Poverty and Inequality in Ireland 1987-1994 :
A Comparison using measures of Income and Consumption[1]

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Abstract

This paper provides a detailed description of recent trends in inequality and poverty in Ireland. To date most of the analysis of inequality and poverty in Ireland has used cross-section data on income. We supplement the information on income with detailed data on individual expenditure taken from the Household Budget Survey. For both measures of resources we provide a detailed analysis of changes in inequality and poverty over the last decade. While our results on inequality are not sensitive to the choice of resource measure used, the identification of people in poverty differs across measures. Self-employed households fare better when expenditure is used to measure resources while the opposite is true for households headed by individuals who are retired or on home duties.

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1. Introduction

The growth rate of income in Ireland over the last 10 years has significantly exceeded the EU average. As a result average real incomes have increased substantially. However, while the increase in average incomes is undisputed, there exists a general perception that these gains have not been shared equally across individuals. Support for this may be found in recent work by Nolan and Hughes (1997). Studies examining inequality in Ireland to date however have tended to focus on income as a measure of resources.[3] However there are some potential drawbacks with focusing only on income. Firstly, certain components of income may be difficult to measure accurately, particularly income from self-employment (see Bradbury 1996). Furthermore 'snapshots' of the income distribution at a point in time cannot distinguish between transitory and permanent components of inequality and poverty.

In this paper we supplement the information obtained from the income studies with information on household expenditure from the Household Budget Surveys. The life-cycle hypothesis of consumption argues that provided individuals can borrow and lend, temporary reductions in income need have no effect on consumption. Analysing consumption patterns in this case may provide a more accurate picture of permanent inequality than focusing on income alone. Expenditure data have been used by Cutler and Katz (1992) and Johnson and Smeeding (1998) to examine inequality in the U.S., and by Goodman and Webb (1997), Blundell and Preston (1998) and Banks, Blundell and Tanner (1998) to examine inequality in the U.K..

There are some potential problems with using expenditure as a measure of household resources. It is well known that expenditure on certain items such as alcohol and cigarettes tend to be under reported in expenditure surveys. Furthermore household *expenditure* over a short period of time may differ from household *consumption,* which is the variable of interest (see

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[3] An exception to this is the work by researchers at the ESRI using deprivation-based

Kay, Keen and Morris (1984)). Expenditure by retired couples, for example, may underestimate their consumption since these households are likely to be receiving a flow of consumption from durable goods purchased earlier in their life (such as housing). Nevertheless we believe that a more complete picture of inequality and poverty in Ireland can be obtained by examining both income and expenditure measures together.

This paper provides a detailed description of inequality at a point in time using both expenditure and income to measure resources. We examine inequality both within and between groups defined on the basis of family composition, work status of head of household, working composition of household, as well as the education level of the head of household. Furthermore we examine changes in both the within and between group components of inequality over time. The results are similar for both measures of resources. The vast majority of inequality in Ireland at a point in time involves differences in resources among households with similar characteristics rather than differences between groups. We do not observe much change in either aggregate inequality or the within and between group components over time for either measure of resources.

While our results concerning inequality are robust to the choice of resource measure used, the identification of people in poverty differs across measures. Households headed by an unemployed individual make up the majority of poor families using either measure of resources. However the number of self-employed households classified as poor falls when consumption is used to measure well being. In fact households headed by self-employed individuals are over represented among the poor in income relative to their numbers in the total population, yet are underrepresented among the poor in terms of their consumption. In contrast households headed

measures of poverty (for example see Nolan and Hughes (1998)).

by individuals who are retired or on home-duties make up a larger proportion of the poor when consumption is used to measure well being. Some possible explanations for these findings are considered in the final section of the paper.

2. Data

To carry out our analysis we use anonymised micro data from the CSO's Household Budget Surveys (HBS). The main purpose of the HBS is to generate weights which can be used in constructing prices indices, however the micro data can also be used to analyse trends in inequality and poverty in Ireland. The surveys contain detailed information on income receipts by source, expenditure patterns and household composition for nationally representative samples of Irish households. The surveys are carried out every seven years, the most recent taking place in 1994. In this analysis we make use of the two surveys which are publicly available, namely those for 1987 and 1994. These contain information on 7,705 and 7,877 households respectively. Throughout the analysis sample weights are used to ensure that the samples are representative of the overall population.

We use information on both income and expenditure to measure well being. The income measure we use is total disposable household income.[4] Gross income includes wages and salaries, income from self-employment, retirement pensions, property income and state transfer payments. Disposable income is defined as gross income minus taxes and social security

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[4] The availability of the micro income data from the HBS for 1987 and 1994 allows us to compare our findings to those reported by the ESRI (see for example Callan and Nolan (1998)).

payments.[5] The expenditure measure used refers to total expenditure by the household in the two week period surrounding the survey, excluding repayments of loans other than house purchase mortgages, business expenses, savings and taxes. It also includes the value of home grown food consumed and the value of income in kind benefits received from employer or other sources. With the exception of free school meals and free milk, state benefits in kind are not included in either income or expenditure. As noted earlier, the presence of durable goods can pose problems for expenditure based measures of resources. In an attempt to overcome some of the problems associated with durable goods the CSO ask a set of supplementary questions relating to durable goods purchased over the last year. The weekly equivalent of these purchases is included in the expenditure data.[6]

Interviews for the HBS took place throughout the year. In this case seasonal variation in purchases would tend to increase the observed dispersion in expenditure. Comparing the expenditure of two individuals, one of whom was sampled during the Christmas period and one who was sampled in early spring may give the impression of significant differences in expenditure. However, it is likely that a large proportion of this difference may simply reflect the different timing of the surveys. To control for seasonal factors we deseasonalise both the expenditure and the income. This is a straightforward exercise in that the CSO report the quarter in which each person was surveyed. All the results presented in the paper refer to the

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[5] Some of the components of income have been top-coded and no adjustment has been made for this top coding in the results below.

[6] Extending the horizon from two weeks to a year for durable goods should reduce the discrepancy between expenditure and consumption. However even a one year horizon may not capture all durable good purchases. We tested the sensitivity of our results to this by repeating our analysis excluding purchase of durable goods from expenditure. The results were not affected by this change.

deseasonalised data.

We deflate both the income and expenditure measures by an equivalence scale to take account of differences in family composition across households.[7] The results presented refer to the individual distribution of resources and person weights are used in the analysis. Both the income and expenditure measures are expressed in real terms using 1986 prices. The sample is restricted to households with positive incomes and expenditure where the head of household is not in full time education at the time of the survey.

3. Aggregate Inequality

There are a number of ways of portraying the distribution of resources. However a useful starting point is to examine the entire distribution. Figures 1 and 2 present kernel density estimates of both the income and expenditure distributions for 1987 and 1994. It is clear from this that the distribution of expenditure and income in both years is single peaked and skewed to the right. For both measures of resources the distributions have shifted to the right over time reflecting the increase in average income. However, apart from this rightward shift no other significant changes arise in 1994. This is in contrast to the work on inequality in the U.K (Cowell, Jenkins and Litchfield (1996)) which shows the emergence of a second peak in the income distribution in the U.K in the late 1980's.

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[7] There are a large number of possible equivalence scales available for rescaling the data (see Coulter, Cowell and Jenkins (1992)). In this study we use what is widely known as the OECD scale which gives a weight of 1 for the first adult in the household, .7 for other adults aged 14 or over and .5 for children age 14 or under. The results of previous work on income inequality in Ireland for 1987 and 1994 (Callan and Nolan 1998) were not sensitive to the choice of equivalence scale used.

Additional information is presented in Table 1. The top panel summarises the income distributions. We estimate that the poorest 20% of households received 8% of total income in 1987 and by 1994 this had risen slightly to 9%. The top 20% received 39% of income in both 1987 and 1994.[8] The income shares of each quintile remained remarkably stable over this period. We also present four alternative measures of dispersion commonly used in the inequality literature. These measures differ in their sensitivity to changes throughout the distribution with the 90/10 ratio and coefficient of variation being sensitive to changes in the tails of the distribution and the Gini coefficient being sensitive to transfers in the middle of the distribution. None of these measures indicate any significant change in income inequality over this period.

The bottom panel of table 2 summarises the distribution of expenditure for both 1987 and 1994. This allows us to examine its evolution over time and also to compare it to the income distribution discussed earlier. The striking feature that emerges from this comparison is the similarity between the expenditure and income distributions both at a point in time and in terms of their evolution over time. The point in time similarity between the two distributions is in contrast to what one would expect if large transitory income differences were leading people to consumption smooth. In this situation, one would expect consumption to be more equally distributed than income. While this seems to be the case in both the U.S (Cutler and Katz 1992) and the U.K (Blundell and Preston 1994) it does not seem to be the case for Ireland.

Blundell and Preston (1994) note however that one must be careful in making comparisons of consumption across groups and over time. The life-cycle hypothesis does not

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[8] These results are consistent with the findings of Callan and Nolan (1998) using the Living in Ireland Survey. The corresponding figures reported there were 7.7% and 8.2% for the poorest quintile in 1987 and 1994 respectively and 40.9% and 41% for the top quintile in these years (see Table 4).

predict that individuals equate consumption levels over the life cycle. Rather it requires that individuals equate the marginal utility of consumption. If there are particular periods where the marginal utility of consumption is high then the life-cycle hypothesis predicts that consumption will also be high in that period. When comparisons are made across age groups one runs the risk of confusing permanent differences in life-time resources with differences in preferences and needs which change over the life-cycle and which can lead to consumption varying at different stages of the life-cycle. Furthermore comparisons which are made over time run the added risk of confusing temporal changes in parameters or preferences with true changes in inequality. However consumption differences within a cohort at a point in time provide an accurate indicator of welfare differences for that group. Blundell and Preston also show that one can quantify the importance of transitory versus permanent differences in resources by comparing changes in income and expenditure inequality over time for young cohorts. Unfortunately the HBS is not well suited to carrying out such a cohort analysis, as data is only available for two time periods, 1987 and 1994.[9] Furthermore the age data is grouped in ten-year intervals while the period between the surveys is seven years. The HBS does allow one to look at inequality for similarly aged individuals at two points in time. This eliminates differences in life-cycle affects but does not take account of the possibility that preferences or other parameters may have changed over time. Table 2 presents measures of income and expenditure inequality by age group. The level of income and expenditure inequality within each of these age groups is very similar in magnitude to the level of aggregate inequality presented in Table 1. Furthermore none of the age groups exhibit significant changes in inequality over time.

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[9] For an example of a study which examines consumption inequality over the life-cycle by following cohorts see Deaton and Paxson (1994).

4. A Dissagregated Analysis of Inequality.

In this section we provide a more detailed analysis of changes in inequality over time by distinguishing between changes in within-group inequality and changes in between-group inequality. The groups we used are defined on the basis of family composition, work status of head of household, work composition of the household, as well as the education level of the head of household. To carry out this decomposition we follow the approach used by Jenkins (1995) and use the mean logarithm deviation (MLD) to measure inequality. This is given by:

$$I_0 = (1/n) \; \Sigma \; \log(\mu/y_i)$$

where μ is mean income and y_i is individual i's income level. We choose the MLD as our inequality measure because it has desirable decomposability properties. In particular it can be rewritten as:

$$I_0 = \Sigma \; v_k \; I_{ok} \quad + \quad \Sigma \; v_k \; \log(1/\lambda_k)$$

where k denotes sub-group k, v_k is the population share of group k and λ_k is group k's mean income relative to the population mean. The first term in this expression (the weighted sum of the inequalities within each group) measures the contribution of within group inequality to total inequality. The second term captures the contribution of between group income differences to total inequality. To see this notice that the second term measures inequality if each group member was assigned the mean income of that group. In the next section, we discuss recent changes in the Irish labour market and their potential effects on inequality.

a. Changing employment Structure

A recent feature of many developed labour markets has been an increased polarisation of work: a decline in the number of traditional single earner households coinciding with a rise in both the proportion of `work rich' households (in which all adults work) and the fraction of `work poor' households (in which no adults work).[10] Table 3 shows the proportion of these types of households in Ireland for both 1987 and 1994. We see that between 1987 and 1994 the proportion of households in which all adults work increased from 26.9% to 32.1%. Almost all of this increase is accounted for by a reduction in the number of households where some (but not all) adults work. It has been suggested that the polarisation of the work force has increased inequality in the U.K (see Gregg and Wadsworth). The decomposition by work composition of the household will allow us to examine this issue. We also carry out the decomposition disaggregating by employment status of head of household.

b. Returns to Education

There is a substantial literature documenting the increase in the return to education in many developed countries (for a disussion of trends in Ireland see Barrret et al (1999)).[11] It has been argued that this rise in the return to education has resulted in greater inequality as those with higher levels of education have improved their position relative to those with little education. In the context of the above decomposition, this would be captured in a rise in between group inequality for the education subgroups.

c. Household Composition Changes

There have been some important changes in family structure in Ireland recently. Table

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[10] For evidence of this in the U.K see Gregg and Wadsworth (1996).

4 shows that individuals from households containing a couple with children account for a noticeably smaller proportion of the population in 1994. They accounted for 41.2% of the population in 1994 as opposed to 45% in 1987. This reduction has been offset by an increase in the number of individuals from childless households and one-parent households. These changes could potentially have important effects on inequality.

The results of our decompositions are given in Table 5 for each of the four classifications we use and for both income and consumption. The striking feature that emerges from this table is that for most classifications and for both measures of resources, over three-quarters of total inequality is due to within-group inequality as opposed to between-group. Inequality. This has important implications for policies aimed at reducing inequality. In particular it suggests that policies targeted at specific groups, which treat all members of those groups equally, will do little to reduce inequality. This is because they fail to tackle the large degree of inequality *within* particular groups.

Looking at the trend in inequality over time we find little change in the relative contribution of either component. It does not appear that large increases in between group inequality have been offset by reductions in within group inequality. A possible exception to this is the decomposition by education level of the head of household, where the rise in between group inequality tends to support the claims made earlier in this section. However, we have to be careful when interpreting the education results, as the groups are not directly comparable. [12]

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[11] Their results refer to earnings and not income.

[12] The education information obtained in the HBS differs between 1987 and 1994. In 1987 respondents were asked at what age did they finish full-time education, whereas in 1994 they were asked their highest level of education. We use the following recategorisation of the 1987 data to make the results comparable : if respondents left before the age of 12, we assigned them no education, between 12 and 14 primary cert, 15-16 junior cert, 17-18 leaving cert, 19-

5. Poor Households

Sections 3 and 4 of the paper focused on inequality in Ireland between 1987 and 1994 and found little change over time or across alternative measures of resources. In this section, we concentrate on those at the lower end of the distribution. In particular we look at individuals in the 10th percentile of both distributions.[13] Figures 3 and 4 examine the bottom decile of the income and expenditure distribution by economic status of the head of household. We also show the distribution of work status in the population as a whole. This allows us to see whether households are over or under- represented in the bottom decile.

From the top panel of Figure 3, we see that households headed by someone who is long-term unemployed accounts for approximately 40% of the poor. For this group the difference between consumption and income based measures are not significant. Not only do long-term unemployed represent the largest single category of the lowest decile, they do so despite accounting for only 10% of the total population. Two other features emerge from the Figure 3. Farming households appear to be over represented among the poor if we use the income measure but underrepresented when consumption is used. Farm incomes tend to be much more variable from one year to the next (for instance 1986 was a particularly bad year for farm incomes in Ireland which may be partly reflected in the 1987 income figures). Income based measures of poverty would tend to reveal significant fluctuations in the proportion of farm households categorised as poor from year to year. However under the life-cycle hypothesis,

20 sub degree and 21+ degree or higher.
    [13] The 10th percentile cut off point corresponds to between 50% and 60% of the median for both income and expenditure.

farm households take account of this variability in their incomes by saving in good times and borrowing when times are bad. Expenditure patterns should in this case provide a more accurate measure of welfare. While the 1987 data may contain low incomes for some farmers, the expenditure data suggests that this fall may have been perceived as temporary as result of which expenditure was unaffected.

The opposite seems to be the case for households on home duties or retired. These households are underrepresented among the poor when income based measures of poverty are used but they fare better when consumption is used. This is not what one might expect from the life-cycle model. Income tends to fall when individuals retire. However since this decline in income can be anticipated one would expect households to save when young in order to finance consumption when old. The fact that retired couples make up a greater proportion of the consumption poor than the income-poor suggests that retired households may be saving too much. Looking more closely at the characteristics of households headed by individuals on home duties we see that a lot of these individuals are widows aged over 65. Thus the tendency for such households to be over represented among the expenditure poor would seem to be an extension of the earlier result on retired households.

The finding that retired households seem to save too much is not unique to Ireland, the same finding has been reported for the U.K by Banks, Blundell and Tanner (1998). One possible explanation for this finding is that current expenditure is a poor measure of consumption for retired families, in that these households are likely to be receiving consumption flows from durables purchased earlier in their lives, such as housing. Although retired households may not be currently spending a lot of their income, neither is it the case that they are doing without the

services provided by these goods. To examine this we repeated the analysis omitting the purchases of durable goods from our expenditure based measure of resources. The tendency for retired couples to over save remains, suggesting that the lumpiness of durable purchases cannot explain this finding.

Alternatively it may be the case that older households tend to disproportionately benefit from in-kind transfers from the state or special discounts on goods and services. Again, the result of this is that the lower expenditure of older households need not reflect lower consumption. The data support the view that older households tend to benefit more from in-kind transfers than other households. Almost 96% of poor retired households received free medical services compared to 88% of the total poor. Callan et al (1996) estimate the value of in-kind medical services to be £2.00 per person per week for an elderly person. While these workers clearly benefit from these services it is not clear that it is in-kind transfers which are driving our results.[14]

What looks like over-saving for older households would also show up if demographic or other influences on preferences caused individuals to voluntarily move their consumption towards earlier periods of the life cycle. Banks, Blundell and Tanner (1998) examine whether expected demographic changes and mortality risk can explain the tendency for older households to over save. They conclude that "the fall in consumption as household heads retire … cannot be fully explained by a forward-looking consumption smoothing model that accounts for expected demographic changes and mortality risk. The only way to reconcile fully the fall in consumption with the life-cycle hypothesis is with the systematic arrival of unexpected adverse information".

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[14] Support for this is also provided by the fact that a similar trend emerges even when we deduct expenditure on medical services from total expenditure.

Such information may lead to an increase in precautionary savings that offset the tendency to consumption smooth. This could explain the apparent lack of rationality in consumption choices over the life cycle.[15]

Looking at the 1994 results we see that long-term unemployed households still represent the largest single category among both the income and expenditure poor. As was the case in 1987, the proportion of households on home duties or retired who are recorded as poor is significantly larger if we use expenditure rather than income to measure resources. The most striking difference between 1987 and 1994 figures is the significant increase in the number of home-duty households who are recorded as poor. By 1994 the proportion of low expenditure households headed by someone on home duties had increased to 23% (compared to approximately 13% in 1987). The corresponding figures for income are 14% and 5% respectively. Nolan and Hughes (1998) also found a large increase in the number of home duty households on low income. This is a cause for concern and warrants further examination.

6. Income and Expenditure

While the marginal distributions of expenditure and income are useful for examining the predictions of the life-cycle model, more insight can be obtained by looking at the joint distribution or the derived conditional distribution. Since households headed by the long-term unemployed account for approximately 40% of the poor on both the income and consumption measure, one might imply that the loss in income when unemployed is perceived as permanent

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[15] Bequests are obviously an important form of savings for some households. Although many of these bequests occur when households are old this does not necessarily imply that consumption must be simultaneously reduced at this point. In so far as these bequests are anticipated they should result in a lower level of consumption over a longer period, not just

and thus requires a reduction in consumption. However this inference is only valid if *it is the same households who are found in the lower end of both distributions*. Examining the conditional distributions of income and expenditure will tell us whether or not this is the case. This will also allow us to say more about the predictions of the life-cycle model.

Tables 6a and 6b present the conditional distribution of income and expenditure for 1987 and 1994. Since both results are similar we will only discuss the 1987 results. The rows of table 6a show the distribution of expenditure conditional on income level, while the columns present the distribution of income conditional on levels of expenditure. The first row of the table shows that 46.5% of those in the bottom income decile are also in the bottom expenditure decile, with another 19% in the next expenditure decile. At the top of the distribution we find that approximately 75 % of those in the top income decile are also in the top two expenditure deciles. The results are similar when we look at the distribution of income conditional on expenditure (the columns of the table). 72% of households with low expenditure are found in the lowest two income deciles. However the remaining low spenders do not seem to be spread throughout the income distribution in the same way that low income households were spread throughout the expenditure distribution. While 8% of families in the lowest income decile had levels of spending which placed them in the top 5 deciles of the expenditure distribution only 3.5% of low expenditure households are found in the top half of the income distribution.

In section 5 we noted that farmers and self-employed tended to fare worse with income based measures of resources than with expenditure based measures. We can gain more insight into this issue by focusing on the farming and self-employed households in the bottom decile of the income distribution and comparing this to their position in the expenditure distribution.

upon retiring.

These results are given in Figure 5a.[16] This figure clearly indicates that low-income households in these two categories are spread throughout the expenditure distribution. While approximately 13% of farmers in the lowest decile of the income distribution are also in the lowest decile of the expenditure distribution, almost 15% of them have levels of spending which place them in the 50th percentile of the expenditure distribution. The same is true for other self-employed households: although 16% of non-farming self-employed households with low income also have low expenditure almost 20% of these households are found *in the top three deciles* of the expenditure distribution. We can compare these findings to those for households headed by someone who is unemployed. These results are given in Figure 5b. Over 60% of long-term unemployed households with low income also have the lowest level of expenditure and over 80% are to be found in lowest two deciles of the expenditure distribution. Almost none of these households make their way into the top half of the expenditure distribution. The results for short-term unemployed households lie between those of the self-employed and long-term unemployed.

These results are consistent with a life-cycle model in which farmers and self-employed households face a variable and uncertain income stream. While periods of low income are to be expected, it seems that most of the households may view this fall in income as transitory and are prepared to borrow in order to maintain consumption at current levels.[17] Income at a point in time will not provide a reliable measure of welfare for these households. A more accurate measure of their well being can be found by examining their consumption patterns. Likewise it

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[16] These results refer to 1987. Similar conclusions are reached on the basis of the 1994 data.

[17] An alternative explanation of these findings may be that the income levels reported by self-employed households are measured with substantial error. While it may be easy to report weekly earnings for employees or state benefits for unemployed it may be more difficult to

seems that some of the short term-unemployed engage in consumption smoothing in the expectation that they will return to work soon. In contrast households headed by someone who is long-term unemployed view their lower income as permanent and reduce their expenditure accordingly. For these households low income is matched with low expenditure and either measure provides an accurate indication of their welfare level.

6. Conclusion

In this paper we have used two alternative measures of welfare, expenditure and income, to analyse trends in Irish inequality and poverty in Ireland between 1987 and 1994. At the aggregate level the striking result which emerges is the similarity of the income and expenditure distributions both at a point in time and in terms of their evolution over time. Neither measure of resources indicates a change in inequality over time. A more detailed analysis of inequality shows that the bulk of inequality in Ireland at a point in time stems from differences among households with similar measured characteristics, rather than differences between groups. However, important differences emerge when we look at the composition of the poor in more detail. Households headed by long-term unemployed individuals accounted for a substantial proportion of the poor irrespective of which measure of resources was used. Older households tended to have levels of spending which were lower than one would expect given their income levels, while farming and self-employed households tended to fare significantly worse when income was used to measure resources as opposed to expenditure. Each of these findings can be explained using a life-cycle model of consumption and illustrate the importance of combining

calculate earnings for the self-employed.

income and expenditure information when conducting an analysis of welfare trends.

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Table 1
Distribution of Income and Expenditure 1987-1994

		Year	
		1987	1994
Quintile	Income Shares		
1		.08	.09
2		.13	.13
3		.17	.17
4		.23	.23
5		.39	.39
	90/10 ratio	4.1	3.9
	CV	.61	.59
	Gini	.31	.30
	Atkinson alpha=.5	.08	.07
Quintile	Expenditure Shares		
1		.08	.08
2		.13	.13
3		.17	.17
4		.23	.23
5		.40	.39
	90/10 ratio	4.1	4.2
	CV^2	.64	.61
	Gini	.31	.31
	Atkinson	.08	.08

Table 2
Consumption - Income inequality comparisons by age group
Atkinson inequality measure ε=.5

Age Group	1987	1994	1987	1994
	Income		Expenditure	
15-24	.09	.08	.08	.09
25-34	.09	.09	.09	.09
35-44	.08	.07	.08	.07
45-54	.06	.07	.06	.07
55-64	.07	.07	.07	.08
65-74	.05	.06	.07	.07
75+	.05	.06	.08	.08

Table 3.
Trends in household work Status in Ireland

Household Work Status	1987	1994
Work-Poor	23.2%	22.6%
Some-Work	49.9%	45.3%
		/
Work-Rich	26.9%	32.1%

[a] Household weights are used. The proportion working is defined as the number of workers divided by number of adults between 18 and 65.

Table 4.
Trends in Family Composition in Ireland

Family Type	1987	1994
No kids, single non pensioner (Aged 15-65)	2.7%	2.7%
Single (Aged 65 +)	2.6%	3.3%
Couple (Aged 65 +)	2.6%	2.9%
Couple <65 no kids	5%	5.8%
Couple plus kids	45%	41.2%
Single plus kids	2.4%	3.6%
Other	40%	40.4%

Table 5
Within and Between Group[a] Inequality 1987-1994

	Year	Aggregate	Within	Between
Income				
Family Composition	1987	157	143 (91)	14 (9)
	1994	151	140 (93)	10 (7)
Work status Hoh	1987	157	126 (80)	31 (20)
	1994	151	120 (79)	31 (21)
Work Composition of Household (household weights used)	1987	177	118 (66)	59 (34)
	1994	171	120 (70)	51 (30)
Education Level HOH*	1987	157	134 (85)	22 (15)
	1994	151	121 (80)	30 (20)
Expenditure				
Family Composition	1987	157	146 (93)	11 (7)
	1994	158	148 (94)	10 (6)
Work status Hoh	1987	157	128 (82)	29 (18)
	1994	158	128 (81)	30 (19)
Work Composition of Household	1987	171	134 (78)	37 (22)
	1994	170	134 (78)	36 (22)
Education Level Hoh	1987	157	129 (82)	28 (18)
	1994	158	125 (79)	33 (21)

Table 6a.
Income and Expenditure Deciles in 1987

Inc.	Expenditure 1	2	3	4	5	6	7	8	9	10
1	46.5	18.9	13.5	7.3	5.4	2.7	1.9	1.9	1.3	.5
2	25.9	28.5	18.1	10.2	6.9	5.1	3	1.2	.8	.3
3	11.9	21.9	20.6	17.6	10.9	7.7	3.5	3.9	1.8	.3
4	6.9	14	16.3	17.9	19.4	127	5.6	4.5	2	1.5
5	5.6	8.7	12.4	17.2	15.4	18.4	9.9	7.5	3.7	1.2
6	1.9	4	11.5	13.3	16.4	15.7	16.5	9.9	6.9	4
7	.7	1.8	3	9.9	12.6	18.9	19	15.3	11.6	7.2
8	.3	1.1	2.2	3.5	7.8	11.6	23.6	20.6	20	9.4
9	.3	.5	1.9	2	3.5	5.6	11.2	22.8	28.4	23.9
10	.3	.3	.6	1.3	1.5	2.5	6.1	12	23.7	51.6

Table 6b.
Income and Expenditure Deciles 1994

Inc	Expenditure 1	2	3	4	5	6	7	8	9	10
1	38.4	23.1	14	7.4	8.3	3.6	2.3	1.2	1.1	.6
2	26.7	25.7	17.9	10.7	8.2	5	2.7	1.5	1.2	.5
3	15.3	21.5	19.9	17.4	10.6	6.2	4.2	2.9	1	.9
4	9.9	15.9	18.0	19.8	13.9	8.8	6.1	4.0	2.5	1.2
5	5.7	6.5	13.3	15.3	19.3	13.3	11.1	8.2	4.4	3
6	2.5	3.1	7.2	13.4	16.4	18.9	16.1	11.1	8.5	2.7
7	.4	2	4.1	8	9.3	19.9	20.9	16.3	13.1	5.8
8	.5	1.1	3.6	4	7.8	13.5	18.7	24	17.7	9.2
9	.4	.8	1.1	2.1	3.7	7.2	12.9	20.9	29.8	21.1
10	.1	.5	.9	2	2.6	3.3	5.3	9.8	20.7	54.8

Figure 1
Distribution of Real Disposable Income in 1987 and 1994
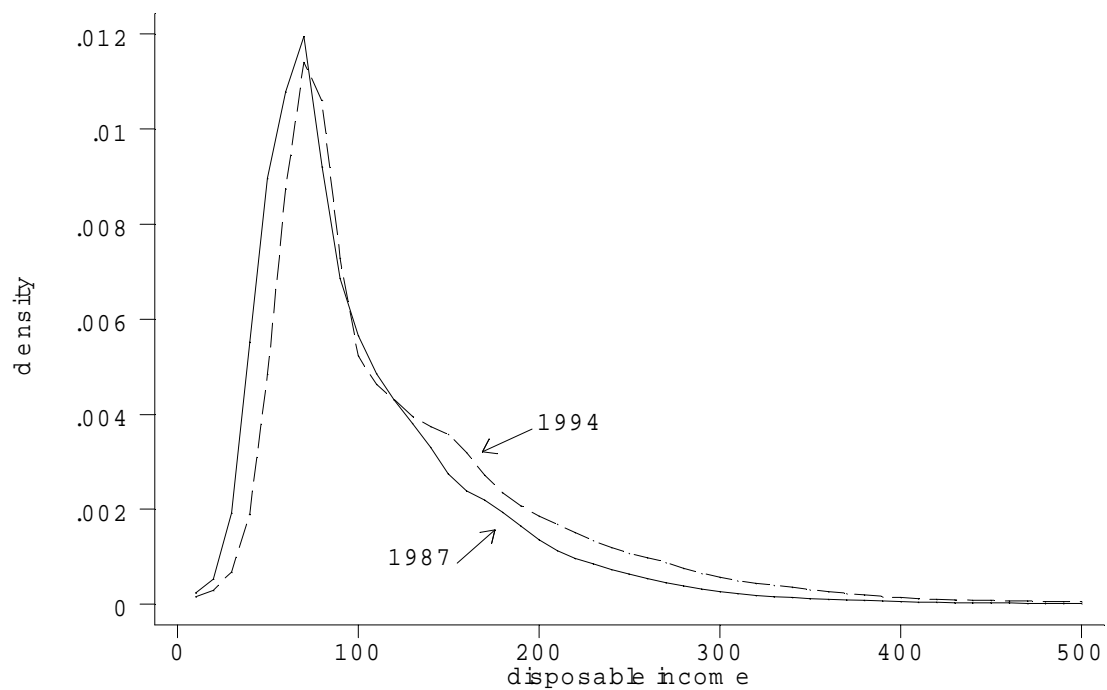

Figure 2
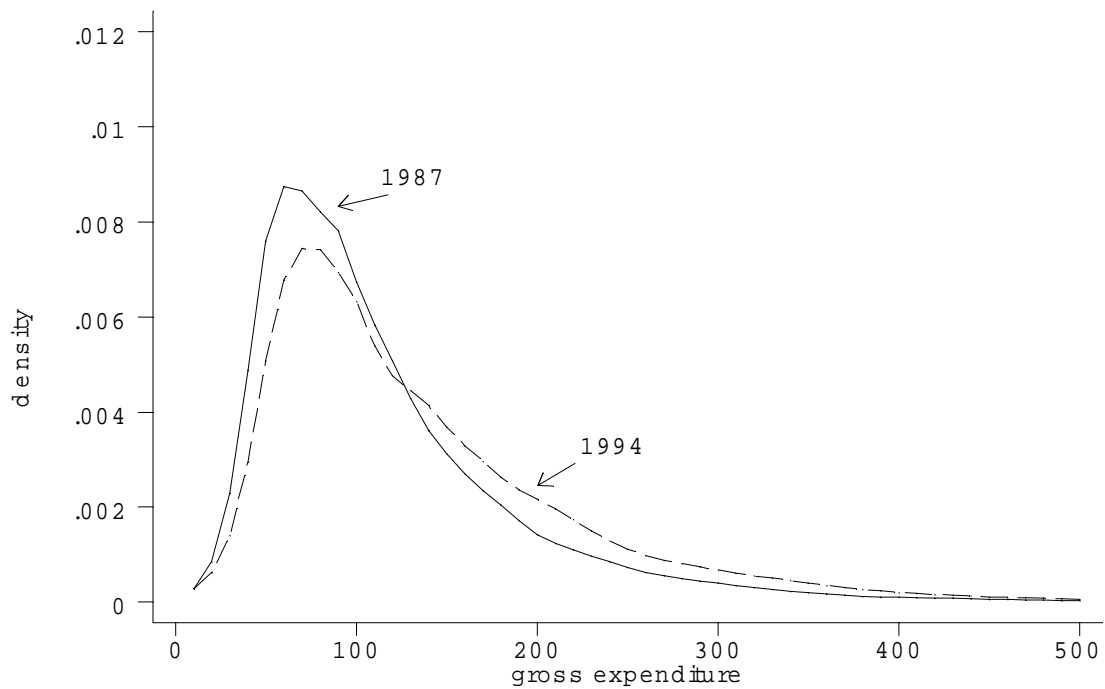**Distribution of Real Expenditure 1987-1994**

Figure 3.
Composition of the Bottom Decile by Household Head Work Status 1987
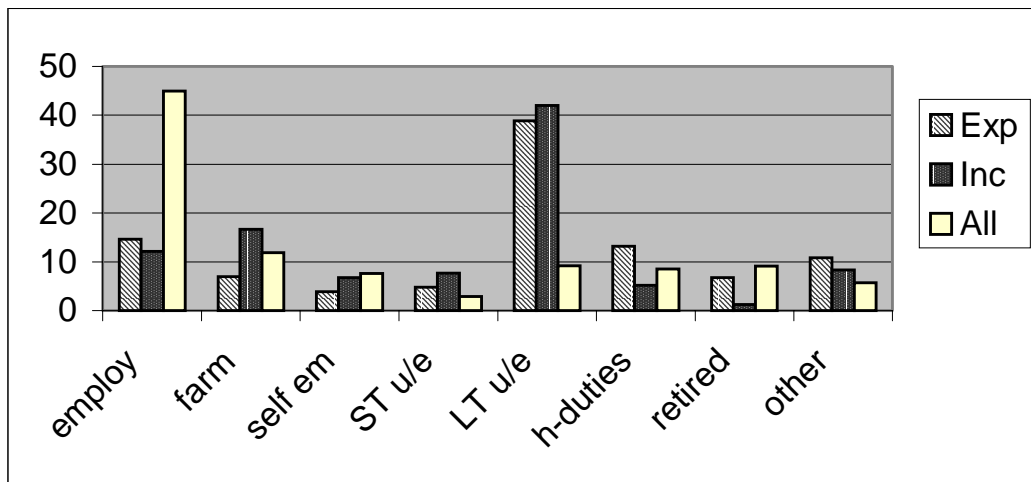

Figure 4
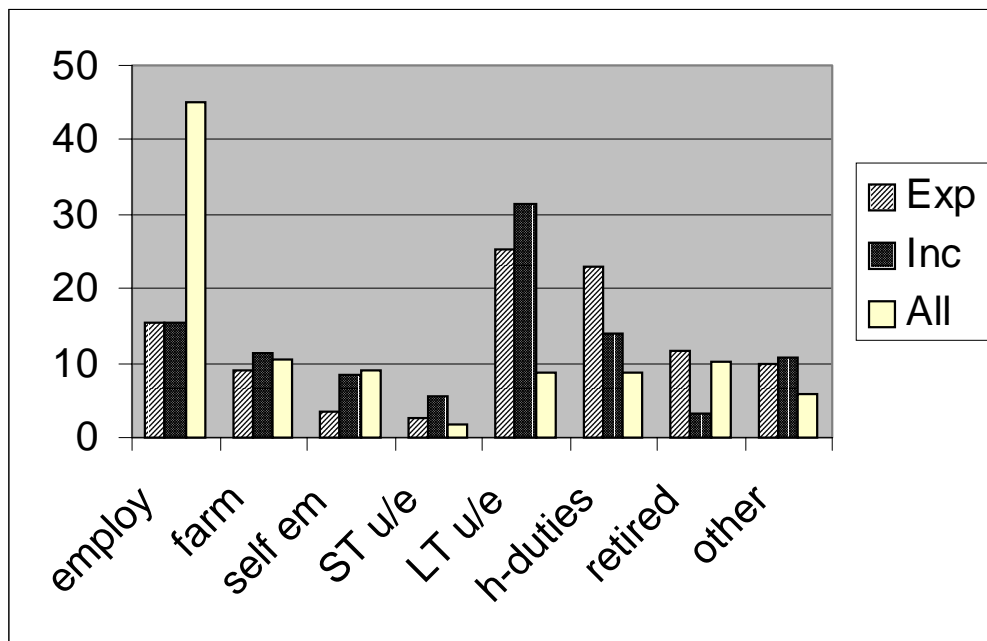**Composition of the bottom Decile by Household Head Work Status 1994**

Figure 5a.
Distribution of Expenditure in Bottom Decile of Income 1987
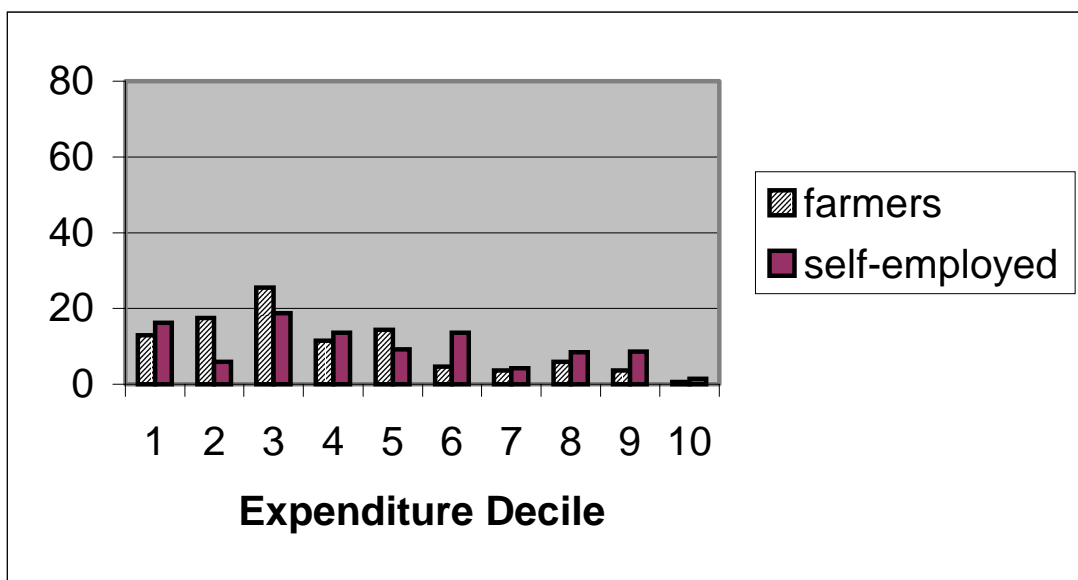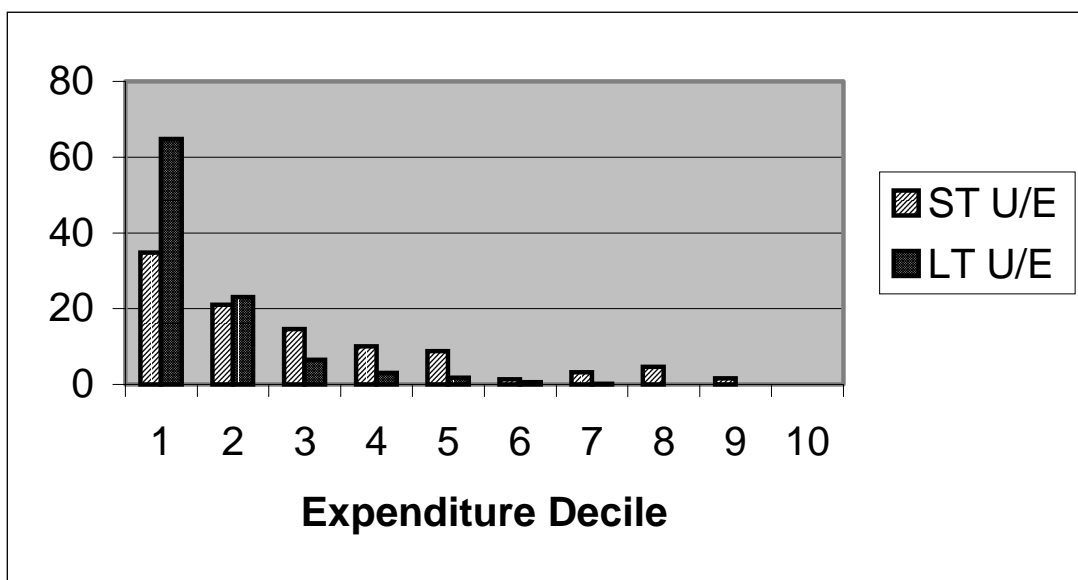a) Farmers and Self-Employed

Figure 5b.
Distribution of Expenditure in Bottom Decile of Income 1987
b) Short and Long-term Unemployed

Appendix 1.
Description of groups used in inequality decomposition.

Family composition:
i.   no kids single non pensioner
ii.   single (aged 65 +)
iii.   couple (aged 65 +)
iv.   couple under 65 no kids
v.   couple plus kids
vi.   single plus kids
vii.   other

Employment status Head of household
i.   employee
ii.   self-employed
iii.   unemployed <=52 weeks
iv.   unemployed >52 weeks
v.   home duties
vi.   retired other

Work Composition of household
i.   no adults work (work-poor)
ii.   some adults work but not all
iii.   all adults work (work-rich)

Highest Education level of head of household
i.   no education
ii.   primary
iii.   junior certificate
iv.   leaving certificate
v.   some college
vi.   degree or higher