7], directed by B. Hutchinson, on Dublin urban living, questions were put to respondents which give us some basis for social class based hypotheses about desire to accept responsibility, and ambition to better themselves. Eight propositions were put to respondents, two of which are relevant to our inquiry. First, they were asked to "Definitely Agree", to "Doubt", or "Definitely Disagree" that *"in a job it is preferable not to have responsibility for other people"*.

The pattern of response has been tabulated for males against social class—see Table 2.10. The progression of the percentage who agree with the statement as one goes down the social scale is striking in its regularity. Only one in ten of male higher professionals would prefer no responsibility for other people whereas among unskilled manual workers the figure is as high as one in two. The picture for females is similar.

A certain degree of aversion to accepting responsibility for other people can be detected from these results and this aversion becomes more acute the lower the position on the social scale. In all social classes however a significant proportion would like responsibility for other people.

Hutchinson's second question which has some relevance to our inquiry is that *"a man should be satisfied to be no better than most other people at his job"*. The response to this question may

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Social (class (SC))	Statement A (lack of responsibility)				Statement B (lack of ambition)			
	SC subject		SC father		SC subject		SC father	
	M	F	M	F	M	F	M	F
1.	10·4	30·0	15·2	17·6	13·0	10·0	17·4	9·5
2.	13·7	23·8	14·1	20·8	16·4	—	20·3	13·8
3.	15·7	10·8	23·5	20·9	13·6	10·7	25·7	20·1
4.	19·7	15·3	24·4	31·9	20·5	18·6	23·1	24·7
5.	24·0	29·8	29·5	41·7	24·0	19·7	24·1	29·6
6.	32·0	47·2	31·6	46·0	31·3	33·0	30·6	31·0
7.	43·1	52·9	33·9	46·9	46·7	38·7	36·7	34·6
8.	49·4	69·2	44·2	54·6	52·2	54·9	46·2	45·1
No. used in sample	597	295	610	1,204	615	215	618	903

Basic Source: B. Hutchinson's Dublin Urban Living Survey 1972. [7.]

Note
The social classes are the eight standard Hall-Jones categories.

give us some insight into ambitions for various socio-economic groups.

Again tabulation of response against social groups for males and females shows how the higher social groups are less satisfied with average performance than are the lower social groups. The progression of percentages again has striking regularity, from 13 per cent of the higher professionals definitely agreeing with the proposition to 52 per cent of the unskilled manual workers.

The picture for females is broadly similar but the range of variation in response is greater. The responses to both questions were also tabulated against father's social class.

Classification by father's status does not produce quite so clear-cut a picture with regard to the two characteristics as does classification by subject. On broad lines, however, the conclusions are the same.

These remarks on relationships between ambitions and responsibilities and Ireland's class structure do not claim to be definitive or established. In the absence of more detailed study they help us to form a less incomplete picture of certain differences in pertinent class attitudes and values.*

Job Hopes of Post-primary Students

Aspiration will usually precede achievement. To move up the social scale (compared with origin) the child must first want to do so; autonomous promotion is rare; whence the

*We are indebted to our colleague, E. E. Davis, for the following largely methodological comment:

There are a number of points to be made in regard to Table 2.10. It is stated above that "the picture for females is broadly similar . . .", however, an inspection of Table 2.10 for statement (*a*) shows what would seem to be considerable differences both in absolute percentages and distribution of percentages for SC of the subject between males and females. For SCI approximately three times as many females as males agree with statement (*a*) and in SC8 the female response rate remains 20 per cent above that of the male response. In addition the distribution of female responses seems to be somewhat curvilinear as opposed to the linear pattern obtained for male subjects.

First to the overall pattern which indicates a significantly higher degree of agreement on the part of lower SC subjects, with the implication that relative to higher SC subjects the lower ones have a "lack of responsibility" and "lack of ambition": it should be noted that the results are based on a single question in each case which is phrased in such a manner that agreement indicates the undesirable trait. It has been amply demonstrated that lower SC subjects generally have a greater tendency towards acquiescence response set, particularly when responding to middle-class interviewers. Whether the trend manifested in Table 2.10 would exist even if this factor were corrected for I do not know. I am merely suggesting that the phenomenon described may account for an unknown but possibly appreciable amount of the variance displayed by the results shown in the Table. This merely shows, the undesirability of basing conclusions on percentage responses to a single item. Ideally the construct under consideration, i.e. "lack of responsibility" or whatever, should be measured by a battery of items which should not only be factorially pure, i.e. presumably measuring the same dimension, but should also contain an equal number of positively worded and negatively worded items. In such a case if p=a number of positive responses to positively

relevance of the results of the sampling survey conducted by J. Raven and C. Benson [8] which we now summarize in part.

This survey extended to a random sample of over 3,000 junior and senior cycle post-primary students. Job hopes must therefore be higher than those for the general population of school leavers, of which a large proportion are still primary leavers. Percentage-wise the results are summarized in Table 2.11. Social class of parents is based on the Hall-Jones scale. Job hopes shown are those aspired by 2 per cent or more of respondents. Such occupations accounted for 70 per cent of the boys and 84 per cent of the girls surveyed.

While the marked preference of both boys and girls for teaching as a career is very interesting, one wonders whether there is more to it than to very young children's aspiration to be bus conductors! It certainly argues a good relationship between teachers and pupils. Otherwise class-bias, i.e. of higher origin to higher jobs and vice versa, is discernible.

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worded items and $q=$ the number of negative responses to negatively worded items, then $p-q$ should equal o if there is no positive or acquiescence response set. An appropriate formula can be applied to measure the construct under consideration corrected for response set. Another question that must be raised with respect to the percentage responses reported in this table has to do with the unreported percentage of responses which were in the "doubt" category. Do the 10 per cent and 49 per cent "Definitely Agree" responses for SC1 and SC8 male, respectively, accurately reflect the relationship between agreement or disagreement or might there be some differences in the percentage of "doubt" responses? Some research has indicated that higher SC subjects tend to give more "Don't Know" responses in survey results than do lower SC subjects, possibly due to some (learned) tendency toward cognitive differentiation when the world is seen not just in terms of black and white but rather in terms of intermediate shades of grey. With respect to the differences between males and females, e.g. in response to statement (a), a couple of possible explanations might be put forth. Research has shown that in our culture females tend to have a greater acquiescence response set than males. This might account for the 20 percentage point differences at SC1 and SC8. This still leaves unexplained, however, the seeming curvilinearity of the female distribution. A hypothesis has been put forth in recent years, supported by some recent empiricial research, that females in our culture suffer from a "fear of success" syndrome. Such a syndrome is posited to exist particularly among more educated, i.e. higher SC, female S's. This might explain the high percentage for SC1 and 2 for female subjects following which from SC3 onwards the same general linear trend exists which is observed with males.

More could be said about these kind of data, but, in general, I merely wish to point out the caution that one must apply to interpreting survey data particularly when the results are based on responses to single items as opposed to more differentiated measures.

Job hope \ Social class of parents	Boys				
	1&2	3&4	5&6	7&8	Total
	Percentage				
Teaching	11	25	19	20	19
Medicine	15	4	3	3	6
Professional	18	10	7	4	10
Scientific	12	3	5	1	6
Engineering	15	6	7	3	7
Farming	8	10	5	3	7
Administrative	8	6	3	0	4
Technician	4	6	8	6	6
Clerical	5	10	7	6	7
Fitter, mechanic	1	6	14	17	10
Building	1	12	18	31	16
Manual	0	3	4	7	3
Number in sample	200	529	241	133	1,103
per cent ot Total Surveyed	73	69	73	71	70

Job hope \ Social class of parents	Girls				
	1&2	3&4	5&6	7&8	Total
	Percentage				
Teaching	24	25	28	20	26
Medicine	16	4	2	1	5
Professional	7	3	1	0	2
Scientific	7	4	2	0	4
Artistic, creative	6	4	4	1	4
Nursing	13	19	18	16	17
Social Work	5	4	1	0	2
Technician	7	3	3	1	4
Secretarial	5	11	16	26	14
Beautician, shopkeeper	1	1	1	5	2
Air hostess	4	8	6	11	7
General clerical	4	11	16	14	11
Manual	0	3	1	4	2
Number in sample	255	723	318	112	1,408
per cent of Total Surveyed	82	80	93	81	84

Source: J. Raven, C. Benson [8].

Notes

(1) Occupations which less than 2 per cent of the sample hoped to enter have been omitted. The last row of the table gives the percentage of the total whose job aspirations are analysed in this table.

(2) The column percentages have been standardized to the base one hundred to facilitate column comparisons. Columns may not tot to one hundred exactly due to rounding.

(3) Tabulated information refers to 70 per cent of boys and 84 per cent of girls. Care should be taken therefore in drawing inferences from these percentages. χ^2—analysis is applicable strictly only if this 70 per cent of boys and 84 per cent of girls are truly representative. This assumption is particularly important with regard to boys. The subsequent χ^2—analysis should be interpreted carefully in the light of this.

(4) While the job hope classifications have an "industrial" appearance, the students clearly meant them as "occupational" and have been so interpreted by the authors in the words "job hope".

Social Class of Parents / Job hope	Boys					Girls				
	1&2	3&4	5&6	7&8	Total	1&2	3&4	5&6	7&8	Total
					Percentages					
1 & 2	75	54	44	32	51	55	36	33	21	37
3 & 4	17	16	14	7	13	32	30	26	19	26
5 & 6	7	16	20	23	17	13	31	40	56	35
7 & 8	1	14	22	38	19	0	3	1	4	2
Number in sample	200	529	241	133	1,103	255	723	318	112	1,408
Distribution of Origin per cent—	18	48	22	12	100	18	51	23	8	100

Basic Source: Table 2.11. (See notes to Table 2.11).

To test the latter point we have tried to cast job hopes (as well as origins) into socio-economic grades. Statistically the imprecision of description of jobs at censuses and otherwise is notorious and even under the best description of occupation, assignment to socio-economic grade is somewhat arbitrary. Table 2.11 shows that young people's job hope description is no more precise—sometimes it is quaint!—than might be expected. Consequently there is no need to emphasize the arbitrariness of our assignment.*

*The job hope occupations in Table 2.11 were assigned to social groups as follows:

Boys: 1 & 2: Teaching, medicine, professional, scientific, engineering and half of farming.
　　　3 & 4: Half of farming, administrative and technician/draughtsman.
　　　5 & 6: Clerical, fitter/mechanic.
　　　7 & 8: Building, manual.

Girls: 1 & 2: Teaching, medicine, professional, scientific.
　　　3 & 4: Artistic/creative, nursing, social work, technician.
　　　5 & 6: Secretarial, beauticians, air hostess, general clerical.
　　　7 & 8: Manual.

If young people were perfectly satisfied with their position in the social scale job hopes 1 and 2 would always correspond with origin 1 and 2 and similarly for other grades. In such a case all the entries in Table 2.12 would lie along the principal diagonal for both males and females. On the other hand, if hopes were uninfluenced by social origin, column percentages for boys (and similarly for girls) would be about the same.

It is evident from Table 2.12 that the distribution of aspired to socio-economic group and socio-economic group of origin differs significantly. But are job hopes influenced by origin? If we test the distribution of aspired to socio-economic group, broken down by social group of origin, against the distribution expected on the basis of the Total sample, the χ^2 statistics for boys and girls (with 9 d.f.) are respectively 131 and 110— both values being overwhelmingly significant. This indicates a strong influence between social class of origin and job aspiration for both boys and girls. Closer scrutiny of the analysis reveals that the distributions of job hopes of boys and girls in social classes 3 to 6 inclusive are broadly typical of the entire sample, and it is the inordinate proportions aspiring to high status among students of origin 1 and 2 and to low status among students of origins 7 and 8 that explain the significant statistic. To bring out the point in a simple way we may attribute a number of social rank of origin, giving 1 and 2 a score of 1·5, 3 and 4, 3·5 etc. with the following result:—

Average origin score of aspirants

Job score:	1 and 2	3 and 4	5 and 6	7 and 8
Boys:	2·2	3·3	3·9	4·8
Girls:	2·7	3·5	3·7	4·4

Trends in averages for boys and girls are quite regular, showing a marked relationship between origin and aspiration.

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It is curious that as much as a quarter of the sample aspired to a social group lower than their parents', as much the same for boys and girls—see Table 2.13. However, both boys and girls aspire on average to higher status since in both cases the point binomial emphatically rejects the null hypothesis that "higher" and "lower" could be equal in the population. The showing of the sample that impulsion for improvement is stronger in boys than in girls is confirmed as significant for the population, for $\chi^2 = 12.75$ (2d.f.), $P < .01$.

TABLE 2.13: *Percentages of boys and girls aspiring to a social class (1) higher, (2) the same, (3) lower, than that of their parents.*

Socio-economic group relative to parents	Boys	Girls
	Percentage	
Higher	46	39
Same	30	35
Lower	24	26
Number in Sample	1,103	1,408

Basic Source: Table 2.12. (See notes to Table 2.11.)

We have already demonstrated the small degree of inter-generational mobility in Dublin (Parts 1, 2). While it should be noted that Hutchinson's sample refers to Dublin Urban males whereas Raven's and Benson's national sample concerns the more senior of post-primary pupils, direct comparison of the results is not valid. A sizeable proportion leaves school before reaching second level, and those who do are likely to have lower than average job aspirations. This suggests than an extrapolation of the figures of Raven and Benson to the entire population would exaggerate the desire for upward social mobility. Even after allowance is made for this, we must conclude that if the aspirations of these boys and girls are to

be met, not alone will the degree of intergenerational social mobility have to increase greatly, but the underlying job structure will have to be shifted in such a way that rewarding jobs associated with the higher social groups will constitute a higher percentage of the total than heretofore.

, Of course, if the relative remuneration of the jobs which are now less preferred were to improve the jobs hopes might be altered. The march of technology may eliminate the more unpleasant manual tasks. In the meantime, however, there appears to be a discrepancy between the desire for improvement and the degree to which this has been happening.

Appendix to Section 2

Measuring Social Mobility in Dublin by the Prais Method

Hutchinson's sample data for Dublin in 1968 was similar to that of D. V. Glass's for England and Wales in 1954, i.e. it classified number of sons in each social group according to social group of father. Therefrom S. J. Prais directly calculated the forward father-son probability as the quotient of number of sons by number of fathers in the table. We are uncertain about the validity of Prais's formulation of the forward probabilities because, although every son has one and only one father, an adult male (a potential father) might have many, one or no son. In this appendix, however, we will follow Prais's treatment faithfully. We must aver that we regard the alternative method of the text proper as the more sound.

The Transition Probabilities

The difference between Prais's forward process and that in the body of the text is in the derivation of the forward probabilities (i.e. the probability that a father in status group i has

a son in status group j). Prais estimates these probabilities as follows:—

Let m_i be the number of fathers in status group i, and let n_{ij} be the number of sons in status group j who have fathers in i. Then the probability of a father in i having a son in j according to Prais is—

$$p_{ij} = n_{ij}/m_i$$

Using this technique a forward transition matrix was constructed from Hutchinson's data. This matrix is presented in Table A2.1. It differs substantially from the matrix of forward transition probabilities derived using the alternative method of our text.

TABLE A2.1: *Prais-type probabilities that a father in status group i has a son in group j in Dublin* 1968.

Father \ Son	1	2	3	4	5	6	7
1	·4638	·1449	·2029	·1014	·0435	·0145	·0290
2	·1667	·2250	·2083	·2583	·0917	·0250	·0250
3	·1321	·1462	·2500	·2783	·1509	·0283	·0142
4	·0621	·1050	·1146	·3770	·2578	·0453	·0382
5	·0148	·0160	·0651	·1610	·4828	·1336	·1267
6	·0033	·0033	·0301	·0836	·3613	·2876	·2308
7	·0000	·0022	·0129	·0774	·2796	·1892	·4387

Basic Source: Hutchinson, Appendix 1.

Average Number of Generations in Each Social Group (Table A2.2)

In Table A2.2 we present the expected number of generations spent by a Dublin male line of each social class, together with the standard deviation of that variable. Prais's figures for England and Wales are given for comparison.

The entries differ, of course, from those in Table 2.6 reflecting the different data approach of Prais. The picture is broadly similar, with marked immobility in the Dublin unskilled manual group. Comparison with England and Wales is not encouraging.

Immobility Ratios (Table A2.3)

In effect the essence of Prais's problem is the derivation of a statistic which would summarize the mobility implicit in the matrix of transition probabilities. The Immobility Ratios in Table A2.3 give us an idea of the proportion of survivors in any given social group after generations compared with what ' it might be in a society where son's status was independent of his father's i.e. in a perfectly mobile society. Thus we see that if the Markov model is an appropriate description of social promotion, and if P is the matrix of transition probabilities applicable to Dublin males, there will be six times as many sons and 3·5 times as many grandsons of social group 1 parents in that social group than there would be in a perfectly mobile society. Prais's Immobility Ratios derived in his 1955 paper for subjects in England and Wales are also presented.

It will be seen that Prais's Immobility Ratios differ from our unskilled manual Mobility Ratios in formulation. For a mathematical development see Prais's original paper [5].

The Immobility Ratios for the first generation are very similar to the Indices of Association used in the studies edited by Glass [1] and also used by Hutchinson—the one difference is that in the case of Immobility Ratios, the equilibrium distribution is used to standardize the survivors in a social group, rather than the actual distribution of subjects which was used by Glass for standardization purposes. Comparisons of the figures for Dublin, and England and Wales show the same pattern of self-recruitment in the various social groups, most marked at the top, and somewhat less so at the bottom of the social hierarchy. In both areas the intermediate grades are the least sticky. However, the effects of self-recruitment are

TABLE A2.2: *Average number of generations spent in each social class by adult males in (i) Dublin (D) 1968, (ii) England and Wales (EW) 1954, together with their standard deviation.*
Also the average number of generations spent in each such group in a similar but perfectly mobile society.
(Using Prais-type transition matrices).

Class	Average No. of generations in present society (1)		Perfectly mobile society* (2)		Column (1) ÷ Column (2) (3)		Standard Deviation (4)	
	D	EW	D	EW	D	EW	D	EW
1. Professional	1·86	1·63	1·08	1·02	1·72	1·59	1·27	1·02
2. Managerial	1·29	1·36	1·07	1·04	1·21	1·30	0·61	0·71
3. Higher grade non-manual	1·33	1·23	1·12	1·10	1·19	1·12	0·66	0·54
4. Lower grade non-manual	1·61	1·27	1·25	1·15	1·29	1·11	0·99	0·58
5. Skilled manual *et alia*	1·93	1·90	1·43	1·69	1·35	1·12	1·34	1·30
6. Semi-skilled manual	1·40	1·45	1·13	1·22	1·24	1·19	0·75	0·81
7. Unskilled manual	1·78	1·38	1·16	1·15	1·53	1·20	1·18	0·72

Source: (i) own computation, (ii) Prais *op. cit.* Table 3, p. 60.

Note
*Perfectly mobile society: a society where a person's probability of achieving a given social status does not depend on the status of his father. (In the transition matrix **P** all the rows are equal. $p_{ij}=p_{kj}$ for all i, $k=1, 2, 3 \ldots K$).

TABLE A2.3: *Intergenerational social mobility—Immobility ratios (i) Dublin adult males (D), (ii) England and Wales adult males (EW). (Using Prais-type transition matrices.)*

Social Group	Generation							
	1st		2nd		3rd		4th	
	D	EW	D	EW	D	EW	D	EW
1. Professional	6·0	16·9	3·5	7·6	2·4	4·0	1·9	2·4
2. Managerial	3·3	6·4	2·0	2·9	1·6	1·8	1·4	1·4
3. Higher grade non-manual	2·4	2·1	1·6	1·3	1·4	1·1	1·2	1·1
4. Lower grade non-manual	1·9	1·7	1·3	1·1	1·1	1·0	1·1	1·0
5. Skilled manual *et alia*	1·6	1·2	1·2	1·0	1·1	1·0	1·1	1·0
6. Semi-skilled manual	2·5	1·7	1·6	1·2	1·3	1·1	1·2	1·0
7. Unskilled manual	3·2	2·1	2·0	1·3	1·5	1·1	1·3	1·0

Dublin—authors' own computation; England-Wales—from Prais 1955, *op. cit.* Table 4.

Source: From Prais 1955, *op. cit.*, Table 4.

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more marked in the upper strata in Prais's data, than in the Irish case, with the converse being the fact at the lower end of the social scale. The figures are consistent with the view that entry to management and the professions is easier in Ireland than in England, but that escape from the semi-skilled and unskilled manual classes is more difficult. However, differences between both sets of figures should be interpreted with caution, in particular since 16 years separate the basic inquiries.

REFERENCES

[1] GLASS, D. V. (ed.): *Social Mobility in Britain*. London: Routledge and Kegan Paul, 1954.
[2] HUTCHINSON, B.: *Social Status and Intergenerational Mobility in Dublin*. Dublin: The Economic and Social Research Institute. Paper No. 48, 1969.
[3] BARTHOLOMEW, D.: *Stochastic Models for Social Processes*. London: Wiley, 1967.
[4] STONE, R.: "A Markovian education model and other examples of linking Social Behaviour to the economy". London: *Journal of the Royal Statistical Society*. Series A. Vol. 135, No. 5, 1972.
[5] PRAIS, S. J.: Measuring Social Mobility. London: *Journal of Royal Statistical Society*, Series A, No. 1, 1955.
[6] HUTCHINSON, B.: *Social Status in Dublin; Marriage Mobility and First Employment*. Dublin: The Economic and Social Research Institute, Paper No. 67, 1973.
[7] HUTCHINSON, B.: *Survey of Dublin Urban Living*. (Work in progress.) Dublin: The Economic and Social Research Institute.
[8] RAVEN, J. and BENSON, C.: *Survey of Attitudes of Post-Primary Teachers and Pupils* (Work in progress.) Dublin: The Economic and Social Research Institute.

3. The Family Environment

HERE we collect, and to a certain extent analyse, statistics pertaining to the Irish family, in so far as these have a bearing, even tenuous, on our inquiry. Emphasis will be especially on children and socio-economic class. The relevance is obvious of statistics of family size, housing conditions, child-related expenditure, physical and mental characteristics, children's reading ability and the like. We believe that factors like these must be taken into account in devising efficient plans for diminishing inequality.

Household particulars

Far and away the best sources of comparative information about the Irish family are the household budget inquiries of 1951–52 and the latest, that for 1965–66. Here we find large random samples of households classified into social, income and other groups, separately and in combination, with weekly expenditure in itemized detail, household composition (numbers of males, females, adults, children, etc.) being shown for each group and sub-group. A disadvantage is that these inquiries extend only to towns and villages, so that almost all farm households are excluded.

The 1965/66 sample extended to about 2,400 households (so that the household was the sampling unit), each surveyed twice during the year of inquiry so that returns numbered about 4,800. The year of inquiry is somewhat remote and CSO has a later inquiry in hand.

First we present a primary analysis of town households and discuss how expenditure patterns vary with gross weekly household income. Expenditures on children are singled out for special attention. In the next section we synthesize the

studies of Leser and Pratschke, and suggest some possible implications of the changes in estimated elasticities. The primary analysis of the first section is then extended to examine the influences of social group, income and household composition on specifically child-related expenditure.

Household Budget Inquiry 1965/66—*A Primary Analysis*

As is usual at household budget inquiries, incomes are probably understated, for example, in lowest category in the report under £4 a week, disposable household income is £2·76 but expenditure is £4·35. Fortunately, the under £10 is not of much interest for our purpose since it contains only 5½ per cent of children (see item 3 in Table 3.1) and, in fact, consists largely of elderly people (see item 9) whose principal income is (as shown in (3)) old age and widows' pensions. Incomes are relative to 1965/66 and we might expect Table 3.1 to make much the same showing in 1973 by raising all incomes by 60 per cent, e.g. under £10 at head of table would become under £16 etc. The figures at Item 11 of the table would also be increased by 60 per cent.

Item 3 shows that approximately one-quarter of children are in each of the four income groups under £15, £15–20, £20–30, £30 or over. Item 4 shows that household size increased with income; concomitant is the steady rise of persons at work (6) and economic strength (7): fortunately, children per household (5) does not reach its maximum in the poorest households but in the £20–£30 class. The children per worker figure (8) is, however, highest in the low income £10–15 class, and declines regularly with income size. By the standard (10) of persons per room, town dwellers were well housed: this is little difference between income classes. Of course there are other standards, including quality of housing.

While disposable income per person (13) is greater than expenditure per person (12) in every household class but one (raising doubts about the reliability of (12) and (13), especially in the lower income grades) the contrast between low and

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high income grades in the matter of income per household (11) and expenditure per person (12) is very marked: thus, while income in gross household income class £40+ is nearly five times that in class £10–15 (see 11), expenditure per person is only twice (see 12). This is due mainly to two causes (i) number of persons (see 4) and (ii) direct taxation, only 3 per cent for £10–15 households compared with 13 per cent for £40+. The question here is: should not comparative ability to pay for children be adjudged by expenditure per person rather than by household income?

It is in the same order of ideas that we present ratios 14 (i) and 14 (ii). We see, as regards 14 (ii), that higher income households pay proportionately far more for their children than do lower income households, the £40+ class more than twice that for the £10–15 class, glaringly in contrast with expenditure on drink and tobacco (15), assuming that the notorious downward bias* in these figures (especially in drink) is proportionately the same in all income classes.

Expenditure Patterns in Urban Households (1951/52 *and* 1965/66)

Leser [1, 2] and Pratschke [3, 4] have estimated expenditure elasticities of commodity groups and items. These elasticities measure the degree of responsiveness of expenditure on commodity groups or items to the changes in total expenditure. By definition, elasticity is the percentage increase in quantum in the item or group for 1 per cent increase in total expenditure. The analysis and estimation is cross-sectional, demand relationships are estimated at a point in time (either 1951/52, Leser, or 1965/66, Pratschke). These elasticities are designed mainly to give some indication of the nature of the goods. We might describe goods with expenditure—elasticities greater than one as economic luxuries—and we would expect these items to

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*In 1966 expenditure on alcoholic beverages and tobacco as percentages of personal expenditure at current market prices were respectively 9·8 and 7·9, total 17·7 for the whole country. Percentages for town areas only (as for the household budget inquiry) were almost certainly larger. Separate household budget percentages were 4·0 for drink and 5·8 for tobacco for all income groups.

TABLE 3.1: *Particulars of households in towns from sample classified by gross weekly household income 1965/66.*

Item	Gross weekly household income (£)						All Households
	−10	10–15	15–20	20–30	30–40	40+	
Percentage of total:—							
1. Households	21·5	19·5	18·7	21·1	10·8	8·3	100
2. Persons	10·9	18·1	19·6	26·0	14·1	11·4	100
3. Children 0–13	5·5	21·1	22·5	28·8	12·6	9·5	100
Per Household:—							
4. Persons	2·04	3·73	4·22	4·96	5·25	5·56	4·03
5. Children 0–4	0·35	1·48	1·64	1·87	1·60	1·56	1·37
6. Persons at work	0·41	1·04	1·36	1·76	2·23	2·46	1·36
7. Economic strength	0·20	0·28	0·33	0·36	0·42	0·44	0·34
8. Children 0–13 per worker	0·86	1·42	1·21	1·06	0·72	0·64	1·01
9. Persons 65+ per cent all persons	34·9	8·0	6·2	5·1	4·2	4·9	8·9
10. Persons per room	0·53	0·89	0·91	0·98	0·98	0·89	0·86
11. Income per household (£)	5·74	12·64	17·41	24·28	34·45	56·38	20·49
12. Expenditure per person (£)	3·85	4·02	4·64	5·22	6·59	8·09	5·27
13. Disposable income per person (£)	2·78	3·28	3·94	4·61	6·05	8·84	4·73
14. Ratio of children's to total expenditure (£) {(i)	0·385	0·205	0·229	0·224	0·265	0·288	0·242
{(ii)	0·087	0·075	0·105	0·105	0·142	0·167	0·113
15. Expenditure on drink and tobacco (per cent)	9·4	10·8	9·5	10·1	9·9	9·5	9·9

Basic Source: Table 7, 1966 Household Budget Inquiry.

Notes

Item 7, economic strength, is quotient of item 6 by item 4.

In Item 10, rooms exclude rooms sub-let.

Item 14 (ii), expenditure on children, consists of items which are specifically spent on children, e.g. boy's clothing, training and education. Full list of items (see [3]) is 144–153, 178–189, 272–277, 101, 190, 301. Item 14 (i), includes 14 (ii) and, in addition, fresh milk (10) and sweets, ices, soft drinks (109–111) of which children are presumably the main consumers, which are also consumed by adults. The figures represent children's expenditure on these items *per child* as a ratio of total expenditure *per person*.

account for an increasing proportion of expenditure as income (expenditure) increases. Goods with positive expenditure elasticities but less than unity we may call economic necessaries, and such elasticities suggest that these commodities account for a smaller proportion of outlay as expenditure increases.

Over a period of years goods may progress from economic luxury to economic necessaries with rising income: hence a declining elasticity is generally indicative of a rising living standard. The opposite phenomenon is more unusual—but it can take place when the supply conditions of the goods in question change. Table 3.2 shows average expenditure proportions and expenditure elasticities for ten major expenditure groups.

TABLE 3.2: *Average urban expenditure proportions and expenditure elasticities for ten major expenditure groups, 1951/52 and 1965/66.*

Commodity group	Expenditure proportion		Expenditure elasticity	
	1951/52	1965/66	1951/52	1965/66
1. Food	37·70	31·55	0·61	0·51
2. Clothing	13·02	9·10	1·49	1·14
3. Fuel and light	7·13	5·29	0·50	0·32
4. Housing	7·13	8·09	0·93	0·98
5. Sundries—				
5.1 Drink and tobacco	6·17	9·88	0·87	0·96
5.2 Household non-durable goods	1·76	1·64	0·79	0·74
5.3 Household durable goods	2·62	4·10	2·00	1·20
5.4 Miscellaneous goods	1·94	2·78	1·30	1·33
5.5 Transport	4·39	9·59	2·13	2·00
5.6 Services and other expenditure	18·13	17·99	1·54	1·52

Source: Pratschke [3].

The marked declines shown in Table 3.2 of proportionate expenditure on the major items food (1) and clothing (2) are clearly indicative of an improved standard of living: so are the declines in the elasticities. The reality of the increases in drink and tobacco proportion may be illusory as due more to improved reporting on 1965/66.* Anomalous also are elasticities exceeding unity but declining proportionate expenditure in the cases of items 2 and, in lesser degree, 5.6. This may be due to differential price movements between 1951/52 and 1965/66 between items and total expenditure: elasticity as a time phenomenon is to be interpreted at constant prices. Or it may be an example of the familiar conflict between income (or expenditure) elasticities computed from time series and cross-section data: we need not trouble ourselves further with this anomaly here.

TABLE 3.3: *Household statistics in four socio-economic groups, 1951/52 and 1965/66.*

Item	Social group				All Groups
	1	2	3	4	
Per household—					
1 Person					
1951/52	3·92	4·07	4·55	4·71	4·11
1965/66	4·01	3·97	4·47	4·53	4·02
2 Earners					
1951/52	1·64	1·72	1·83	1·95	1·74
1965/66	1·32	1·42	1·59	1·54	1·36
3 Other adults					
1951/52	1·13	1·11	1·11	1·08	1·03
1965/66	1·37	1·24	1·31	1·31	1·29
4 Children 0–13					
1951/52	1·15	1·24	1·61	1·68	1·34
1965/66	1·32	1·32	1·57	1·68	1·37
5 Rooms					
1951/52	6·04	4·84	4·02	3·31	4·21
1965/66	6·14	4·82	4·48	3·82	4·68

*National proportions, however, also showed an increase at current prices from 17·3 per cent in 1953 to 17·7 per cent in 1966, i.e. much smaller than in Table 3.2.

TABLE 3.3—*continued*.

Item	Social group				All Groups
	1	2	3	4	
Per person—					
6 Earners					
1951/52	0·42	0·42	0·40	0·41	0·42
1965/66	0·33	0·36	0·36	0·34	0·34
7 Other adults					
1951/52	0·29	0·27	0·24	0·23	0·25
1965/66	0·34	0·31	0·29	0·29	0·32
8 Children 0–13					
1951/52	0·29	0·30	0·35	0·36	0·33
1965/66	0·33	0·33	0·35	0·37	0·34
9 *Expenditure per person—*					
per cent of total					
1951/52	153	132	102	79	100
1965/66	159	104	103	83	100
Children expenditure ratios—					
10 Education					
1951/52	0·066	0·093	0·026	0·019	0·045
1965/66	0·081	0·037	0·019	0·007	0·036
11 Clothing					
1951/52	0·084	0·085	0·068	0·051	0·069
1965/66	0·056	0·057	0·051	0·038	0·052
12 Pocket money					
1951/52	0·014	0·012	0·008	0·007	0·010
1965/66	0·019	0·019	0·010	0·009	0·015
13 Total 10–12					
1951/52	0·165	0·191	0·102	0·077	0·125
1965/66	0·157	0·113	0·080	0·054	0·102

Basic Sources: [13], [14].

Notes

Social Groups: 1 professional, employer, manager,
(1965-66   2 other non-manual,
allocation)   3 skilled manual,
              4 semi-skilled, unskilled manual.

Items:

1–4:   Excluding private domestic servants living in.
5:         Excluding rooms sub-let.
10–13:   Quotient of expenditure per child to total expenditure per person in family.

Comparison of Household Particulars in 1951/52 *and* 1965/66

Table 3.3 may be regarded as the comparative version of Table 3.1 which relates to 1965/66 alone. Social groups had to be condensed to the four described in the notes and, even so, it is impossible to guarantee that group coverage in the two years covering a span of 14 years was the same. We believe that it was sufficiently alike to justify comparison in general. Principal inferences are as follows:—

(i) Small decline in persons per household, most marked in two manual groups (item 1).

(ii) Marked decline in all groups in number of earners and almost equally marked increase in other adults (items 2 and 3).

(iii) Increase in children in group 1; no change in manual groups (item 4).

(iv) Marked improvement in housing of manual classes (item 5). However, in 1965/66 persons per room increased regularly from 0·65 for group 1 to 1·19 for group 4 (items 1 and 5).

(v) Decline in economic strength (item 6).

(vi) Scarcely any change in any group in proportionate number of children (item 8).

(vii) While for item 9, comparison for group 2 (carried over to items 10 and 11) looks dubious obviously there has been no significant change between groups (item 9).

(viii) Expenditure ratios for education declined markedly in group 4 but increased in group 1 (item 10).

(ix) Trends the same in all classes for expenditure ratios for

children's clothing and pocket money, down for former, up for latter (items 11 and 12).

Decline in economic strength ((v) above) is not necessarily a bad thing. On the contrary, it may be regarded as a social step-up for manual groups since always numbers of earners per household increase as social group declines.

Child-related Expenditure Patterns 1965/66

Our main interest here is to discern relationship, if any, between household expenditure on children (in so far as this is distinguishable) and social group, and to comment thereon.

In Tables 12 and 12A of the Household Budget Inquiry 1965/66, town households are classified in two ways, by social group (6 specific groups) and household income (4 groups). Group 6 ("others") is omitted as indefinite, leaving 20 observations ($= 5 \times 4$) included in the analysis. For each of these 20 household types many particulars are available. In regard to expenditure predominantly on children, only (i) education and training and (ii) boys' and girls' clothing are distinguished: no doubt differential propensity to spend on these items will reflect dispositions as regards total expenditure on children. These two will be used as dependent variables in what follows. As indvars we use social group, number of children 0–14, number of adults (14+), family expenditure and economic strength.

Two sets of linear models were tried in the regressions, in the first absolute and in the second logarithms (except for the social group dummy indvar). We had no hesitation in choosing the log models, which had consistently higher F values, explaining more of the variation than the corresponding equations using absolute levels of variables.

The following indvars were considered in the regression analysis:—

X_1: Social group—a dummy variable, as follows: 1. Higher professional, lower professional, employer, manager ;

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2. Salaried employee, intermediate non-manual workers;
3. Other non-manual worker; 4. Skilled manual worker;
5. Semi-skilled manual worker and unskilled manual worker.

X_2: Log number of children aged 0–14 years.
X_3: Log total expenditure.
X_4: Log average number of adults in household.
X_5: Log economic strength of average household with this income and social status—the ratio of persons at work to total persons.

Depvars are:—

X_6: Log education and training expenditure.
X_7: Log children's clothing expenditure.

Twenty-eight regressions are displayed in Table 3.4, 14 identical as regards indvars, for each of the two depvars. From our point of view the most important result is that in every case in which it appears the coefficient of X_1 is negative, indicating a marked tendency for expenditure on children to decline with social group level. Also very significant is the fact that this relationship is much more marked in the case of education (the A series of equations in Table 3.7); actually no relationship is discernible *simpliciter* on our data between social grade and expenditure on children's clothing (eq. B1); nevertheless we believe there is some relationship.

In multivariate regression, equations with large values of F (or $\bar{R}^2$) and values of τ not too different from half the number of sets (here $10 = 20/2$) are regarded as furnishing a good representation of the data. So, in both A and B series in Table 3.4, we pick equations 7, 11, 12, 14 as the "best": note that the A series, with values of $\bar{R}^2$ equal to ·94, ·96, are a better fit than the B series with $\bar{R}^2$ equal to ·83 and ·85. Note also that these "best" eight equations all have X_1 (social group) as a regressor. All coefficient values of X_1 are highly significant for the A series; not so for the B series.

Equation A14 means that when given total family expendi-

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TABLE 3.4: *Least square regressions for household expenditure on (A) education and training and (B) children's clothing. Double logarithm treatment.*

Equation Number	Intercept	Social Group X_1	Children (0–13) X_2	Expenditure X_3	Adults (14+) X_4	Economic strength X_5	F	$\bar{R}^2$	S.E.E.	τ
(A) Education and Training
A1	2·55 (5·1)	−0·50 (3·4)					11·3	0·35	0·95	9
A2	1·05 (4·4)		0·56 (2·2)				5·0	0·17	1·07	8
A3	−9·08 (5·1)			1·69 (5·7)			32·8	0·63	0·72	12
A4	−0·51 (0·7)*				1·56 (2·1)		4·6	0·16	1·08	8
A5	3·31 (3·6)					2·04 (2·6)	6·7	0·23	1·03	7
A6	3·16 (13·8)	−0·70 (10·1)	0·90 (8·7)				67·7	0·88	0·42	9
A7	−7·07 (9·2)	−0·44 (9·3)		1·58 (12·8)			138·4	0·94	0·30	6
A8	−11·99 (4·6)		−0·37 (1·5)*	2·17 (5·1)			18·7	0·65	0·69	10
A9	2·68 (2·4)		0·28 (0·9)*			1·47 (1·5)*	3·7	0·22	1·04	8
A10*	0·23 (0·2)*		0·35 (1·0)*		0·81 (0·8)*		2·7*	0·15	1·08	7
A11	−3·73 (3·4)	−0·54 (11·9)	0·37 (3·6)	1·07 (6·3)			161·6	0·96	0·23	14
A12	1·92 (6·5)	−0·73 (16·0)	0·58 (6·1)		1·33 (4·9)		114·5	0·95	0·27	10
A13	−17·8 (10·8)		−0·15 (1·1)*	3·73 (11·3)	−3·49 (6·6)		57·5	0·90	0·37	7
A14	−4·94 (1·8)*	−0·50 (5·0)	0·33 (2·6)	1·31 (2·5)	−0·34 (0·5)*		115·4	0·96	0·23	14
(B) Children's Clothing
B1*	2·22 (5·2)	−0·14 (1·1)*					1·1*	0·01	0·81	9
B2	1·82 (13·8)		0·59 (4·2)				17·9	0·47	0·59	8
B3	−6·09 (7·0)			1·32 (9·1)			89·5	0·81	0·35	9
B4	0·11 (0·3)*				1·72 (4·4)		19·2	0·49	0·58	7
B5	3·95 (7·5)					1·92 (4·2)	17·8	0·47	0·59	9
B6	2·72 (11·4)	−0·30 (4·1)	0·73 (6·8)				25·4	0·72	0·43	5
B7	−5·70 (6·5)	−0·90 (1·6)*		1·30 (9·3)			46·1	0·83	0·34	11
B8	−5·67 (4·2)		0·05 (0·4)*	1·25 (5·6)			39·4	0·80	0·36	9
B9	3·14 (5·4)		0·37 (2·3)			1·19 (2·3)	13·7	0·57	0·53	9
B10	0·79 (1·4)*		0·32 (1·7)*		1·04 (1·9)*		12·0	0·54	0·55	11
B11	−3·25 (2·1)	−0·16 (2·5)	0·27 (1·9)*	0·93 (4·0)			36·8	0·85	0·32	13
B12	1·53 (4·6)	−0·32 (6·2)	0·42 (3·9)		1·27 (4·1)		38·1	0·85	0·31	10
B13	−7·05 (4·6)		0·11 (0·8)*	1·62 (5·3)	−0·82 (1·7)*		30·0	0·82	0·34	11
B14	−0·31 (0·1)*	−0·26 (1·9)*	0·36 (2·0)*	0·35 (0·5)*	0·82 (0·9)*		27·3	0·85	0·32	11

Notes

1. All variables logs except X_1.
2. t-values in brackets ( ) under coefficient values.
3. Equation (F) or coefficient (t) *not* significant at ·05 probability indicated by asterisk (*). Rest significant.
5. τ(tau) is number of sign changes of 20 residuals when data are ordered according to magnitude of principal indvar. Null hypothesis probabilities (two-sided, with 20 sets of observations) are .019 for $\tau=4$ and 0·64 for $\tau=5$. As $\tau>4$ for all values, residues are deemed free from automeression.

4. Indvar correlation matrix

	X_1	X_2	X_3	X_4	X_5
	1	0·33*	0·10*	0·32*	0·10*
		1	0·75	0·73	0·61
			1	0·87	0·79
				1	0·85
					1

ture, number of children and number of adults, expenditure on education and training is powerfully influenced by social level. This is *not* the case as regards children's clothing expenditure.

If we were interested only in finding formulae for the depvars we would prefer (in both cases) equation 7 to 14 as containing fewer indvars (2 compared with 4) and yielding almost as high values of $\bar{R}^2$.

An anomalous aspect of this regression experiment requires comment, namely that, as indicated in note 4 to Table 3.4, none of the correlations of X_1 (social group) with the 4 other indvars is significant at the ·05 probability level. This is due to the fact that our set of 20 must be deemed to consist of one average family from each of 20 social group/income grades. It seems hard to credit that there is no significant correlation between social grade (X_1) and total household expenditure (X_3): in fact an earlier table (3.3) shows little variation in total expenditure between social groups but a large variation between values of family expenditure per person, since size of family (and hence number of gainfully occupied) increases markedly as social group level declines.

Because the equations in Table 3.4 are of the double-log variety, it is possible to interpret the coefficients of the simple regressions as expenditure elasticities of the regressand with respect to the regressor variable in the case of equations A2 to A5 and B2 to B5 inclusive. These elasticities are set out separately in Table 3.5.

Expenditures on both education and training and children's clothing are seen to be inelastic with respect to the number of children, but the presence of adults in the household greatly enhances expenditures on children. The responsiveness of such expenditures to economic strength is particularly marked, and underlines the importance of the dependency factor. It also points to a possible avenue of advance from the position of less fortunate children—greater participation in the work-force by adults in these households.

TABLE 3.5: *Expenditure elasticities of education and training, and children's clothing with respect to adults, children, total expenditure and economic strength.*

Elasticity of expenditure	Education and training	Children's clothing
With respect to:		
(1) Number of children	0·56	0·59
(2) Total Expenditure	1·69	1·32
(3) Number of adults	1·56	1·72
(4) Economic Strength	2·04	1·92

Expenditures on both commodity groups are both elastic to total expenditure, which illustrates that the key to the problems of poorly provided-for children is adequate income.

It is important to note that the effects of social group and income appear from these regressions to be separable. This is because, as already indicated, X_1 (the social group dummy) and X_3 (total expenditure) are not significantly correlated. The data set thus approaches orthogonality, and it is valid to talk about social status and income effects in these circumstances. A consequence of this is that the coefficients of X_1 and X_3 when estimated in single regressor equations (equations 1 and 3 in both series) are not significantly different from those obtained in joint estimation of the coefficients, (equation 7). This is a consequence of the near-orthogonal design.

Pratschke, in his ESR article in 1970, had difficulty in isolating the effect of household composition on various categories of expenditure. Neither absolute levels nor log equations indicated how expenditures on children's clothing or education might be decomposed into adult and child components. However, when the social group dummy is included we obtained two highly significant equations, 12 in both series, which enable us to "decompose" these expenditures into the negative influence of the social group dummy and the positive

contribution of numbers of adults and children to such expen-
ditures. The marginal contribution of an adult to education
and training expenditures suggested by the coefficients, is about
twice that of a child, and in the case of children's clothing the
adult effect is about three times that of a child. Such a marginal
interpretation of the coefficients is strictly valid only in an
orthogonal design, and in this case there is some evidence of
multicollinearity in the data set.

Our main impression related to our research project from the
foregoing regression analysis is that there is a very powerful
class-effect operating as regards expenditure on education and
training. The situation is quite different as regards expenditure
on children's clothing. When due allowance is made for *ceteris
paribus* (see equation B14) class-effect discernible is much less,
if any. One would like to know if this is true as regards other
expenditure on children, on milk, toys, sweets, etc.

It may validly be objected that the household budget data,
namely, that of 1965/66 which we use for Tables 3.4 and 3.5,
are out-of-date, especially as regards expenditure on children;
in fact, since then expenditure on post-primary education has
become "free". Administrative changes can take place over-
night: practice and outlook of people far more slowly. While
we shall greatly welcome the results of the more recent inquiry,
we submit that our present results may have some relevance,
as indicative of the comparative propensity of the different
social grades to spend on children for "higher things".

Improvement in Housing, 1926–1966

Housing ranks highly among the factors which shape the
environment of our young people. Its influence on physical
growth and development, general health, and even ability to
read has been documented in studies we will examine presently.
First we will examine the change in housing conditions over
the 40 years 1926–1966.

Table 3.6 shows the marked improvement in housing condi-
tions in the 35 years 1926–61, with the incidence of over-

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TABLE 3.6: *Housing conditions in town, rural and all areas,* 1926, 1946, 1961, 1966.

	1926	1946	1961	1966
Persons per household				
Town areas	4·32	4·15	3·99	4·07
Rural ,,	4·55	4·16	3·96	3·95
All ,,	4·48	4·16	3·97	4·01
Percentage > 2 per room				
Town areas	31·3	21·4	11·1	10·8
Rural ,,	25·5	14·3	11·8	11·1
All ,,	27·2	16·8	11·5	10·9
Persons per room				
Town areas	1·17	1·03	0·83	0·89
Rural areas	1·19	1·00	0·91	0·90
All ,,	1·19	1·01	0·90	0·89

Source: [15], Tables 2, 3, 4.

crowding (as conventionally defined) reduced by two-thirds and a substantial reduction in the average number of persons per room.

However, in the last five years 1961–66, there was little change. Improvement in housing standards might have been more marked were it not for the substantial decline in emigration, thus increasing numbers in families.

Table 3.6 tells us nothing about trends in the different social groups. Taking a line from item 5 of Table 3.3, however, we are confident that improvement in, say, the twenty years 1946–66 was more marked in the lower groups.

Physical Growth and Development in Dublin City Children
The results commented on in this section were derived by

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M. P. Kent and J. J. Sexton [5] from a sample of 412 Dublin City children, aged 4–7, who formed part of the Gastroenteritis Survey (case and control) of 1964–66. The sample is not a random one, for the authors point out that the children included were largely from families in the lower income ranges. Furthermore, at the meeting at which the paper was presented, T. P. Linehan pointed out that the proportion of families in the sample with 9 or more children, namely 19 per cent, was far in excess of the national average. This downward bias in the aggregate need not worry us unduly since we are interested only in comparison, and results are given for classifications according to socio-economic group of father and other. In each such group the physical measurements may not be unduly biased, if the aggregates are.

The authors ingeniously plot children's measurements on a percentile scale, using charts stated to be developed by Tanner, Whitehouse and Takaishi [6, authors' reference]. Here we confine attention to the 50 percentile, to be interpreted as follows. If percentage shown for any group of Dublin children for either measure is above, equal to, or below 50, then Dublin children in the group are to be regarded, approximately on average, as larger, equal to, or lower respectively, in regard to the TWT standard measure. Whatever may be thought about absolutes, the authors' method is well adapted for comparison between groups of children.

In the whole sample, percentages found are 38 for height and 41 for weight, which indicate that Dublin children in the sample fall short of the TWT standards, not unexpectedly, since the sample is biased downward in socio-economic scale.

Table 3.7 synthesizes three tables in the Kent-Sexton paper, in which the data are submitted to full χ^2 treatment. The effect of the three characteristics studied on height and weight of children is extremely striking. One surmises that similar results would be found for other social characteristics. The poor showing for all three on the right side have, no doubt, a common cause, namely relative poverty.

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TABLE 3.7: *Percentages of Dublin children in sample in various groups above the TWT 50 percentile standard.*

(a) Children in family:—

	1–2	3–4	5–6	7–8	9+	Total
Height	52·7	47·1	40·0	33·3	19·0	37·9
Weight	52·6	44·3	41·6	39·1	29·1	40·5
No. in sample	38	106	120	69	79	412

(b) Home conditions:—

	Good	Fair	Poor	V. Poor
Height	55·2	41·3	31·3	13·6
Weight	47·9	47·3	33·9	23·7
No. in sample	96	148	109	59

(c) Socio-economic group of father:—

	1	2	3	4	5
Height	50·0	43·1	43·2	31·4	22·6
Weight	50·0	47·4	40·0	31·4	34·4
No. in sample	48	95	125	51	93

Source: [5].

Notes

Totals for (b) and (c) same as at (a). Socio-economic classification at (c) is: 1 professions, employers, salaried, 2 intermediate non-manual, 3 other non-manual, 4 skilled manual, 5 semi-skilled and unskilled manual.

Though stated to be derived from Gastroenteritis Survey sample, proportion poor (="poor" +"very poor") at (b) namely 41 per cent is very much greater than 10 per cent for the control group in the former sample.

In their Table 4 the authors classify their data two ways, home conditions x children in family, from which we note that in families of 1–2, 3–4, 5–6, 7–8, 9+ respectively, percentages with poor home conditions are 20, 20, 39, 57, 67. The authors, deploring the smallness of their sample (and we agree that inquiry on these matters should be set up regularly on a much larger scale), state "growth and development is an extremely complex phenomenon subject to a great many interacting influences (of both a social and medical nature) and one has to tread cautiously in drawing conclusions concerning the effect of any one factor taken in isolation". We agree, but we think that the authors' data convincingly show that the main underlying cause is social inequality. With the diminution of poverty better living will transpire, elements in better living being those indicated in Tables 3.3 and 3.9, and many more.

In a medical contribution to the discussion on the Kent-Sexton paper, E. W. Lillie said that height and weight were significant criteria of development on the evidence of the effect that deprivation of a baby in utero had on its birth weight and length. He quoted similar results from a study he carried out on 200 cases of grand multiparity (patients having seven or more viable pregnancies). He found that the grand multipara tended to be from the lower socio-economic groups, poorly educated, and naturally of an older age group. They tend to eat poorly, concentrating largely on carbohydrates, which in turn leads to obesity. The poor quality diet also causes deficiencies of iron and folic acid, which lead to anaemia, which in turn leads to dental caries. In fact, 50 per cent of the sample had dental caries, and half of the remainder were edentulous. The grand multipara also has a poor record of attendance at ante-natal clinics and is apt to ignore medical advice. It is quite understandable therefore that the grand multipara has a high perinatal mortality rate and also an increased maternal mortality rate. While it is difficult to distinguish cause from effect, there can be little doubt that some

limitation of family size would be of benefit to this group of patients.

Continuing, Lillie said, with regard to the standard of home conditions and occupation of father, that these parameters are clearly related but not identical. The standard of home condition is largely dependent on family finance and the level of education of the parents. The father's occupation determines family income, which, in turn, is dependent on his education and ability. Where both of these social factors are low, it means poverty, both mental and physical. Socio-medical investigations from other centres have shown that poverty produces mothers who may be too young, or too old, and who tend to have too many children. It is the main predisposing factor in the causation of premature delivery, and thus is a major cause of perinatal mortality. Among the infants who survive, the intelligence quotient is lower than among those born into a higher socio-economic group. There is also an increased liability to cerebral palsy, epilepsy, mental deficiency, behaviour disorders, sensory disorders and autism. Lillie concluded that it is very easy to see, from this evidence, how poverty begets poverty [7].

Reading Ability

The results of a large-scale reading survey, carried out by a team of qualified psychologists attached to the UCD Psychology Department, under the direction of D. Swan, are of great interest and of obvious relevance to our inquiry [8]. This survey was conducted amongst 3,377 first-year post-primary pupils attending 161 schools in 18 counties, average age $13\frac{1}{2}$.

It was found that 16 per cent of post-primary school pupils had some degree of backwardness in reading. The problem was significantly greater among boys than among girls, and among children of larger families than those of smaller families. It was nine times more frequent among the children of manual workers than among those of professional workers. Its incidence in secondary schools varied between 8 and 9 per cent, while

in vocational schools it was between 28 and 30 per cent. At the other end of the scale, 17 per cent of post-primary school pupils could be termed advanced readers, with 22 per cent for secondary schools, but only 7 per cent for vocational schools.

Other results were that for secondary schools the size of the school was unimportant but, on the other hand, for vocational schools the scores were markedly lower in the larger schools on a country-wide basis.

On average, the backward children come from larger families, had been longer at school (in the sense that they take more time to pass through a school), and intended leaving school younger than the advanced readers. They also felt that their parents would wish them to leave school younger, but seemed to disagree with their parents about when they should leave school. They read less frequently for leisure, came from homes where fewer books were available, and had less favourable general attitudes to reading.

Health and Opportunity—Dublin Gastroenteritis Survey

The Medical Research Council of Ireland conducted a survey between 1964 and 1966, on the incidence of gastroenteritis [9] among Dublin City children. Over twelve-hundred cases were analysed, a "case" being defined as any child of less than two years who was admitted to either Cherry Orchard or Vergemount Fever Hospitals with a pre-admission diagnosis of gastroenteritis. A sample of 1,339 controls was also selected from the healthy infant population, children who in the preceding three weeks had not had any illness.

For our study of family conditions, the results of this inquiry, both as regards the disease group, and even more so the control group, have much interest for us. Readers do not need to be reminded that gastroenteritis is very much a social disease.

Family Size—The incidence of the disease was examined with relation to certain social factors that are relevant to

our study, classified by number of children in family. We cannot, however, accept the statement that "there is no great difference between cases and controls in relation to the number of children in family". In fact, an χ^2 analysis on Table 3.8 comparing the observed distribution of cases classified by family size, and the distribution expected on the basis of the family-size distribution of the controls gives an χ^2 value of 47·2. The critical value at the 1 per cent significance level (with 10 degrees of freedom) is 23·2. It is beyond question that, on this body of data, there is a marked relation between incidence of the disease and family size.

TABLE 3.8: *Cases and controls classified by number of children in family.*

Number of children in family	Number		Percentages	
	Cases	Controls	Cases	Controls
1	208	354	18·0	26·4
2	225	246	19·4	18·4
3	228	178	19·7	13·3
4	150	167	13·0	12·5
5	118	129	10·2	9·6
6	49	84	4·2	6·3
7	59	54	5·1	4·0
8	41	37	3·5	2·8
9	26	40	2·2	3·0
10	28	26	2·4	1·9
11+	25	24	2·2	1·8
Total	1,157	1,339	100	100

Source: [9].

Home Conditions—Most significant of all was the way in which home conditions influenced the number of cases of the disease. The home conditions of both cases and controls were assessed by the Public Health visitors of the Dublin Health Authority. A considerably larger percentage of cases came from "poor

home conditions" than did controls, 29 per cent as against 10 per cent (Table 3.9), a satisfactorily low percentage which, one imagines, represents a marked improvement in recent years.* For the cases, more homes with large families, i.e. with six or more children fell into the poor home category. Thirty-seven per cent as compared with 9 per cent of controls. In fact a remarkable showing of Table 3.9 is that, in the control group, percentage in poor home conditions is little influenced by family size.

TABLE 3.9: *Cases and controls (figures in brackets) classified by number of children in family and home conditions.*

Home Conditions	Number				Percentage			
	Children in family				Children in family			
	1–2	3–5	6+	Total	1–2	3–5	6+	Total
Good	69	52	11	132	15·9	10·5	4·8	11·4
	(120)	(93)	(28)	(241)	(20·0)	(19·6)	(10·6)	(18·0)
Fair	246	312	132	690	56·8	62·9	57·9	59·6
	(420)	(334)	(213)	(967)	(70·0)	(70·5)	(80·4)	(72·2)
Poor	118	132	85	335	27·3	26·6	37·3	29·9
	(60)	(47)	(24)	(131)	(10·0)	(9·9)	(9·0)	(9·8)
Total	433	496	228	1,157	100	100	100	100
	(600)	(474)	(265)	(1,339)	(100)	(100)	(100)	(100)

Source: [9].

Chi-squared analysis of Table 3.9 confirms the preponderant effect of home conditions on incidence of gastroenteritis, given number of children in family. Values for each family size are as follows:—

No. of children	χ^2
1 or 2	52·5
3 to 5	52·2
6 or over	58·1

With 2 d.f. in each case these values of χ^2 are of overwhelming significance. There is no doubt whatever that, given

*But see footnote page 86.

family size, there is a strong relation between the incidence of the disease and home conditions. Overall χ^2 for Table 3.11 is (with 8 d.f.) 179·1. Scrutiny of contribution of each cell to total χ^2 supports the view that home conditions rather than family size are most strongly associated with the incidence of gastroenteritis. Those in poor home conditions and in large families are especially disadvantaged.

Of greater significance for us is the relationship between family size and home conditions. For this we use only the control figures (i.e. those in brackets) in Table 3.11. With 4 d.f. we find $\chi^2 = 13·3$, almost exactly equal to the ·99 (one-sided) null-hypothesis probability point. Compared to other values in this section, here $\chi^2 = 13·3$ is comparatively low; nevertheless one must decide that the larger the family the worse the home conditions on this evidence. It remarkably happens, however, that if, instead of a three-fold classification, we used only two categories (absorbing "good" and "fair" in one category) χ^2 with 2 d.f. is insignificant. We infer that the relationship between home conditions and family size is by no means as clear-cut as cruder analysis might indicate. We must also bear in mind that the classification of home conditions is necessarily subjective.

Though the ratings "good", "fair" and "poor" cannot be assessed absolutely, they are considered by the authors of the study to be quite reliable, as the inspecting personnel applied objective criteria to the standard of housekeeping and home hygiene, with particular reference to facilities for food storage, water supply, waste disposal and toilet arrangement.*

Family Income—Family income was also an important factor influencing the incidence of the disease. As Table 3.10 shows, the distribution of cases and controls classified by family

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*We feel bound to observe that the proportion in poor home conditions (merely 10 per cent for the case and control group in Table 3.9) differs substantially from the 40 per cent for "poor and very poor" in (b) of Table 3.7. This is undoubtedly due to the downward bias in the Kent-Sexton sample.

income were strikingly divergent. Almost 50 per cent of cases came from households with an income of less than £10 per week. The corresponding percentage for controls was 29 per cent.

TABLE 3.10: *Cases and controls classified by family income.*

Weekly Income Group	Number		Percentage	
	Cases	Controls	Cases	Controls
Under £10	575	388	49·7	28·9
£10–20	538	921	46·5	68·8
£30+	44	30	3·8	2·3
Total	1,157	1,339	100	100

Chi-squared is 126·9 (with 2 d.f.) in this case, again overwhelmingly significant. Although the sample of healthy children might not be perfectly representative of all Dublin children, to the extent that children of the lower income groups are less inclined to attend at child health clinics (one source from which the control group was drawn), the influence and importance of income, home conditions, and family size is so marked as to make statistical arguments academic. Scrutiny of the figures reveals that of the social variables presented in this study, home conditions are the most important factor as far as incidence of gastroenteritis is concerned, although income and family size must also be considered.

We admit the tenuousness of relationship between gastroenteritis and equality of opportunity. The point is that gastro-

enteritis is strongly indicative of poor family conditions, in turn inimical to equality.

Mental Illness and Deficiency

From statistical time immemorial the issue of the high incidence of mental illness in Ireland (i.e. compared with England) has been hotly debated. Is the phenomenon real, or a statistical illusion? If real, why?

As to the first question, the illusionists held that what was being compared was *not* the rate as it applied to the general population but to the numbers *hospitalized*. (One of us recalls that this was a view vehemently held by a very able Secretary— long since deceased—of the Department of Local Government and Public Health, then responsible for mental hospitals.) Political comment seems unnecessary on the fact that in the 19th century the British Government made ample provision— when ample provisioning of other things was not customary— for the mentally ill Irish.* This provision became the more ample the more the total population declined. Nature (and hospital) abhors a vacuum; so the mental hospital beds were filled. Hence, said the illusionists, the high Irish rate.†

For those who accepted that the Irish had a higher rate of mental illness, it was argued (and the argument may still hold some truth) that Ireland was a much poorer country than England, mental disease, like so many others, being a social disease, which means that its incidence is the more severe the lower the social level. Another theory (based on the proliferation of people with the same surname in different rural localities) was that inbreeding was a major cause of mental illness.

With so much doubt on an important issue the entry of so

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*Readers of that best essay ever on socio-political Ireland at the turn of the century, namely Bernard Shaw's "John Bull's Other Island", might call this the "Broadbent Syndrome".

†Of course, the opposite situation may also obtain: the lower English rate may be due to inadequate accommodation in English mental hospitals.

well-qualified an expert as D. Walsh into this field of research
is to be welcomed. Walsh has already several papers to his
credit, alone and in collaboration [10, 11, 12], and we are
promised others. As his data so far relate, as of old, to hospital-
ization, we are not yet in a position to answer definitively the
age-old problem with which we started this section. However,
Walsh has kindly informed us, in correspondence, that the
Medico-Social Research Board has recently set up a project to
"attempt to examine sample communities for the total com-
munity prevalence of serious psychiatric illness, irrespective of
whether patients are receiving treatment or not". For *our*
project, equalization of opportunity, could we respectfully
request the MSRB in effect to drop the word "serious" from
their project description and furnish a psychiatric appraisal
(on a superficial, observational basis and without recourse to
clinical testing or IQ and such) of the *whole* population, in the
form of a frequency distribution even with very generalized
classification headings. These headings would range from
mentally ill (in clinical categories), mentally deficient to
highly intelligent, method being expert interview supple-
mented by evidence from school records etc.

Some of Walsh's findings are sensational. On 31 March 1963
there were 20,000 patients in Irish psychiatric hospitals. Rates
per 100,000 compared with those in hospitals in England and
Wales are as follows—

	Male	*Female*
Ireland (age-standardized)	826	757
England and Wales	255	316
Ratio	3·2	2·4

Source: [10].

The Irish rates have been standardized to the England and
Wales age distribution, so that the rates are comparable, as

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regards ages. The age-specific ratios at the younger age groups are even more emphatic—

Age group	Male	Female
15–24	4·8	3·5
25–34	5·9	4·2
35–44	3·8	3·7

Source: [11].

It appears therefore that at ages 25–34 the male Irish rate is nearly six times that of England! When the rates are standardized for ages and compared by conjugal condition Walsh finds the Irish rates are very much closer to those of England and Wales—

	Male			Female		
	S	M	W	S	M	W
Ireland (std.)	486	193	451	743	301	689
England and Wales	353	110	497	356	158	625
Ratio	1·4	1·8	0·9	2·1	1·9	1·1

S Single, M Married, W Widowed.

Source: [10].

We do not understand why the ratio is so low for single males, in comparison with the ratios (above) for young ages. Walsh thinks that the explanation is "the abnormal age structure of the Irish population taken in conjunction with the 'period of risk' for the major psychiatric illnesses" (communication to authors).

In an attempt to establish rates for socio-economic groups, Walsh was faced with the difficulty familiar to all demographers, namely inconsistent descriptions of occupation in

different records. So, with some diffidence (which Walsh shares) we compare his rate of 944 for male unskilled manual workers with the general male average of 747.

This impression of mental disease being much greater in the lower social groups is confirmed by Walsh's data for first admissions of males to Dublin psychiatric hospitals in 1962 [12], from which it appears that for males the percentage of the total in the lowest group (unskilled manual) was 31, compared with the 1961 Census percentage for males at work in Dublin of 17. Especially having regard to the fact that reluctance to recognize that the mentally ill require professional attention probably varies regularly with social grade, Walsh's results leave little room for doubt that mental disease (including alcoholism) is a social disease, in the sense explained above.

Walsh's conclusion to his Dublin paper [12] is worth quoting in full—

> This study, and the common experience of professional workers in Dublin disadvantaged areas, indicate clearly the multiplicity of handicaps in personal, familial, educational, employment, medical and mental health areas which characterizes the population from which many admissions to Local Authority hospitals are drawn. This population, which may comprise as much as 25 per cent of the entire community, represents the downward spiral of compounded tragedy, wherein those handicapped in personality or social assets from childhood on are trapped as adults at or near the poverty level, there to find themselves enmeshed in a web of burdens that tend to precipitate (or intensify) mental and somatic morbidity; in turn such precipitations propel the descent deeper into chronic personality-crushing indigency (Srole et al., 1962). It is therefore hardly surprising that when psychiatric breakdown occurs it is permeated with all these failures in early life training and reflects handicapping defects in so many functional areas.

Finally, the findings of this study suggest that the psychiatrist alone, with an approach which is predominantly unidimensional and cross-sectional, cannot cope with the illness of the disadvantaged. Therapy must rather proceed on a broad multidisciplinary front bringing to bear all the resources of welfare, education, health and other services in a planned, coherent, fully integrated fashion, sometimes constantly applied over relatively long periods of time.

In correspondence Walsh helpfully informs us that the "consensus from several international—albeit western—studies is that the prevalence of serious or psychotic psychiatric illness comprises about 3 per cent of populations and that another 5 per cent suffer from neurosis severe enough to have them consult a medical agency at least once (and often many times) during their lives. In addition a further proportion—which may be as high as one-third—of populations suffer from minor neurotic complaints not severe enough for them to consult a doctor but sufficiently obtrusive for them never to feel completely well". From Walsh's statistics of recognized mental illness we can only surmise that population proportions for Ireland may be even larger than those in the previous quotation, impressive though these are.

Ordinary observation goes to show that there is far less sympathy amongst the general public for mental as compared with physical illness, especially marked in the case of alcoholism, also a strong tendency towards concealment: "there was never any madness in our family". These attitudes are probably changing for the better but the rate of change must be accelerated by propaganda and even financial inducement (as in the case of TB).

If there is to be even a simulacrum of a trend towards equalization of opportunity there must be explicit recognition amongst State agencies of widespread psychiatric disturbance in Ireland, with no nonsense about "national pride" but with

every regard to legitimate personal pride and dignity. One assumes (and hopes) that there is considerable emphasis on this psychiatric aspect in the training of career guidance officers, teachers, job placement officers and the like. No doubt the comprehensive school will be comprehensive enough to deal with children so mentally retarded as to be unable to follow ordinary curricula, and to do so without hurt to the feelings of the children concerned and their parents.

This may be a suitable point at which to remark that the rights of the individual (his dignity and freedom in particular) must take precedence of our doctrine of social efficiency. However, if we define attainment of the latter as that of steering people towards the job which they are best able to do, then no qualification seems necessary, for it can be regarded as including those who are mentally and physically incapable of any work, but which society must care for as of their right, and hence with no derogation of their dignity as persons. "From each according to his (her) ability": a good job placement service should be able to find occupations for a large proportion of the mentally lacking.

Men are not born equal. The elimination or mitigation of inequality for the mentally or physically deficient, in hospitals or outside, must be recognized as an explicit task within the general problem of inequality, especially in Ireland where the mentally lacking seem to be comparatively numerous.

REFERENCES

[1] LESER, C. E. V.: *Demand Relationships for Ireland.* Dublin: The Economic and Social Research Institute, Paper No. 4, 1962.
[2] LESER, C. E. V.: *A Further Analysis of Irish Household Budget Data,* 1951–52. Dublin: The Economic and Social Research Institute, Paper No. 23, 1964.
[3] PRATSCHKE, JOHN L.: *Income-Expenditure Relations in Ireland* 1965–66. Dublin: The Economic and Social Research Institute, Paper No. 50, 1969.

[4] PRATSCHKE, JOHN L.: "A Further Analysis of Irish Expenditure Functions 1965–66", *The Economic and Social Review*, Vol. 2, October, 1970.

[5] KENT, M. P. and SEXTON, J. J.: "The Influence of Certain Social Factors on the Physical Growth and Development of a Group of Dublin City Children". Paper read at *Statistical and Social Inquiry Society of Ireland*, May, 1973.

[6] TANNER, J. WHITEHOUSE, R. and TAKAISKI, M.: "Standards from Birth to Maternity for height, weight, height velocity and weight velocity". *Archives of Disease in Childhood*. 41, 1966.

[7] Comment on [5] above at meeting of the Statistical and Social Inquiry Society of Ireland, May, 1973.

[8] SWAN, D.: "National Reading Survey". *The Education Times*. May 30th 1973.

[9] The Medical Research Council of Ireland: *Dublin Gastro-enteritis Study*.

[10] WALSH, DERMOT: "The 1963 Irish Psychiatric Hospital Census". *Medico-Social Research Board*.

[11] O'HARE, AILEEN and WALSH, DERMOT: "First Admissions to Irish Psychiatric Hospitals 1965–69". Medico-Social Research Board. Dublin: *Journal of Irish Medical Association*, April 29, 1972.

[12] WALSH, DERMOT: "Social Class and Mental Illness in Dublin". *British Journal of Psychiatry*. October, 1969; Official Sources.

[13] Central Statistics Office: *Household Budget Inquiry* 1951–52. Dublin: Stationery Office.

[14] Central Statistics Office: *ibid*.

[15] Central Statistics Office: *Census of Population*, 1966, Vol. VI. Dublin: Stationery Office.

4. Education and Opportunity

Educational Participation

THE 1966 Census of Population is a major source of statistics of educational participation. Table 4.1 shows the degree of post-primary participation among males and females in each quinquennial age group between 15 and 85 years, i.e. covering a span of more than 70 years.

TABLE 4.1 : *Percentage of males and females aged 15 and over who finished at later than primary stage, classified in quinquennial age groups.*

Present age	Male	Female
15–19	61·6	67·3
10–24	55·9	62·8
25–29	49·0	57·2
30–34	42·8	49·9
35–39	35·3	43·5
40–44	28·3	35·3
50–54	23·7	30·3
60–64	19·1	25·7
65–69	15·6	22·2
70–74	13·1	18·4
75–79	11·1	16·9
80–84	10·3	15·8
85+	9·4	14·4

Basic Source: Census of Population 1966, Volume VII Tables 3A and 3B.

Note

"Not stated" omitted. "Still at school" category are deemed non-primary which accounts for differences between above percentages and those in Table 4A and 4B of Volume VII of 1966 Census.

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Few tables are more fraught with significance from the present point of view, than Table 4.1, as is the chart derived from it. The order of age groups has been reversed on the chart, thus the left refers to the older generation, the right to the younger. The chart shows not only the unbroken regularity of the increase in educational participation (by this Census measure) but also its magnitude, from, for men, some 10 per cent post-primary for those now aged 80 or over, to over 60 per cent for youths aged 15–19, with a similar showing for females.

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The obvious linearity of the logarithmic graphs on the chart is most remarkable, indicating quasi-constancy from age-group to age group in *proportionate* increase. There is perhaps discernible a slight tendency towards a decline in the rate of increase at the younger ages for both sexes, natural when we consider that we have to do with percentages which must level off nearing 100. Despite the enormous emphasis on the spread of higher education in the last few years the chart shows clearly that this has been happening all the time during the half century before 1966. It remains to be seen if the 1971 Census will reveal an acceleration.

It is shown in chapter 1 that there has been little significant change in the socio-economic distribution of the gainfully occupied in non-agriculture since 1951. Jobs assigned to a given socio-economic group may require higher educational qualifications now than in the past; for instance, a computer operator might require "more education" than a telephonist but they are assigned to the same social group. To what extent do employers require higher educational qualifications from prospective employees? To what extent do these requirements enhance job performance, or are they used as a mere preliminary screening process of the abundance of applicants? It is arguable (though not positively proved) that in a situation of given job opportunities it is education that decides who gets the high-paying jobs, and who gets the low-paying ones. Of course, education may affect the job opportunities facing the economy and make it more favourable. Educational participation by the socio-economic groups does nothing to allay the idea that education plays its part in the stratification of society.*

Occupations and Education

The chart also demonstrates that the phenomenon, also noted by the Investment in Education Survey Team, of women

*Much work and many models have been proposed to explain the effect of education on the distribution of labour income. One interesting survey of such literature is "The Distribution of Labour Incomes: A Survey", Jacob Mincer [1].

receiving more formal education (in terms of number of years schooling) than men is not of recent date, though this difference is proportionately smaller in recent years. The chart shows a marked tendency for male and female graphs to approach at the younger ages. This again is partly due to each percentage's approach to 100; partly to the graphs being logarithmic for, as Table 4.1 shows, there is no great *absolute* difference between the percentages in the different age groups: thus 5·7 at ages 15–19, 5·0 at 85 or over.

The Table 4.1 and chart showing of unbroken growth repeats

TABLE 4.2: *Percentage males and females in present age groups 25–29 and 80–85 classified by highest non-primary educational establishment attended.*

	Secondary	Vocational	Secondary and Vocational	University
Males:—				
25–29	19·3	14·5	6·4	8·0
80–85	5·8	0·9	0·6	3·0
Females:—				
25–29	25·9	13·1	12·0	6·0
80–85	12·0	1·0	0·8	2·0

Source: Census of Population 1966, Volume VII, Tables 4A, 4B.

Note

See note to Table 4.1. In Table 4.2 we take the actual percentages given in the Census volume.

TABLE 4.3: *Percentage distribution by type of educational establishment attended for a number of the principal occupational groups.*

Occupational group	Total	Primary	Secondary	Vocational	Secondary and Vocational	University
Males:						
Agricultural occupations	100	86·9	7·5	4·1	1·0	0·5
Electric and electronic workers	100	29·1	16·8	32·8	18·6	2·8
Woodworks	100	53·5	9·8	31·2	5·2	0·2
Building and construction workers	100	82·0	6·4	9·5	1·7	0·3
Labourers and unskilled workers	100	91·0	3·7	4·5	0·7	0·0
Transport and communication workers	100	75·6	11·6	9·1	2·9	0·8
Clerks	100	13·6	60·4	7·5	13·6	4·9
Commerce, insurance and finance occupations	100	42·1	35·2	11·6	7·6	3·4
Administrative, executive and managerial workers	100	8·8	44·1	5·8	13·7	27·5
Professional and technical occupations	100	5·4	16·8	3·9	6·1	67·8
Females:						
Agricultural occupations	100	77·3	14·1	5·3	2·4	0·9
Textile workers	100	79·9	7·2	11·9	1·0	0·0
Makers of textile goods	100	79·7	6·9	11·9	1·3	0·2
Clerks and typists	100	7·4	38·1	19·5	33·0	2·0
Commerce, insurance and finance occupations	100	42·0	33·4	17·3	6·4	0·9
Service workers	100	71·5	13·5	11·1	3·3	0·6
Professional and technical occupations	100	8·2	43·4	5·1	6·9	36·4

Source: Commentary in Volume VII of the 1966 Census of Population.

itself with practically no exception for each type of higher education. Accordingly, in Table 4.2 it suffices, for brevity and clarity, to confine attention to two present age groups one young, one old.

As might be expected, growth is proportionately greatest in vocational education for both males and females. In the more than 70 year span of the table, growth in secondary and university has been of the same order, approximately a trebling. In the more recent period (25–29 age group) young men and women are about equal in numbers in (pure) vocational, but girls greatly exceed boys in proportionate numbers in the two secondary classes.

While Hutchinson's findings (which we use extensively here) of the relationship between social status and education are quite convincing as far as they go, they relate only to Dublin men. The Census data, on the other hand, is complete (as distinct from a sample) and extends to the whole population, rural as well as urban, aged 14 or over. Unfortunately, the 1966 Census data were not compiled by social group—it is hoped that such a table will be produced for the 1971 Census report.

As our Table 4.3 we reproduce in its entirety a Census table pertaining to occupational groups. We now see that part of the reason for the marked disparity, already noted, in degree of education in women compared with men is occupational distribution. The groups amongst men with fewest post-primary alumni are workers in building etc. (mainly semi-skilled), unskilled trades and transport, avocations with very few women. The percentage primary in the commerce group (large for both men and women) is the same for both.

The post-primary percentage of 13 for agricultural occupations is surprisingly small. Our main consolation in contemplating such a melancholy figure is that most Irish farmers are old; perhaps younger farmers are better educated. (Would the Census authorities enlighten us on this problem also in their 1971 report?) Size of farm does not offer much solace:—

Farm size acres	Percentage post-primary
0– 5	6·6
5– 10	6·2
10– 15	6·4
15– 30	7·2
30– 50	9·8
50–100	15·5
100–200	30·3
200+	49·0
All sizes	13·2

There is evidence, however, of better education on the larger farms. If farm size were considered as a proxy to income, this table could be said to illustrate (after a fashion) the income elasticity of post-primary education.

Educational Participation by Social Group

We Irish have, in the past, been inclined to rate ourselves a classless society. Educationally we certainly are not. The Investment in Education Survey Team found in the early 'sixties a very marked association between social group and participation in full-time education. The statistic they used was persons engaged in full-time education aged 15–19 years in 1961 as per cent of children aged 5–9 years in 1951. In particular, the Team show a marked contrast between the professional, salaried and employers' classes and the rest. The finding that the participation rate for Protestants was far higher than for the country as a whole was associated with the higher average social status of Protestants. In Hutchinson's [2] inter-generational mobility study of Dublin males (1968), 97 per cent of subjects whose fathers' were in social category 1 had some post-primary education compared with 18 per cent in

unskilled manual category 7. At the other end of the educational scale, i.e. those with completed university education, 53 per cent of subjects with fathers in category 1, 3 per cent of subjects with fathers in category 5 (skilled manual) had reached this level. In the semi and unskilled categories 6 and 7 the sample (of 2,500) did not discover a single unit. Monica Nevin's [3] 1964/65 inquiry confirms the latter point. Using the Census social grouping she found that the number of potential* Leinster students in UCD as a percentage of the number of Leinster students was over 20 per cent in the three parental groups 1. Higher professional, 2. Lower professional and 3. Managerial and Executive but only 0·3 per cent for Semi-skilled manual, and 0·2 per cent for Unskilled manual.

Supply and Demand of Educational Qualifications; The Study Team's Flow Estimates (1961–71)

The divergence of the participation rates of the different social groups was not the only feature that underlay the desirability of expansion of educational participation. The most striking finding of the Team's report was that 53 per cent of pupils in primary school left without completing their primary education†. This led to imbalance in the educational mix—too large numbers competed for the jobs for which they were qualified, which were semi-skilled and unskilled in the main. We believe that this undereducation has in the past been responsible for the endemically high rates of unemployment, and emigration among unskilled men (described in [4]). This over-supply of the unskilled and undereducated made equalization of net advantages in alternative employments an academic fiction, for the occupations of the unskilled have been characterized by low pay. As for emigration, the Survey Team showed that of persons in Britain in 1961, born in the Irish Republic,

*Potential Leinster students were defined as one fourteenth the number of children aged 0–14 in Leinster in each social group of parents.

†The 53 per cent figure related to national school pupils, who left without having reached, or without having completed, sixth standard.

Thousands

| | | Third level certificants | Second level | | No post-primary qualifications |
	Total		Senior Certificate	Junior Certificate	
Total Supply	510	35	85	120	270
Expected supply to Non-Labour Force[1]	60	3	7	10	40
Total Supply to Labour Force	450	32	78	110	230
Labour Force Demand	450	31	73	186	160
Total Demand[2]	510	34	80	196	200
Labour Force Surplus or Deficit	—	+1	+5	—76	+70
Average Annual Surplus or Deficit	—	neg.	+0·5	—7·6	+7·0

Source: [5].

[1]Including direct emigration.
[2]Non-labour force demand is taken as equal to expected supply to the non-labour force (including direct emigration).

89 per cent had no education beyond primary level.*[5]. Apart altogether from considerations of social justice, in our view the very magnitude of the wastage of persons and talent implicit in that primary fall-out rate indicate that equalization of opportunity is a major task facing the nation.

The Education Gap

In the early 'sixties the Survey Team attempted to quantify the mismatch of discrepancy between qualifications and requirements over the decade 1961–71. The likely demand for manpower of various educational levels was estimated

*B. M. Walsh has drawn up a picture of the migrant stream to the United Kingdom, 1961–66. The most obvious feature for the male is concentration in labouring occupations, in the unskilled manual social group. [9].

using "historical" forecasting techniques supplemented by the "structural" and "establishment" survey approach. Population projections were made, and combined with the estimated numbers likely to be required in broad categories of employment—each of which was assigned a target educational requirement pattern. These demand estimates were matched to the likely supply from the educational system, in a table which is reproduced here as Table 4.4.

The table shows remarkably the near-equality in internal supply and demand in the mid-sixties for alumni of the two higher education levels. The supply would not suffice to meet the demands for people of Junior Certificate standard, with a large surplus of people with no post primary qualification. Interestingly, the shortfall in the former (some 7,000 a year) is about equal to the excess in the latter; we have already commented on this phenomenon.

Technicians of various kinds have always been in short supply in Ireland. The Survey Team doubted whether this problem could be resolved by 1970. The Team also expressed the view that in a country with a labour surplus it should be public policy to develop native talent to the degree where all demands for specialized labour could be met.

Educational Participation and Government Policy

The rate of participation in second level education was thus shown to be lower than required by economic factors. The Investment in Education report traced the poor provision of secondary education to the reluctance of the government to accept responsibility for its provision. Secondary schools were provided by mainly religious enterprise, the State contribution being confined to aiding them when they were established. As a result, location has been largely haphazard: the Survey Team found on a county basis only a small relationship between degree of participation in Second level education on one hand and, on the other, (i) personal income per head, (ii) density of population and (iii) degree of urbanization.

Shortly after this report was published, the government guaranteed that any pupil no matter what his ability or social background should have the right of entry to any post-primary school that was supported by State funds. Later a University grants scheme with means test was introduced as a logical follow-on to the fee-free post-primary education.

In 1969, the Department of Education published a paper entitled "All Our Children" [6]. The Minister for Education said in the introduction that the most urgent social and educational objective was equality of opportunity. Access to post-primary school was now guaranteed and the paper stated that "except in a small number of private schools this education is entirely free."

Education since 1966

The Census of Population carried the story of development in Education only to 1966. Other sources show the trend in the latest period.

In 1963 the Survey Team made a forecast of the number of pupils classified by educational level, in full-time education in 1970/71. It is accordingly of interest to compare this forecast with what actually transpired, with a view to determining the measure of success that attended policy—see Table 4.5.

TABLE 4.5: *Forecast (for 1970/71) and actual number (for February 1971) of pupils in full-time education by educational level.*

Thousands

Level	A Survey Team's Forecast	B. Actual
1. First Level	514·7	526·8
2. Second Level	172·6	208·5
3. Third Level	23·6	26·2
Total	710·9	761·5

Sources: A Investment in Education, Table 3.2,
B Statistical Abstracts & Department of Education. All figures in column B are for 1st-February, 1971

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H

Out-turn is considerably in excess of forecast at Second level. Clearly the gap between demand and supply at this level is being rapidly bridged.

Acceleration of Expansion

There has been a steady rise in second level education since 1932/3 but since 1966 there has been a sharp acceleration in the number enrolled.

TABLE 4.6: *Annual average percentage rates of increases in numbers participating wholetime in post-primary education, classified by establishment type, in approximate periods (i) 1946–66, (ii) 1966–72.*

Establishment	Approximate Period	
	1946–1966	1966–1972
Secondary	4·4	8·2
Vocational	4·8	5·7
University	4·5	3·5
Total above	4·5	7·1

Basic sources:—Stastical Abstract (1969) Department of Education (1972).

Between the periods chosen there has been a marked advance in the rate of increase in total post-primary numbers, from 4½ per cent to 7 per cent. The periods differ in that in 1946–66 increase was uniform for the different types, whereas in 1966–72 percentage for secondary was by far the largest. The lowering in the percentage for university-type is, no doubt, partly due to toughening of entry standards.

Educational Aspirations of Parents

Was the post-primary school fee the principal impediment to further education? The accelerated rate of increase in

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participation in very recent years is evidence of the substantial barrier this fee may have been. (The fact that the State did not consider the provision of secondary education as one of its functions was another important factor). As we shall see, there is evidence that the social values and the educational aspirations of parents for their children may be the deciding factor in whether a child will continue his education, or whether he leaves school and gets a lowly paid job at once.

In her study "A Better Chance" [7] Monica Nevin compared the educational aspirations of parents of skilled and intermediate non-manual workers. Her survey suggested that "at the average level of ability, a boy whose father is a white collar worker has a better chance of completing secondary education than has a boy whose father is a skilled manual worker". Elsewhere in her report she finds that 6 per cent of skilled workers and only 1½ per cent of intermediate non-manual workers find their children's staying at school is too great an expense. Of skilled workers interviewed 23 per cent felt their children should train for a job as early as possible as against only 5 per cent of parents in the intermediate non-manual grade.

A study by Desmond McCluskey [8] strongly supports the theory that parents' attitude to prolonged education and their occupational aspirations for their children are the factors most closely associated with the time children remain in school; McCluskey chose four boys' schools in Dublin, each of which had a relatively high proportion of manual workers' sons. Of the 320 boys at Intermediate level surveyed in May 1972, nearly a quarter had left school by the following October. Major differences were noted between leavers and non-leavers of the importance attached by their fathers to their staying at school. Half of the non-leavers said their father thought it very important as compared to 15 per cent in the case of leavers.

In section 3 the question of values and priorities by social class was examined further using the Household Budget Inquiry figures. If it can be established that social values and

the occupational aspirations of parents are the main barrier to the participation of the socially disadvantaged in post-primary education this will have implications for the kind of policy to be recommended to redress the balance. It may be that some compensation to parents for income foregone might in some cases be necessary. The parent who hoped for some return from his child before he established a household of his own might consider a short-term gain of £5 weekly as sufficient to direct his child to leave education and contribute to the finances of the household. Such pressures are likely to be more acute the more marked economic stress in the household.

REFERENCES

[1] MINCER, J.: "The Distribution of Labour Incomes—A Survey". *Journal of Economic Literature*, March 1970.

[2] HUTCHINSON, B.: *Social Status and Intergenerational Social Mobility in Dublin*. Dublin: The Economic and Social Research Institute Paper No. 48.

[3] NEVIN, M.: "A Study of the Social Background of Students in Irish Universities". *Journal of Statistical and Social Inquiry Society of Ireland*, Vol. XXI 1967–8.

[4] GEARY, R. C. AND HUGHES, J. G.: *Certain Aspects of Non-Agricultural Unemployment in Ireland*. Dublin: The Economic and Social Research Institute, Paper No. 52, 1970.

[5] *Report of the Survey Team:* "Investment in Education". Dublin: Stationery Office, 1965.

[6] ÁR NDALTÁN UILE: "All Our Children". Department of Education, Dublin 1969.

[7] NEVIN, MONICA: *A Better Chance*. University College, Dublin, 1970.

[8] McCLUSKEY, D.: "Leaving School at Intermediate". *Social Studies*. Volume 2, No. 1, 1973.

[9] WALSH, B. M.: *Migration to UK from Ireland* 1961–66. Dublin: The Economic and Social Research Institute, Memorandum Series, No. 70.

5. Conclusion

IN this final section we set down and comment on what we regard as our main findings. Some of our comments are firmly based on the foregoing statistical analyses; others are speculative, problems which require further consideration though not contradicted by statistics and other facts as we know them.

We have tried in earlier sections to impose a kind of order on the presentation of our mainly statistical data with, we fear, but limited success. Our approach has been that of economic statisticians: quantative measurement of broadly defined supply and demand phenomena, with social optimality as the objective. We have endeavoured to confine the subject by dealing mainly with, influences that are "purely economic" or at least have strong economic overtones—such things as employment and earnings, education, health and housing.

We realise the subject does not end here, many facets of equalization, e.g., the legal, and administrative, have gone unmentioned. Serious consideration might be given to setting up a small expert commission charged with the study and supervision of steps to reduce inequality. Such a body should be empowered to recommend specific action, and to co-ordinate the efforts of government departments, and monitor improvement. Such a commission might report to the Taoiseach and the relevant departments.

Principal Findings

In view of the considerable economic advance in recent years the stability of the proportions in the various socio-economic groups is remarkable. Such classification may obscure a gradual upgrading of the work being done in

similarly described occupations. However, there is little apparent tendency in the occupational structure towards elimination of the less attractive employments and the equalization of net advantages, though experiments in other countries, particularly Sweden, suggest that technology, which inaugurated assembly lines, may now be instrumental in abolishing them [1]. As yet, however, occupational structure has contributed little equalization of opportunity except in so far as the great and continuing changeover from employment in agriculture to non-agriculture is conducive to improved opportunity.

In this paper we have been able to show that there has been little perceptible improvement in the relative position of the lowly paid in industry over a long term of years. The dramatic increase in the marriage rate over the past few years is, on the other hand, to be welcomed, as opening up a great swathe of opportunity for many more women than formerly. The persistence of women's earnings, when gainfully occupied, at little more than half men's rates is in our view due more to women's generally lower socio-economic status and the sectors and industries they work in than the very much more publicised issue of "equal pay for equal work". We welcome the recommendations of the Beere Commission in particular with regard to equal pay [2]. But the adverse job structure for women referred to by that Commission is also, of course, a major source of inequity. It is arguable, however, whether the advent of equal pay will rectify this situation even after a time. We believe that if acted upon, the recommendations with regard to equal pay, and more important equal work, would help advance opportunity for women, which in the past has been severely curtailed.

For assessment of some of the formative influences on the individual we relied heavily on the household budget inquiries, on medical reports, and on privately sponsored social inquiries. Here we found more considerable differences between the groups than we anticipated, most marked in the level of formal

education attained. We surmise that a large part of other differences noted derive from this fact alone. We paid particular attention to the propensity to spend on children: no social group differences is more marked, *ceteris paribus*, than expenditure on education, in marked contrast to expenditure on transport, which is probably due to outlays on motor cars. Improvement in housing of the lower social groups (compared with other groups) in the last generation is conducive to lessening of inequality, though the relative housing densities still, of course, favour the higher groups.

The Pattern of Disadvantage

The statistical model developed to assess the effects of intergenerational social mobility discovered a pattern of disadvantage which must surely inspire some immediate and positive action. The picture that emerges must be grossly sub-optimal. The ideal is that every man and woman should be directed towards the job for which he or she is best suited. The real picture is very different. Instead of having a chance of achieving professional or managerial status equal to that of other social groups, the unskilled of origin have negligible opportunity of achieving these grades, while they are twice as likely as they ought be, to inherit the unskilled manual status of their father. Though relating to 16 years later, Dublin experience compares unfavourably with that of England and Wales. The autonomous levelling up implicit in the social promotion pattern documented by Hutchinson would require up to four generations (i.e. more than a century) to cancel the influence of social origin. Such a time scale throws doubt on dependence on evolution for equalization in the here-and-now.

Employment Policy

In the improvement of opportunity a major role will be played by improvements in the education and employment systems *vis-à-vis* young people in particular, but also the individual must be receptive at every age to the idea that he

can improve himself. We cannot avoid sententiousness here; opportunity knocks at every age, if with a fainter rap as we grow older. We seriously recommend change of employment (implying preparation therefor, though with reservations as regards the job of wife, and some others!) throughout life. Such change, if possible every ten years or so, would facilitate innovation and the interchange of ideas. It would enable more flexibility and efficiency in the distribution of human resources, for the individual to enrich the variety of his experience and mitigate the humiliating impact of redundancy. Some barriers to inter-job mobility should be eliminated to encourage such movement. Artificial barriers to entry, such as unnecessary age, sex or even educational requirements, should be legislated against, and employment commissioners appointed to police the employment policy. Agreement of all parties concerned should be sought, employers, unions and government. But even the best intentioned need the support of the institutions. Employment guarantees and a National Pension Scheme would be the ideal environment for the encouragement of such occupational mobility. It seems likely that the ultimate return in increased and improved quality of output would be enormously greater than the cost of mobilizing and improving job allocation.

Education and Equality

A revolution is taking place in educational participation. We do not know to what extent children of different social background are taking advantage of easier access to educational facilities. If the lower social groups were to take advantage of these opportunities to a lesser degree than other groups, educational expansion could aggravate rather than reduce inequality. The attitudes of parents towards further and higher education could sustain the present imbalance in participation in higher levels of education. We welcome all steps taken to increase participation, especially of the lower social groups in all levels of education. Educational priority areas, special

schools, facilities and methods, must all be employed selectively, to offset the handicap of what are in many cases antagonistic parental attitudes to formal education.

We believe that the giving of financial assistance to poor families to enable their children to realize their potential should be considered. Very often the poor householder has a large family for the bringing up of which he has made great sacrifices. It is understandable that he should regard his children as earning assets from age 14 on, contributing to family income. Since these persons tend to marry at a young age, with loss of income to the parental household, there is a great pressure that they be sent to work in their early teens.

Over-supply of Unskilled

We have had direct contact with one fact which is really our main impulsion in the present study. In their work on non-agricultural unemployment, Geary and Hughes [3] found that each year in the Republic 2,000 boys embark on an unskilled labour career, i.e. a lifetime of lowly-paid and comparatively undesirable labour when working and (on the experience of the last half century in Ireland) bound to experience a 20 per cent unemployment rate, indicative of endemic over-supply, savouring strongly of society's exploitation of ignorance. How has this come about? How many geniuses (if they got a chance) are amongst each 2,000? From the viewpoint of society must there not be shocking waste here? We recall Monica Nevin's finding [4] of the disproportionately low number of university students in UCD from working class families: some 0·3 per cent compared with over 20 per cent for professional classes. We have stressed the Investment in Education Team discovery of the vast fall-out even from primary education (1963), i.e. those leaving school without even the three R's. We have dealt at length with the researches of B. Hutchinson which leave us with the impression of but a small degree of generational promotion: the poor stay poor.

Privilege

In our society as it is, there is a great deal of privilege (perhaps largely unconscious) in placement in better jobs, while admittedly there has been improvement in recent years. This jobbery operates mainly through the educational system which the better-off can afford; indeed such parents almost invariably and automatically give their children a secondary or higher education even if these show little taste for "book-learning". This ensures for children of even low talent almost a monopoly of professional jobs in which they are protected in all kinds of ways from elimination through incompetence. Another great swathe of privilege is family business with guaranteed jobs for children, whatever their worthiness. The social system ensures segregation whereby class meets, allocates jobs and marries within its own class. Even apart from obvious discrimination based on race, religion, and the like, the man of poorly origin, even if eminently well qualified, will encounter barriers to advancement.

In the past, privilege was not confined to the higher socio-economic groups. The highly protective attitude of persons in skilled trades, which is reflected in the Markov analysis, directed towards entry of young aspirants, was clearly inimical to equality of opportunity. Acceptance of apprentices was selective and duration of apprenticeship was unnecessarily long. This attitude was understandable in view of the endemic condition of unemployment and low wages, interpreted as over-supply of skilled labour. With the marked improvement in these respects in recent years, there may have transpired a more liberal attitude to acceptance of trainees. This is merely an impression; we lack concrete evidence.

Factors Tending Towards Lessening of Class Discrimination

We have found, with some elements of surmise, that improvement in elimination of class-distinctions in recent years has taken several forms including (i) the spread of educational opportunity, (ii) the increase in the share of government and of

semi-State bodies in the economy ensuring a fairer allocation of jobs, (iii) over the longer term the very considerable improvement in the absolute in earnings in poorer paid jobs. We have failed to find much *relative* improvement.

Worker Participation

We welcome the greatly increased interest in this aspect. Apart from relative formal status and pay, greater worker participation at all levels of direction may do something to lessen the *feeling* of inequality at firm level.

Are People Really Interested in Advancement?

We are unaware that the trade union movement is specially interested in the promotional prospects of unionists, except perhaps the one step up, in which unions tend to favour the easiest method, seniority. We read lately that such an authority as Jerome Bruner maintains that the educational system reinforces the message for working class children "that they really have not the capacity to cope with things, at least at school, in any effective way". A recent brochure entitled "A Pattern of Disadvantage" from the National Foundation for Educational Research recommends that "schools should make a major attempt to 'sell' education to the parents of under-fives particularly in working class areas," perhaps not a very sensational idea [5].

Under existing arrangements the working-class boy capable of educational improvement (with its considerable monetary awards and improvement of social status five or ten years ahead) can get a lower paid job at once, at a rate which, as he never earned before, seems very large in his eyes. He may make this choice for family reasons, perhaps because he wants to marry, a consideration being that, in a very few years, he may reach his maximum lifetime pay, whereas typically the pay of the educated man, often on a scale, reaches its maximum only after a long term of years.

One suspects some measure of content with one's position in

the social scale.* Builders' labourers do not desire to become professors; many want only better pay and conditions as labourers, while some aspire to be building contractors. Willingness to accept responsibility is heavily class-oriented. However, it is distasteful to the humanist that any grade in society should be regarded as better than another. Least of all is it desirable that the lowest social grade, unskilled labourers, should be regarded as composed of the rejects of all other grades. There is so much discussion these days about all levels of education that the question must be posed "where are the uneducated (unskilled?), absolutely necessary for the functioning of our society, to come from?" If the educated and skilled become so numerous and the uneducated and unskilled so scarce the remunerations might reflect the disparity so that, to make ends meet, e.g. the social researcher would have to do his stint on clearing litter. Perhaps the people should explicitly accept the doctrine "all jobs are good, if well done" and even institute awards of merit regardless of socio-economic grade.

Importance of Culture

Despite our emphasis in these notes on the job and training therefor, we regard culture training as of at least equal importance. In one sense, indeed, the job is not the end but a means to the end of deriving a reasonable amount of satisfaction out of life—an essentially cultural concept. This point is the more important for our approach to the age of leisure. Culture is the great social leveller. All at a football match or a symphony concert are equal, if not equal to one another.

Recently Finola Kennedy stated—

Another serious pitfall exists in relation to education for leisure. Because much of today's industrial work is boring

*Napoleon's famous remark about the field-marshal's baton might have been an inspiration to him as a young soldier, but surely less to the ordinary foot-slogger in the Grande Armée.

and monotonous, people are urged to find their fulfilment outside of their work. To me, this is skating on thin ice. People's work will always be central to their lives. Therefore, we need both to find ways of making all work more interesting *and* to alter our values so that we appreciate the significance of most menial work. [6.]

We suggest that appreciation of the importance of culture as an end is not inconsistent with attaching primary importance to education for work. Such a policy does not rest solely on equalization for its justification. No less an authority than Alfred Marshall states "for the business by which a man earns his livelihood fills his thoughts during by far the greater part of those hours at which his mind is at its best". [7.]

REFERENCES

[1] RAMSEY, D.: "An End to Assembly Lines". *European Community*, June, 1973.

[2] *Commission on the Status of Women*. Final Report. December 1972. Dublin: Stationery Office.

[3] GEARY, R. C. and HUGHES, J. G.: *Some Aspects of Non-Agricultural Employment in Ireland*. Dublin: The Economic and Social Research Institute, Paper No. 52, 1970.

[4] NEVIN, MONICA: "A Study of the Social Background of Students in Irish Universities". *Journal of the Statistical and Social Inquiry Society of Ireland*, Vol. XXI, 1967–68.

[5] *A Pattern of Disadvantage*. London: National Foundation for Educational Research.

[6] Reply of Finola Kennedy to paper "The Dilemma of Economic Growth" by George Colley, *Irish Federation of Women Graduates Study Weekend*. October 1973.

[7] MARSHALL, ALFRED: *Principles of Economics*. London: Macmillan, 1920.

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