

INEQUALITY, POVERTY AND MOBILITY: CHOOSING INCOME OR CONSUMPTION AS WELFARE INDICATORS

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The economic literature has discussed at large about the best indicator of individual welfare: income or consumption. The implications of this choice are not only a matter for theoretical discussion but turn out to be very relevant for empirical analysis. Up to now, the debate has focused on the effects on distributional statics and avoided discussing or offering evidence of the effects on mobility or poverty dynamics. In this paper we discuss the strengths and weaknesses of both resource measurements and analyze the effects of the choice on distributional dynamics by presenting empirical evidence on Spain obtained from a rotating longitudinal survey.

Keywords: income distribution, sensitivity analysis, expenditure, mobility, poverty dynamics, Spain.

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1. Introduction

An extensive literature on inequality and poverty has traditionally been devoted to the sensitivity of results to important methodological decisions such as the choice of a welfare indicator, an inequality or poverty index, an equivalence scale or an adequate accounting period.

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Within all these methodological decisions, the choice of a welfare indicator is of particular relevance. Indeed, from the very first moment of analysis one has to decide on *what one would like to measure*. In principle, household welfare could be approached by the *sum of all household members' disposable income*, mainly because income is the means by which well-being can be achieved. In fact, most of the empirical literature chooses income to compare results on inequality and poverty for different countries' survey data. However, there is also a strong argument for using the *sum of all household members' consumption* as a measure of household welfare, given that one expects a strong correlation between poverty and some 'minimum standard of living' and, also, consumption may better approximate household *permanent* well-being. To avoid this choice, Johnson and Smeeding (1998) suggested that, rather than choosing between them, researchers should use both measures in evaluating household well-being. The problem is that this is rarely possible given the limitations of the household micro-data available from a particular population. In this context, being aware that each indicator has its strengths and weaknesses, it is important to have information on the effects that using one or the other may have on meaningful empirical results.

In general, papers have discussed the theoretical issues and the empirical effects of each welfare indicator on distributional statics. That is, on the *level* and *evolution* of inequality and on the *incidence, intensity* or *characterization* of poverty. In recent times, an important amount of research focuses on a dynamic approach to measuring inequality and poverty by studying *intradistributional mobility* and adding the *persistence* dimension to poverty analysis. Up to now, to the best of our knowledge, works on the implications of the choice of welfare indicator on distributional dynamics are still scarce. In our view, it is precisely in this case where the individual's ability to smooth consumption would be expected to have more consequences on the analysis given that the use of an income-based indicator would surely overstate short-run mobility.

The aim of this paper is to provide discussion and empirical evidence on the consequences of the choice of income or consumption as a measure of household resources on distributional dynamics' results. We undertake all empirical analysis using a particularly adequate longitudinal survey: the Spanish *Encuesta Continua de Presupuestos Familiares* (ECPF) which includes detailed quarterly information on house-

hold incomes and expenditures on a sequence of about two years long. From the information on sub-annual accounting period's incomes and expenditures we are able to reconstruct the household's complete picture over the year.

The paper begins with a revision of the most important theoretical issues involved in the choice of one or the other indicator. It then focuses on previous results in the literature and presents a brief reference to those for Spain. The third section exposes our definitions of household income, expenditure and our approximation to measuring consumption while giving details on the characteristics and structure of our data source. Section four presents and discusses our results on inequality, poverty and mobility using the two resource measures. The last section summarizes our main findings.

2. Changing income or changing consumption?

2.1 *Theoretical issues: Strengths and weaknesses of each indicator*

There are theoretical reasons to believe that both income and consumption are adequate indicators of well-being. If we believe that a household's 'standard of living' is rather more stable than annual income and we also consider that life cycle effects are driving income differences between households, it is reasonable to think that *permanent* income is a good measure of well-being. In this context, and facing the fact that one seldomly finds survey information on incomes for long accounting periods, many authors have considered current consumption as an accurate indicator of the long-term household economic position (e. g. Slesnick, 1991 and 1993). In fact, the theoretical justification of the use of consumption as a good indicator of household welfare is based on the predictions of inter-temporal models on the choice between current and future consumption. These models are integrated either in life cycle models such as Modigliani and Brumberg (1954) or in permanent income hypothesis models such as Friedman (1957). They predict that, in the presence of uncertainty, the concavity of utility functions will lead individuals to smooth consumption along their lives through savings or incurring in temporary debt. In this context, individuals' consumption will only respond to *permanent* increases in incomes and not to merely *transitory* changes in their earnings which will, instead, be destined to savings. In principle, one would then predict that consumption distributions should be more equally distributed than income ones. This is because one expects that high income people

do not spend all their income while low income people typically spend more than they earn by drawing down past savings or borrowing.

Some authors, however, argue that the predictions of the life cycle hypothesis do not hold because of the empirical evidence on the similarity in the pattern of consumption and income over the life cycle and an excess reaction of consumption to changes in net disposable incomes. In any case, there are alternative explanations for this result. Indeed, year-to-year variability in consumption can be explained by household's changes in needs which imply that considering equivalent scales in consumption will make the pattern slightly flatter. The fact that, even in this case, one still observes a large reduction of consumption at advanced ages could be due to the complementarity between some goods' consumption and labor market participation as pointed out by Heckman (1974)¹. However, the wish to save in order to heir, risk aversion (precautionary reasons in an uncertain world) or liquidity constraints may also explain a non-flat pattern of expenditures over the life cycle.

There are also some other reasons to believe that consumption may have important disadvantages in the measurement of household welfare given that it highly depends on the habits of individuals and on the demographic group the household is inserted in. For example young and old households have radically different consumption patterns due either to very different needs or to intergenerational differences in preferences. In the view of Attanasio (1999), the life cycle model enriched to account for demographic and labor supply variables, is not rejected by the available data. However, the same author indicates that the validity of the model is limited to middle-aged individuals (around 45 years of age), while there is much work to be done on consumption patterns of either the young or the old. Old-age households are especially difficult to model given their significant changes in labor status together with changes in size, health and the increase in the probability of death. All these factors seem to influence household consumption decisively.

However, not only conceptual considerations may drive the choice of one of the two indicators. Also the degree of reliability of the data available in household surveys is a relevant issue. Using micro-data, consumption may present a higher level of reliability than income

¹See Attanasio and Banks (1997) for an analysis of demographic and labor market factors and the life-cycle.

given the expected underreporting of the latter. For instance, in the Spanish context, authors like Ruiz-Castillo (1987) or Ruiz-Huerta and Martínez (1994) have indicated that a large percentage of households in the Spanish Consumer Expenditure Survey (*Encuesta de Presupuestos Familiares*, EPF) report more total current expenditure than income. This result is also obtained by Cantó (1998) using the ECPF. Most precisely, Sanz (1996) underlines the fact that using the 1990-91 EPF it is not possible to recover National Account Data on household income. This is especially worrisome when she shows that underreporting is not homogeneous in the population but is concentrated in capital and self-employment income and social protection subsidies different from pensions. Underreporting of incomes is also an important problem for Éltető and Havasi (2004) using Hungarian data and Meyer and Sullivan (2003) using a U.S. survey. The latter give some further support to the use of consumption as a resource measure due to the variety of sources of incomes of those households situated at the lowest end of the income distribution which also leads to *unwanted* underreporting of incomes. This contrasts with their limited variety of expenditures, basically on food, drink and housing. Note however that consumption data are by no means less prone to measurement error than income data due to the varied periodicity in which expenditures are sampled in official household surveys. These, in general, impose a simple annualization of weekly or monthly purchases. Moreover, the presence of purchase infrequency in many of the items makes the estimation of real household consumption far from accurate².

2.2 *Some empirical evidence on income and expenditure inequality*

The question that any empirical researcher devoted to distributional analysis inevitably has to face is: should we use income or should we use consumption in order to measure individual's well-being? Both the use of consumption and income data in order to measure inequality and poverty has been widespread in the empirical literature. Most works on developed countries have used income (see the survey in Gottschalk and Smeeding, 1997) while several authors in recent times have also chosen to analyze consumption inequality³. The European Statistical

²See Peña and Ruiz-Castillo (1998) for three alternative estimations of annual food expenditures when information about bulk purchases is limited.

³See Cutler and Katz (1991, 1992), Slesnick (1993, 2001), Attanasio and Davis (1996), Goodman *et al.* (1997), Attanasio (1999), Attanasio *et al.* (2002), Meyer and Sullivan (2003) or Krueger and Perri (2006).

Office (*Eurostat*) initial option on these matters was, in fact, to use consumption expenditures to derive poverty ratios for each country in the European Union. However, since the European Community Household Panel (ECHP) became available all results on inequality and poverty produced by *Eurostat* are calculated using income data⁴.

Several empirical studies have tried to contrast if expenditure is more equally distributed than income. However, there is a variety of methodological approaches within them. Basically, these approaches could be summarized in two general groups: those which analyze time-series of National Accounts data and those which analyze micro-data from large household surveys. Attanasio (1999) finds that an aggregate approach has serious problems in the interpretation of the estimated coefficients and this has led researchers to focus their efforts in micro-data analysis. However, this line of research is not free of difficulties. The lack of long household panels with sufficient information on consumption and income has forced analysts to construct pseudo-panels from cross-sectional samples and follow different cohorts as if it were the same individual⁵.

The results in the literature on simple cross-section income and consumption inequality based on micro-data appear to be quite contradictory. While some authors obtain that total annual expenditures are distributed more equitably than annual incomes (see Cutler and Katz, 1991; Slesnick, 2001; Meyer and Sullivan, 2003; or Johnson *et al.*, 2005 for the U.S.) others show the opposite and counterintuitive result (see for example Harding and Greenwell (2002) for Australia and Éltető and Havasi (2004) for Hungary)⁶. The Spanish evidence on these matters in particular would be included within this last group generally showing a higher inequality of expenditures than that of incomes (see Ayala *et al.*, 1993; Del Río and Ruiz-Castillo, 1996; Mercader-Prats, 1998; Cantó, 1998 or Gradín, 2002)⁷.

⁴Eurostat (1990) uses expenditure, while Eurostat (2000) is based on income.

⁵The option of using a proper household panel to avoid this problem has also encountered the difficulty that, for the U.S. case, in the Panel Study of Income Dynamics (PSID) survey households report only a few consumption items.

⁶Measurement errors have often been mentioned as a possible source of these contradictory results.

⁷In contrast, Cutanda (2002) reports a higher variance in incomes than in expenditures. This author uses a quite different methodology to ours (see Blundell and Preston, 1998) and, most importantly, considers a much more restricted definition of consumption (food and drink, energy, water, transport services and communications) than we do.

2.3 *Some empirical evidence on income and expenditure variability*

Attanasio (1999), using National Accounts data for the U.K. (1965-1996) and the U.S. (1959-1996), shows that net household incomes present a higher degree of instability than non-durable expenditures. This makes expenditures on durables, as one would expect, subject to a high level of variability. Using cohort data this author shows also that both incomes and expenditures follow an inverted-U pattern where the maximum appears at the household's head age of 45, which is seemingly in contrast with the predictions of a constant level of consumption along the life cycle. Fischer and Johnson (2003), using both aggregate cohort data from the CES and longitudinal data from the PSID, found a remarkably similar income and consumption mobility for the U.S.

In the Spanish context, the works undertaken by Pena (1996), Cantó (2000), Ayala and Sastre (2002) or Cantó *et al.* (2006) use only longitudinal income data in measuring mobility or poverty dynamics. Interestingly the levels of income mobility obtained for Spain are outstandingly similar to those reported by Jarvis and Jenkins (1996) for the U.K., in a period where both countries were experiencing a radically different evolution of inequality. Cantó *et al.* (2003) find that the evolution of the income poverty rate during the late eighties and the first half of the nineties is mainly associated to changes in the poverty exit rate, i.e. the degree of upward mobility of those classified as poor. However, the increase in the headcount ratio registered along the first part of the nineties is also due to some increases in the poverty entry rate in that period i.e. the level of downward mobility of those households just over the poverty line that we could refer to as the *vulnerable*. There is not much evidence for Spain on the pattern of consumption mobility.

2.4 *Do low income households face liquidity constraints?*

One of the key issues in order to accept the use of consumption as being superior to income in distributive analysis is the existence of liquidity constraints, especially for the poorest population. A few authors have claimed that the poor are able to smooth their consumption and thus current income overstates poverty with respect to current consumption. This is the case of Rodgers and Rodgers (1993) or Slesnick (2001). The latter reports that U.S. households classified as poor using disposable income are able to consume almost 1.7 times their annual

income in 1985. However, elsewhere there is strong direct evidence on the inability of the poorest population to effectively smooth consumption. Japelli (1990) using the *Survey of Consumer Finances* for the U.S. shows that household's current income, current wealth and member's age are relevant variables in determining if a household considers a credit claim. Also, Zeldes (1989) finds that for U.S. households in the lower tail of the income distribution the rate of consumption growth (on food and drink) is related with the retarded value of incomes while that is not true for those at the higher tail of the distribution. Kempson (1996) concludes that the households most vulnerable to poverty in the U.K., especially those formed by young adults with children, often lack of savings or any other financial assets to finance consumption during low income periods.

Difficulties for smoothing consumption are also supported by other authors who show that there is a high correlation between the increases in wages and those in expenditures on food and drink. Blacklow and Ray (2000) for Australian data claim that the propensity to smooth consumption in the face of exogenous income shocks by drawing on savings or borrowing is at its highest in some demographic groups such as single adults with no dependent children but not in others. Other evidence from Jappelli and Pistaferri (2003) on the mobility of incomes and expenditures for Italian households rejects complete consumption smoothing⁸.

⁸These authors try to evaluate the mobility in non-durable expenditures for Italian households by constructing transition matrices. They construct different models with decreasing levels of consumption smoothing. A complete consumption smoothing is rejected given that roughly 50 percent of Italian households move up or down in the consumption distribution between any two periods. They show that measurement error is unlikely to explain a large fraction of total cross-sectional variance of consumption and thus a great deal of consumption mobility is explained by idiosyncratic shocks that households are unable to insure. There is no direct evidence for Spain on these matters. Only some indirect evidence can be found in the work of Cutanda (2003) who analyzes the excess sensitivity of non-durables consumption to income for Spanish households using the ECPF. He points out that a plausible explanation of this excess sensitivity could be that a considerable fraction of the Spanish population would be affected by borrowing constraints.

3. Some relevant definitions and our longitudinal dataset

3.1 *Defining expenditures, consumption and income*

Income is approximated in this study by *Household Income*: the sum of all monetary incomes plus the value of self-consumed goods and the imputation value of owner-occupied housing⁹.

Consumption is ideally defined as the sum of expenditures on current purchases plus the value of self-consumed goods (self-produced or not), the service flows of the expenditures on consumer durables and the imputation value of owner-occupied housing (see for instance World Bank, 2000). This definition shows that using consumption has an important range of problems, especially those related to the estimation of the service flows of consumer durables because of the lack of relevant information in most surveys. As a consequence, following most of the empirical literature on the matter¹⁰, we use two proxies to measuring consumption including current expenditures and the value of service flows and self-consumed goods. First, *Household Expenditures* is the sum of durable and non-durable household current purchases including the value of self-consumed goods and the service flow from housing¹¹. This first definition of consumption is very close to what has been recently used by Krueger and Perri (2006)¹². Secondly, Non-durable Household Expenditure excludes purchases on durables¹³. This second definition differs from that of other authors such as Harding and

⁹It includes incomes from employment and self-employment, regular transfers (such as pensions and unemployment benefits), investment and other income sources. It is net of pay-as-you-earn taxes and compulsory social contributions.

¹⁰See for instance the recent work by Johnson *et al.* (2005).

¹¹Our measure of service flows from housing is the actual rent paid for households who rent their homes and the self-reported hypothetical rental equivalence value for households who are home-owners. Consumer units that own their home are asked, "If someone were to rent your home today, how much do you think it would rent for?"

¹²Basically the only difference between our definition and theirs is that we do not replace purchases of vehicles with an imputation of the service flow from cars given that our database lacks of information on the household's vehicles stock.

¹³This measure of non-durable consumption is total household expenditures less purchases of durables (the costs of housing repairs and the purchase price of vehicles). We here follow Arévalo *et al.* (1995) who consider as durables all expenditures on new or second-hand vehicles or other personal means of transport and on housing conservation repairs of all kinds (all these sum up to about 6 per cent of total expenditures). This implies that this second definition of consumption includes all non-durable purchases plus service flows from housing and the value of self-consumed goods.

Greenwell (2002) who decide to eliminate a large list of items such as furniture, appliances and housewear from household expenditures in order to approximate consumption. Even if we cannot claim to be analyzing *consumption* in the full sense of the word, we believe that restricting expenditures by deleting some durable or semi-durable items may be an adequate choice for other economic analysis. However, if we are trying to measure well-being we believe that it is not convenient to reduce individual welfare to the consumption of food, drink and little more. Especially if missing items are not properly replaced by their corresponding service flows, a difficult task with most expenditure surveys.

The choice of the household as unit of study is based on the fact that an individual's well being is believed to strongly depend on total household welfare (if income and expenditure are equally distributed within the household). Also, the shortage of demographic and socio-economic information on individuals other than the head of household and the spouse in the data (apart from age and sex) makes this choice advantageous. Both welfare measures, income and expenditure, are adjusted for household needs using the parameterized Buhmann *et al.* (1988) scales such that resources are divided by household size to the power of s , where $s \in [0,1]$. Our choice on the value of s follows the literature on distribution and is fixed at an intermediate level, $s = 0.5$.

3.2 *The encuesta continua de presupuestos familiares (ECPF)*

In this paper we use a sub-annual panel of incomes and expenditures on a sample of Spanish households similar to the U.S. *Consumer Expenditure Survey* (CES): the *Encuesta Continua de Presupuestos Familiares* (ECPF). This is a rotating panel survey which interviews about 3,200 households every quarter (substituting 1/8 of its sample at each wave) and offers us information on seven different sources of incomes and very detailed information on expenditures from 1985 to 1995¹⁴. The data include a large amount of household demographic and socio-economic characteristics and households are kept in the panel for up to two years

¹⁴Some methodological changes in the survey undertaken on the second quarter of 1997 and related to the collection of information on household income, make it difficult to extend our analysis further in time.

(eight quarterly interviews), making this survey especially useful for the analysis of short-term dynamics¹⁵.

In the cross-sectional analysis, in order to reconstruct annual income and expenditure and calculate inequality and poverty indices, we select the sample of households who are, at least, in their 4th interview on the last quarter of each year. After trimming the tails of the distributions, our mean sample consists of 1,504 households per quarter¹⁶. For our dynamic analysis, instead, we need to reconstruct household's annual income and expenditure for two consecutive years. For this purpose we construct a *pool* sample of households observed in the panel during two years and we compute mobility measures comparing the first year's annual income or expenditure (the sum of their first four quarterly observations) with that of the second year (the sum of their last four quarterly observations). After trimming the tails of the distributions to eliminate all households that are *contaminated* in one of their interviews (about 9 percent), our *pool* sample consists of 7,177 households.

It is important to note that despite the sub-annual structure of the data, we have annualized income and expenditure (summing up four quarters) in order to prevent all seasonal distortions from quarterly information. To avoid the potential bias from the deletion of censored spells, samples will be systematically weighted for both sampling design and attrition¹⁷. However we should note that we have checked that our results are robust to the use of original quarterly data information.

¹⁵For those readers that are not familiar with this dataset, we should note that any missing information on incomes in the data is imputed by individual and component only when individuals declare to receive a certain income component but the amount received is missing. The methodology used for imputing these quantities is analogous to what is being used in other large household surveys and, in particular, it is most similar to that of the Spanish Encuesta de Presupuestos Familiares (EPF) gathered in 1990-91.

¹⁶An important methodological consideration here is the treatment of outliers, Cowell and Schluter (1999) have underlined the necessity of trimming the distribution tails to prevent data contamination (either the presence of zeros or incredibly high reported incomes or expenditures). In order to minimize the problem we eliminate all households whose equivalent income or expenditure is situated below the first or above the 99th percentile.

¹⁷See Gradín *et al.* (2004) for details on the longitudinal weighting method used in this paper. Further details on the advantages and disadvantages of the Spanish ECPF dataset can also be found there.

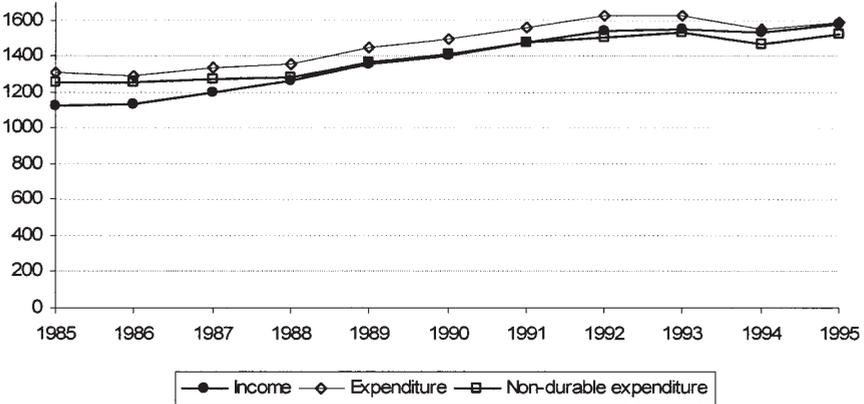
**4. Mobility and Poverty dynamics using both indicators:
The results**

4.1 Inequality and poverty

Before going through the dynamic analysis, we need to know how cross-sectional distributions of income and expenditure look like. In Figure 1 we present the evolution in time of the average annual amounts of each of these variables in constant pesetas. There is a clear increase in average household incomes and expenditures during the period of economic boom (1985 and 1992) and a change of pattern from 1992 onwards. It is important to note that expenditures averages have a somewhat flatter path compared to incomes between 1985 and 1988.

FIGURE 1
Expenditure and income in Spain: 1985-95

Annual average amounts, adjusted for household size ($s=0.5$). Thousands of constant 1995 Pts. Hhs with at least four interviews in the last quarter of each year



In Figure 2 we present a first measurement of the evolution of income and expenditure inequality in Spain¹⁸. We find that, in line with previous works, expenditure inequality in Spain is most of the period equal or above income inequality. Considering non-durable expenditure instead as a better proxy of consumption, its inequality index is, almost

¹⁸Our results on income inequality in Spain are smaller than those presented by Oliver *et al.* (2001) for the same period. These authors use the ECPF but construct a different income variable and use a different equivalence scale. We have checked that the use of quarterly data increases the level of income and expenditure inequality, reflecting the expected sub-annual fluctuations of incomes and expenditures.

all along the period, slightly below that of income. However, the differences in inequality between these three variables are not statistically significant if we calculate bootstrap confidence intervals¹⁹.

FIGURE 2
Expenditure and income inequality: Spain 1985-95

Gini index. Total amounts adjusted for household size ($s=0.5$). Hhs with at least four interviews in the last quarter of each year

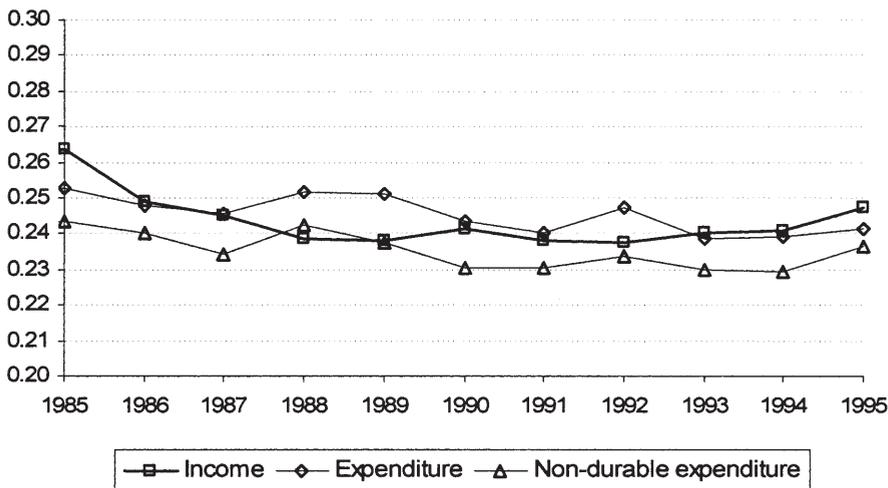


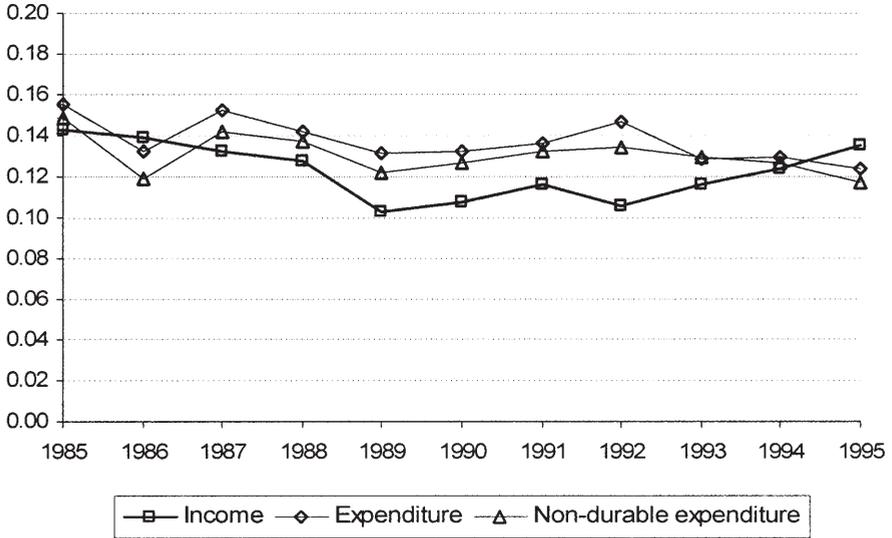
Figure 3 focuses on the analysis of the lowest part of the income distribution and is a first measure of the different *incidence* of poverty when using income or expenditure as welfare indicators. Results show that the incidence of poverty using expenditures is higher to that obtained when using income²⁰. In order to include in the analysis other poverty dimensions such as *intensity* and *inequality within the poor* we have also calculated Foster, Greer and Thorbecke's indexes FGT(1) and FGT(2). Results confirm that, even when including these two additional dimensions, the income distribution registers lower poverty than the expenditure distribution. However, in all cases, as for inequality, all differences in the percentage of poor or headcount index between income and expenditure are not statistically significant.

¹⁹Throughout this paper, and in order to check for statistical significance, we will use 95 percent confidence intervals using biased-corrected bootstrapping with 1000 replications of original samples.

²⁰Results on poverty here are based on a relative concept of poverty drawing the poverty line at the 60 percent of the resources' contemporary median.

FIGURE 3
Expenditure and income poverty: Spain 1985-95

Head-count ratio. Total amounts adjusted for household size ($s=0.5$). Hhs with at least four interviews at in the last quarter of each year

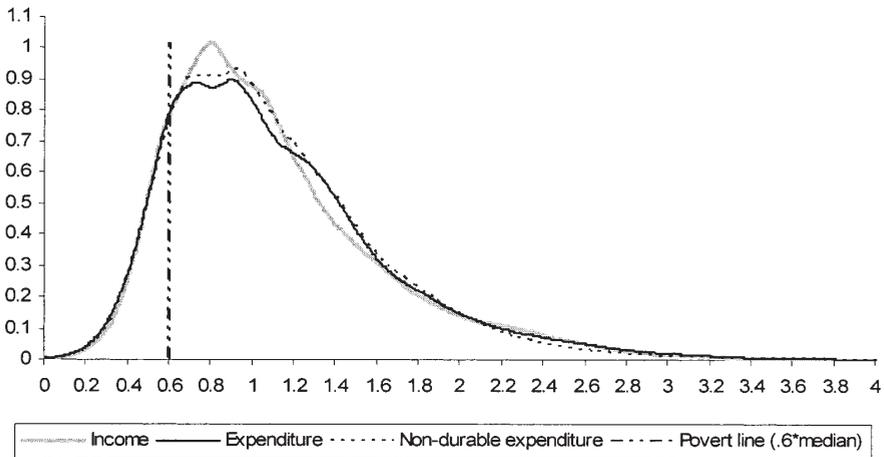


Given the former one wonders: Can we find any difference between expenditures and incomes in the analysis of distributional issues in Spain? Plotting the complete distribution of incomes and expenditures in the same graph will give us very detailed information on whether differences between them actually exist or not. In Figure 4 we present kernel distribution estimates for all three variables considered using the complete *pool* of observations (an approximation to the average for all the period under study). The black vertical line situates our poverty line and all variables are expressed relative to their contemporary median.

As one would have expected from our previous results, all three distributions are outstandingly similar in their lowest tails and thus also below the poverty line. The main differences between income and expenditure distributions appear between 70 and 160 percent of the median. Therefore, for our Spanish data, the use of different measures of resources does not give a significantly different picture of poverty but a different picture of what we could call *middle class*. In fact, in

contrast with expenditure, the use of income in the measurement of poverty situates a large group of households just over the 60 percent median poverty line. This implies that results on income poverty for Spain will be most sensitive to movements of the poverty line upwards. Further, the higher density of households between 70 and 90 percent of the median using income respect to using expenditure makes this difference turn out particularly relevant in the analysis of poverty dynamics. Indeed, using income we would find a significantly larger group of *vulnerable* households with a presumably higher chance of falling in poverty shortly.

FIGURE 4
Income and expenditure *adaptive kernel* densities:
Spain 1985-95, pool sample



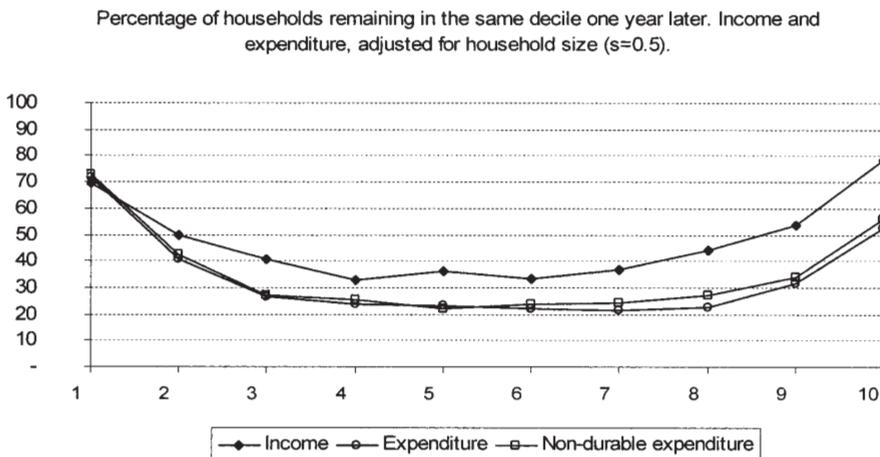
4.2 Income and expenditure in distributional dynamics

The latter result suggests that the choice of the well-being indicator might be more important for mobility, especially for poverty transitions, than it actually is in a one shot context. With the purpose of analyzing this issue in depth we have calculated transition matrices and a variety of mobility indices which will try to capture the different aspects of mobility.

In Figure 5 we present the percentage of households at different points of the initial distributions that remain in the same decile one year later. As obtained in Cantó (2000), households in the middle of both distributions are more mobile than households in the extremes. In-

terestingly, household incomes register less instability than household expenditures. This result is robust to the deletion of some important durable items from our proxy of consumption.

FIGURE 5
Expenditure and income immobility: Spain 1985-95, pool sample

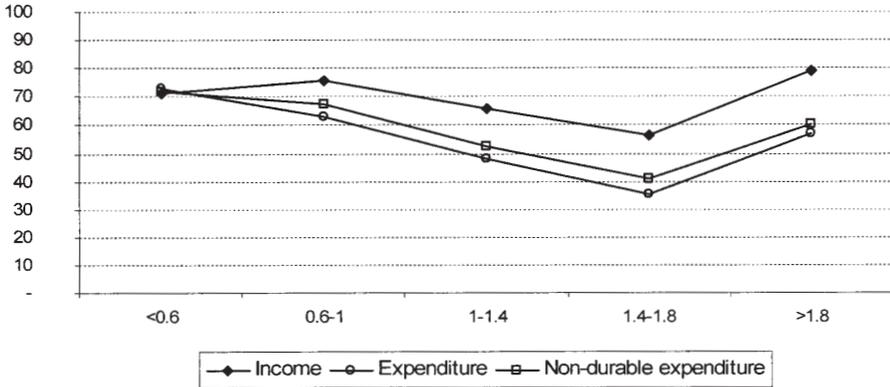


This difference in the stability of incomes compared to expenditures consistently increases as income and expenditure grow. In particular, only households at the lowest part of the distribution register a similar variability in incomes compared to expenditures. It is important to check, however, if this result holds when we define some alternative income groups²¹. If groups are re-defined in percentages of the distributional median, as we present in Figure 6, incomes continue to be more stable than expenditures and mobility is still lower in the extremes than in the middle of the distribution. The main additional information in this Figure is the detail it offers on mobility patterns taking the median (thus also the poverty line) as a reference. Both poor households (< 0.6) and those that could be considered as *vulnerable* or potential movers into poverty (those just above the poverty line, $0.6-1$) appear to show a large persistence compared to middle income-expenditure households (up to 80 percent above the median). Note that while densities in Figure 4 showed that there were more

²¹One of the problems of decile transition matrices is that in the middle part of the distribution the limits between deciles are narrow in absolute terms and this clearly means that relatively small changes in household incomes or expenditure may imply a change of decile while this is much more unlikely as one approaches the bottom or the top of any of the two distributions.

vulnerable households in the income distribution, Figure 6 indicates that it is those classified as *vulnerable* using expenditures that exhibit more mobility.

FIGURE 6
 Expenditure and income immobility: Spain 1985-95, pool sample
 Percentage of households remaining in the same interval one year later. Income and expenditure, adjusted for household size (s=0.5).



In order to complete the picture and offer some robust results, we have computed a battery of mobility indices. We report results on the Shorrocks-Prais M index (Shorrocks, 1978a), which is based on the previous decile transition matrices²². We also compute an index which is often associated with income or expenditure *volatility* and with the idea of *equality of opportunity*, the Hart index (Hart, 1976)²³. Finally, aiming to compare the effect on a variety of mobility aspects, we also calculate the Shorrocks R index of mobility (Shorrocks, 1978b) which measures the degree at which incomes or expenditures equalize as we increase the accounting period²⁴. For a more robust result, we

²²The index can be expressed as $M = \frac{n - tr(P)}{n - 1}$, where P is the transition matrix and n is the number of groups in which the distribution is divided (using deciles $n = 10$). The index has a limit value of 0 when there is complete immobility and has no fixed upper-limit. Note that, in any case, if there was *origin independence* the index should reach the value of 1 (households have equal probability of being situated anywhere in the distribution at the second moment).

²³The Hart index: $M_{HART} = 1 - \rho(\log x, \log y)$. Note that x is income or expenditure in the first period, y is income or expenditure in the second period and ρ is the Pearson's correlation coefficient.

²⁴The index can be expressed as $R = \frac{I(Y)}{\sum_k w_k I(Y_k)}$ being $w_k = \frac{\mu_k}{\mu}$, where $I(Y)$ is two-years income or expenditure inequality and $I(Y_k)$ with $k = 1, 2$ indicates annual inequality for each annual period. $I(Y_k)$ are weighted by the share of aggregate

calculate this index using four different inequality indices: Gini and three Indexes from the General Entropy family where the inequality aversion parameter takes the values of 0, 1 and 2 – GE(0), GE(1) and GE(2). In the presence of consumption smoothing, expenditures should clearly exhibit smaller values for these mobility indices than incomes. Results including bootstrap confidence intervals appear in Table 1. All indices confirm the previous results on instability and thus we find that, for our sample of Spanish households, mobility is significantly larger using expenditure than using income²⁵. Note here that if we were to use a different source of income data such as the European Community Household Panel (ECHP), in line with results obtained by Ayala and Sastre (2002) for the Hart index, income mobility would be higher. However, one cannot generally claim that income mobility in the ECHP is significantly higher than expenditure mobility in the ECPF. Results crucially depend on the index used and on the period chosen for comparison²⁶. Also, in line with what would be expected, non-durable expenditure is more stable than total expenditure, due to the infrequency of durables purchases.

incomes or expenditures received in each period. Note that since households in the pool were interviewed in different years, each household income or expenditure is constructed as relative to its *contemporary* average and not to the average across the *pool*.

²⁵We have checked the robustness of results to changes of the equivalence scale (the modified OECD scale versus the square root of household size) and our main conclusions hold. We also considered the possibility of variations in mobility over time and thus calculated mobility indices for two sub-periods (1985-89 and 1990-95). Results turned out to be remarkably similar for both samples.

²⁶One must keep in mind that the information on both datasets is, to a large extent, hardly comparable. Each survey is undertaken in different periods and, most importantly, is of a substantial different nature: the ECPF is a quarterly rotating panel survey in the line of standard datasets with information on income and consumption currently being exploited in the literature while the ECHP is a pure annual panel on incomes. Further, income variables in each dataset are obtained using a very different questionnaire structure and the imputation method used in the ECHP in order to deal with missing data may largely affect comparative results. This exercise was undertaken for the periods 93/94, 94/95 and 95/96 and results reported correspond to this last pair of years.

TABLE 1
Expenditure and Income mobility

INDICES	ECPF , pool sample											
	Expenditure			Non-durable Expenditure			Income			ECHP Income		
	Estimate	Confidence interval 95% Min	Max	Estimate	Confidence interval 95% Min	Max	Estimate	Confidence interval 95% Min	Max	Estimate	Confidence interval 95% Min	Max
Shorrocks-Prais M	0.738	0.725	0.751	0.717	0.705	0.729	0.585	0.572	0.597	0.668	0.653	0.686
Hart	0.230	0.211	0.256	0.187	0.166	0.220	0.123	0.105	0.147	0.193	0.177	0.212
Shorrocks (Gini)	0.042	0.039	0.044	0.034	0.032	0.036	0.024	0.022	0.026	0.047	0.043	0.052
Shorrocks (GE0)	0.083	0.078	0.088	0.070	0.066	0.074	0.052	0.048	0.057	0.121	0.111	0.133
Shorrocks (GE1)	0.089	0.083	0.094	0.073	0.068	0.079	0.050	0.045	0.055	0.098	0.089	0.109
Shorrocks (GE2)	0.106	0.096	0.121	0.087	0.077	0.105	0.056	0.048	0.068	0.097	0.087	0.109

Our results on income and expenditure instability in Spain could be driven by the age of individuals in the sample. In fact, Attanasio (1999) asserted that the life cycle hypothesis would basically hold for households headed by middle-age individuals. We have recalculated all previous mobility indices for groups defined by the head of household's age and constructed Table 2. Further, Figure 7 shows the ratio of non-durable expenditure to income mobility using Shorrocks' index R for three age groups. Results indicate that whatever the household's head age, mobility is larger using expenditure than using income. The difference is statistically significant in most cases. However, interestingly enough, this difference appears somewhat larger for households headed by an individual over 55 years of age than for those at an intermediate age. The case of young households is quite particular. Taking the Shorrocks index as a reference, one can observe that the divergence between income and consumption mobility is increasing with the degree of inequality aversion (20, 42 and 62 percent larger respectively for $GE(0)$, $GE(1)$ and $GE(2)$), that is, discrepancies between both well-being indicators tend to be larger at the top of the distribution of young households than at the bottom.

FIGURE 7
Shorrocks index mobility ratio: non-durable expenditure to income mobility (Spain 1985-95, pool sample)

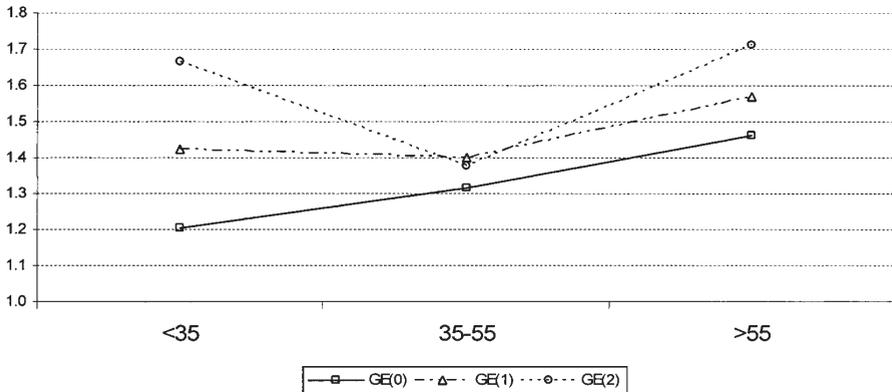


TABLE 2
Expenditure and Income mobility by head of household age:
1985-95 pool

INDICES	Expenditure			Non-durable Expenditure			Income		
	Estimate	Confidence interval (95%)		Estimate	Confidence interval (95%)		Estimate	Confidence interval (95%)	
		Min	Max		Min	Max		Min	Max
Head <35 years									
Shorrocks-Prais M	0.765	0.728	0.802	0.749	0.711	0.784	0.643	0.608	0.682
Hart	0.251	0.218	0.292	0.184	0.160	0.216	0.109	0.088	0.136
Shorrocks (Gini)	0.047	0.041	0.055	0.036	0.031	0.042	0.028	0.022	0.036
Shorrocks (GE0)	0.094	0.083	0.108	0.074	0.064	0.087	0.061	0.049	0.077
Shorrocks (GE1)	0.103	0.090	0.121	0.079	0.067	0.093	0.055	0.044	0.069
Shorrocks (GE2)	0.123	0.106	0.146	0.091	0.076	0.111	0.055	0.043	0.070
Head 35-55 years									
Shorrocks-Prais M	0.719	0.698	0.742	0.701	0.681	0.726	0.604	0.584	0.624
Hart	0.221	0.199	0.244	0.174	0.154	0.207	0.122	0.094	0.173
Shorrocks (Gini)	0.042	0.038	0.047	0.034	0.031	0.037	0.023	0.020	0.026
Shorrocks (GE0)	0.083	0.076	0.090	0.069	0.064	0.075	0.052	0.047	0.059
Shorrocks (GE1)	0.087	0.079	0.096	0.070	0.064	0.077	0.050	0.043	0.061
Shorrocks (GE2)	0.100	0.089	0.112	0.078	0.068	0.092	0.057	0.042	0.086
Head >55 years									
Shorrocks-Prais M	0.751	0.732	0.768	0.726	0.708	0.745	0.555	0.536	0.574
Hart	0.241	0.211	0.290	0.206	0.173	0.267	0.131	0.107	0.166
Shorrocks (Gini)	0.042	0.039	0.045	0.035	0.033	0.038	0.023	0.021	0.027
Shorrocks (GE0)	0.084	0.078	0.092	0.072	0.067	0.078	0.049	0.043	0.058
Shorrocks (GE1)	0.091	0.083	0.102	0.077	0.070	0.088	0.049	0.043	0.058
Shorrocks (GE2)	0.113	0.097	0.142	0.098	0.080	0.135	0.057	0.046	0.070

Mobility analysis becomes more relevant if we focus on the bottom of the distribution, especially when the poorest population is expected to be facing liquidity constraints. In order to discuss the implications of the choice of resource indicator on the analysis of poverty dynamics, we look at transitions both into and out of poverty using income, and expenditure. Results on exit and entry poverty rates (Table 3) show that the difference in choosing one or the other indicator is largely significant in poverty entry rates. Indeed, it is the chance that a non-poor household has of a transiting into poverty that is significantly lower using income compared to using expenditure while exit rates are roughly similar. This result is particularly striking given that the

group of potential entrants (the *vulnerable*), shown in Figure 4, is larger when using income. Despite that, and consistently with their larger persistence (see Figure 6), they are less likely to fall into poverty than those classified as *vulnerable* using expenditures.

TABLE 3
Rates of entry to and exit from poverty using income and expenditure:
Spain 1985-95, pool sample (in percentage)

	Observed	Confidence interval (95%)	
		min	max
Entry rate			
Expenditure	6.6	5.9	7.3
Non-durable Exp.	5.7	5.1	6.4
Income	3.6	3.1	4.2
Exit rate			
Expenditure	27.1	24.3	30.4
Non-durable Exp.	28.0	25.0	31.1
Income	28.9	25.7	32.1

We should note here that in this analysis the initial classification of households as poor or non-poor plays a fundamental role. We actually find that 86 percent of households are identically classified in either category using income or non-durable consumption expenditures. Therefore a 14 percent of households are classified differently. Note here that even if this percentage does not appear to be high out of the total sample, out of those that are potential movers into and out of poverty, approximately half would not be classified equally by the other indicator: a 56 percent of income poor would be non-poor using non-durable expenditure and 52.8 percent of non-durable expenditure poor would be non-poor using income. Thus, even if transition rates were similar, the composition of the group of movers into or out of poverty could be significantly different. This leads us to the most interesting issue here: it turns out to be important to try to discover the diverse socio-economic and demographic characteristics of households that actually move from poverty to non-poverty and vice versa when we are forced to use just one resource indicator.

For this purpose, and in order to provide a neater presentation, we will only show the results for income and for our best proxy to consumption: non-durable expenditures²⁷. We start with a descriptive analysis

²⁷We have recalculated all results using total expenditures and our conclusions do not change significantly.

constructing some statistics for the characteristics of the group of initial poor, or the *stock*, the leavers and the entrants, or the *flows*, for each variable in Table 4. Obviously here all results obtained for leavers and entrants are conditional on being previously classified within the poor or non-poor under each indicator. Under this caveat, income captures within the poor and moving into or out of poverty a significantly larger group of households with children and households headed by an unemployed. Expenditures, capture, instead, a relatively larger group of households headed by individuals over 65 years of age, retired and with low education. Thus, it is worth noting that differences between income and expenditure hold not only in the composition of the *stock* of poverty, but also in that of the *flows* into and out of it. Further, in all cases, results are strongly related to the head of household's age.

However, we are conscious that our results here could be largely biased by the initial classification of poor or non-poor and the correlation among characteristics. In order to reduce these effects we have run regressions for the probability of being poor, being a leaver or an entrant on a list of household characteristics. Results appear in Table 5.

Calculating the marginal probabilities of being classified as poor under each indicator provides interesting evidence. The regressions confirm the similarity of the characteristics found in the *stock* and the *flow* into poverty. Being unemployed or retired plays an important role in all regressions. The main difference between using an income or an expenditure indicator on the probability of being poor is the relative importance of the household head labor status. Indeed, the effect of being unemployed or retired on income poverty is twice the effect it has on expenditure poverty. Further, the choice of resource indicator makes a difference when identifying the characteristics of households transiting out of poverty. Using income, those households that manage to step over the poverty line most easily are couples below 65 years of age where both spouses are employed. Using expenditure poverty, those that manage to leave are older couples over 45 whose head holds a university degree. In this case the head or spouse's employment status plays no significant role.

TABLE 4
 Characteristics of head of poor households using different resource
 measurements: Income or non-durable Expenditure (in percentage)

	Initial poor			Leavers		Entrants	
	Population	Income	Non durable Exp.	Income	Non durable Exp.	Income	Non durable Exp.
Sex							
Female	18.6	31.0	28.9	22.5	27.7	25.5	27.3
Male	81.4	69.0	71.1	77.5	72.3	74.6	72.7
Age							
<35	14.6	14.2	11.3	17.3	13.4	17.4	13.7
35-44	19.3	14.7	13.0	18.3	13.7	16.5	12.8
45-54	19.4	14.9	11.3	20.1	17.6	14.5	15.1
55-64	21.0	19.9	18.6	20.7	18.7	24.6	20.3
≥65	25.8	36.2	45.9	23.6	36.6	27.1	38.2
Civil status							
No spouse	23.0	36.6	36.1	26.3	29.2	32.6	29.7
Spouse employed	16.9	7.3	7.4	13.4	9.1	8.9	10.0
Spouse not employed	60.2	56.1	56.5	60.3	61.7	58.6	60.3
Household type							
Lone or single parent household	3.9	7.7	5.3	8.4	6.2	7.3	8.1
Couple ≤2 children	35.2	24.1	21.1	29.5	27.0	30.9	27.9
Couple ≥3 children	7.9	11.8	9.9	15.5	10.8	10.2	7.1
Household without children	53.0	56.4	63.7	46.6	56.0	51.6	56.9
Township of residence							
<5000	16.0	24.7	27.8	24.5	23.9	21.6	25.4
5000-10000	9.1	11.7	14.2	11.5	12.3	12.3	12.2
10000-20000	9.3	10.5	10.1	14.0	10.8	11.0	8.8
20000-50000	11.1	11.2	11.4	10.4	14.4	13.8	14.7
50000-100000	11.1	9.0	7.6	9.9	6.9	5.3	9.6
100000-500000	21.9	18.3	18.4	17.1	19.4	21.3	13.0
>500000	21.5	14.7	10.4	12.7	12.3	14.7	16.2
Level of education							
illiterate	4.3	10.8	12.8	8.7	9.4	6.1	9.8
no studies	22.0	35.7	39.7	35.2	37.5	33.4	31.4
primary school	43.8	42.0	38.3	42.2	41.2	40.1	42.8
sec. school 1st cycle	10.9	6.5	5.2	7.0	4.9	12.2	9.1
sec. school 2nd cycle	10.3	3.5	2.4	5.0	3.2	4.5	5.2
3 year university degree	4.5	0.2	0.7	0.4	1.1	1.4	0.3
5 year university degree	4.3	1.3	0.9	1.6	2.8	2.4	1.3
Employment situation							
full-time employment	57.3	32.8	31.8	46.1	38.3	39.1	36.9
part-time employment	0.9	2.1	1.4	3.6	3.0	3.5	1.3
unemployed	4.5	10.2	6.5	10.7	8.6	11.1	7.5
retired	35.9	52.1	58.3	37.6	47.0	41.7	50.8
housework	0.6	1.5	1.0	1.4	1.1	1.8	1.1
other	0.8	1.4	1.0	0.6	2.0	2.8	2.5
Housing							
owner occupied	76.7	57.5	67.6	68.0	67.9	67.1	69.1
rent-free	5.7	7.4	8.0	5.3	7.1	6.8	4.5
subsidised	1.4	1.3	1.1	2.3	0.7	2.6	1.8
rented	16.3	33.8	23.4	24.4	24.3	23.6	24.6

TABLE 5
Marginal probabilities of being Poor and Moving into and out of Poverty: Income and Non-Durable Expenditure (estimated Probit models)

	Poor			Entry			Exit					
	Income dF/dx	P> z	Non-durable Expenditure dF/dx	P> z	Income dF/dx	P> z	Non-durable Expenditure dF/dx	P> z	Income dF/dx	P> z	Non-durable Expenditure dF/dx	P> z
<5000	0.13	0.00	0.16	0.00	0.03	0.00	0.06	0.00	-0.04	0.48	-0.01	0.83
5000-10000	0.08	0.00	0.13	0.00	0.03	0.00	0.04	0.00	-0.04	0.52	0.00	0.97
10000-20000	0.07	0.00	0.08	0.00	0.02	0.02	0.01	0.19	0.02	0.82	0.05	0.51
20000-50000	0.03	0.04	0.06	0.00	0.02	0.02	0.03	0.03	-0.06	0.35	0.10	0.25
50000-100000	0.02	0.32	0.03	0.10	-0.01	0.45	0.01	0.47	0.03	0.68	-0.04	0.59
100000-500000	0.02	0.11	0.06	0.00	0.01	0.07	0.00	0.89	0.00	0.97	0.00	0.98
lone-single parent hh	0.05	0.01	0.02	0.43	0.01	0.24	0.05	0.00	0.08	0.30	0.11	0.21
couple s2 children	0.03	0.00	0.02	0.14	0.02	0.01	0.01	0.18	-0.05	0.33	0.01	0.90
couple s3 children	0.17	0.00	0.10	0.00	0.05	0.00	0.02	0.07	0.23	0.00	0.00	0.97
spouse employed	-0.06	0.00	-0.06	0.00	-0.02	0.00	0.01	0.58	0.30	0.00	0.18	0.05
spouse not employed	-0.01	0.30	-0.03	0.03	-0.01	0.09	0.02	0.02	0.09	0.15	0.19	0.00
female	0.02	0.13	-0.01	0.64	0.00	0.82	0.03	0.01	-0.01	0.91	0.15	0.03
<35	0.08	0.00	0.09	0.09	0.03	0.01	0.02	0.02	-0.03	0.60	-0.10	0.11
35-<44	0.01	0.26	0.04	0.01	0.01	0.33	0.00	0.81	-0.04	0.51	-0.15	0.01
55-<65	-0.01	0.38	0.01	0.38	0.01	0.27	0.00	0.99	-0.07	0.21	-0.06	0.37
>65	-0.02	0.15	0.06	0.00	0.00	0.81	0.02	0.16	-0.11	0.08	-0.07	0.33
illiterate	0.05	0.00	0.06	0.00	0.00	0.88	0.04	0.00	0.01	0.82	-0.06	0.22
primary school	-0.05	0.00	-0.06	0.00	-0.01	0.00	-0.01	0.01	-0.05	0.16	0.05	0.20
sec. school 1st cycle	-0.07	0.00	-0.07	0.00	-0.01	0.07	-0.02	0.02	-0.09	0.23	-0.01	0.95
sec. school 2nd cycle	-0.08	0.00	-0.09	0.00	-0.02	0.00	-0.03	0.00	0.08	0.43	0.10	0.43
3 y. university degree	-0.09	0.00	-0.08	0.00	-0.02	0.00	-0.04	0.00	0.31	0.35	0.33	0.17
5 y. university degree	-0.08	0.00	-0.08	0.00	-0.02	0.01	-0.03	0.00	0.13	0.49	0.67	0.00
part-time employment	0.21	0.00	0.08	0.06	0.12	0.00	0.03	0.37	0.08	0.18	0.24	0.18
unemployed	0.24	0.00	0.12	0.00	0.09	0.00	0.07	0.00	-0.11	0.02	0.02	0.79
retired	0.11	0.00	0.05	0.00	0.02	0.00	0.03	0.00	-0.16	0.00	-0.11	0.06
housework	0.19	0.00	0.06	0.26	0.11	0.02	0.04	0.35	-0.02	0.92	0.03	0.89
other	0.19	0.00	0.08	0.18	0.12	0.00	0.21	0.00	-0.22	0.07	0.02	0.91
rent-free	0.08	0.00	0.08	0.00	0.02	0.09	0.00	0.95	-0.16	0.00	-0.09	0.12
subsidised	0.03	0.45	0.00	0.96	0.03	0.14	0.03	0.29	0.15	0.30	-0.13	0.37
rented	0.21	0.00	0.10	0.00	0.04	0.00	0.04	0.00	-0.13	0.00	0.00	0.96
Pseudo R ²	0.204		0.173		0.133		0.123		0.124		0.101	
Log pseudolikelihood	-2.330		-2.315		-881		-1.255		-504		-508	
Number observations	7,481		7,481		6,524		6,527		957		954	

a) Reference: Male, between 45-54 years old, without spouse, without children, with no studies, living in his own home in a city with more than 500 thousands inhabitants, full-time employed. b) Dummies for date at the 4th interview have been included in each regression.

As expected, the characteristics that increase the probability of a transition into poverty are fairly similar to those that increase the probability of *being* within the poor. However, the characteristics increasing the probability of transition out of poverty are somewhat different. The level of education of the household head is an extremely important determinant of both poverty and the probability of stepping into it, but not of leaving it, whatever resource indicator we use. A similar result is obtained for having a head of households below 35 years of age or living in a small township. In the case of expenditure, however, there are some differences between the characteristics that promote an entry and those that increase the probability of being within the poor. In fact, lone and single parenthood and the lack of employment of the spouse are only relevant in pushing the probability of entering poverty upwards.

5. Conclusions

In this paper we have analyzed the effects of the choice of welfare indicator on the empirical analysis of the income distribution, with a special focus on its dynamics. With that purpose in mind we undertook the analysis using a longitudinal survey: The Spanish *Encuesta Continua de Presupuestos Familiares* (ECPF) a data source that allows for the reconstruction of the household's complete picture on incomes and expenditures over a period of two years.

Our results show that for Spanish households, the levels of inequality and poverty are not substantially different when using income or consumption expenditures. By plotting both distributions we find that some differences can be found when analyzing the complete income and expenditure distribution: income non-poor are more concentrated just above the poverty line than expenditure non-poor, making results using income most sensitive to movements of the poverty line upwards. Additionally, a larger share of households would be considered as *vulnerable* to poverty using income respect to using expenditures.

A relevant part of the contribution of this work has been also that of adding evidence on the effects of using expenditures as a proxy to consumption for the analysis of intra-distributional mobility and poverty dynamics. Interestingly, and contrary to what one could expect, household incomes register less mobility than household expenditures. This result is confirmed by a large battery of mobility indices and seems to be robust to different head of household's age, implying that the

life cycle is not decisively driving our results. In relation with poverty dynamics, results seem to suggest that the main difference in using income or expenditure is the different entry rates into poverty. The use of expenditures increases the poverty entry rate significantly respect to using income while exit rates are roughly similar. Interestingly, those income non-poor households that could be considered as *vulnerable* because of their short distance to the poverty line, despite being substantially larger in size, exhibit a lower risk of falling in poverty than those who are classified as *vulnerable* using expenditure.

Finally we have evaluated whether or not the composition of the *stock* of poverty and the *flows* into and out of it are altered by the choice of indicator. Results appear to suggest that the age of the household head makes the difference between them, not only for those classified as poor in a given year, but also for poverty transitions. While the role of age in poverty statics is preserved, once we condition on all characteristics this is not the case regarding poverty transitions. In the case of poverty entries, determinants are roughly similar, while in the case of poverty exits the main differences between both indicators come from the larger relevance of household members' employment status when using income.

The main finding of this paper is that, for Spanish household data, the use of income for analyzing well-being distributional dynamics would not imply overstating mobility compared to the use of consumption expenditures. Our evidence appears to be mostly consistent with the existence of liquidity constraints as well as with other factors that may explain why expenditures are not sufficiently smoothed.

In any case, we should underline that we do not claim for the life cycle or the permanent income hypothesis to be false. In fact, we are aware that both, underreporting of most irregular incomes and the lack of a good estimation for durables' service flows, might be driving our empirical results. Rather, we would like to claim that whenever a researcher has to choose between these two indicators of well-being, it is not straightforward that expenditure is empirically *superior* to income. In the cases where the researcher has no choice, we hope to offer here a deep analysis of the potential biases of the use of one or the other indicator. Whether our results are Spanish-specific or not remains an open question for future research.

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Resumen

En la literatura económica se ha discutido en numerosas ocasiones sobre cuál es el mejor indicador para medir el nivel de bienestar de los individuos: la renta o el consumo. Las implicaciones de elegir una u otra variable no se circunscriben sólo al ámbito teórico sino que se muestran extraordinariamente relevantes en el análisis empírico. Hasta el momento, el debate se ha ocupado de cuantificar sus efectos a partir de estudios distributivos estáticos, pero no ha ofrecido evidencia relacionada con la movilidad de rentas o la pobreza medida en términos dinámicos. En este artículo discutimos las debilidades y fortalezas de ambos indicadores y mostramos las consecuencias de elegir uno u otro atendiendo a la dinámica de su distribución, presentando evidencia empírica para el caso español a partir de una encuesta longitudinal rotatoria, la Encuesta Continua de Presupuestos Familiares, que incluye ambas variables.

Palabras clave: Distribución de la renta, gasto, análisis de sensibilidad, movilidad, pobreza dinámica, España.

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