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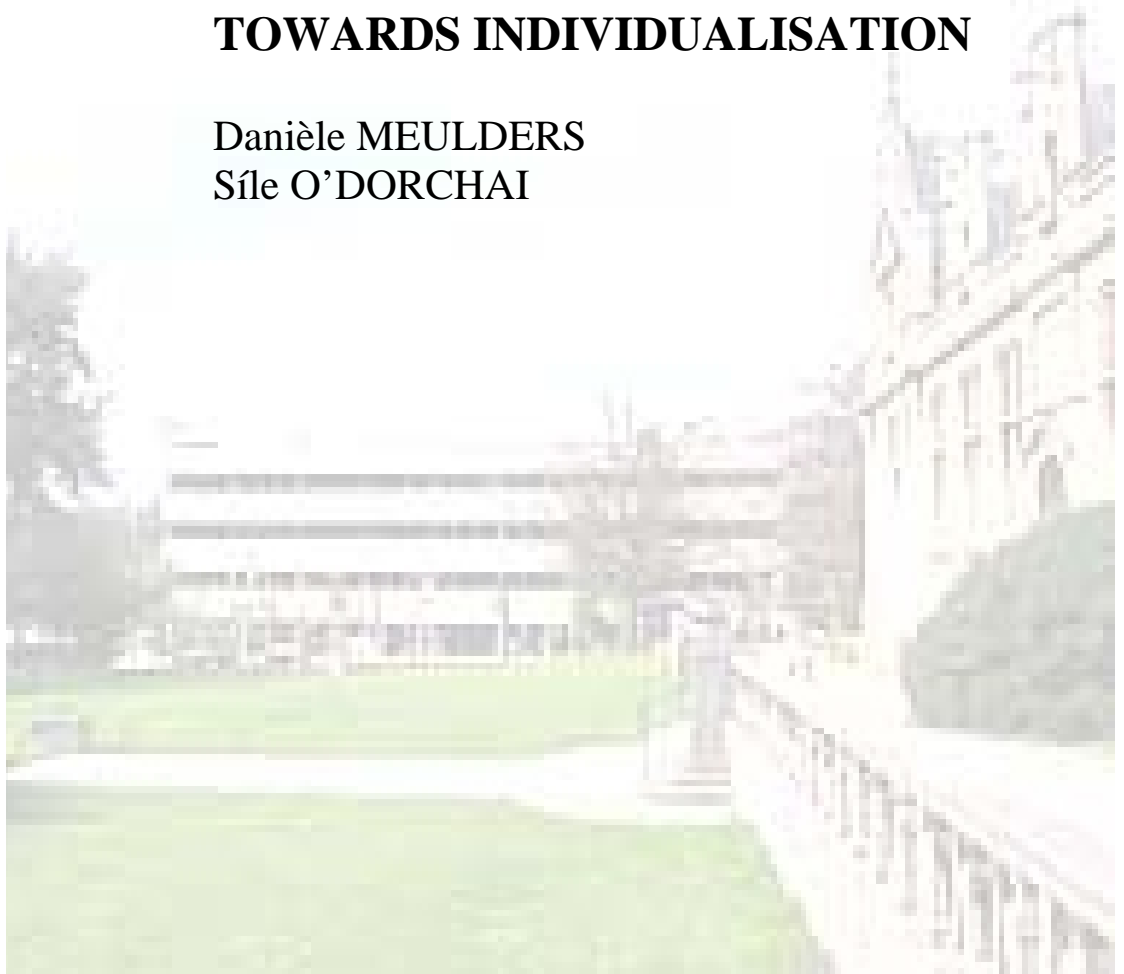
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**REVISITING POVERTY MEASURES
TOWARDS INDIVIDUALISATION**

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“Revisiting poverty measures towards individualisation”¹

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Abstract

We use the methodology developed in a previous study to individualise all incomes reported in the EU Statistics on Income and Living Conditions (2006)². Based on individual incomes we compute financial dependency rates which are compared with the household-level at-risk-of-poverty rates defined by the EC. The determinants of financial dependency are studied by means of descriptive statistics and by the estimation of bivariate probit regressions for men and women. We cover nine European countries. Finally, four new indicators are proposed to complement the Laeken indicators.

JEL codes: C21, I32, J16

Keywords: poverty, gender inequality, individual income, household economics, indicators

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² Reference omitted for anonymity reasons.

Introduction

After many decades of poverty research, mapping women's economic well-being is still in an embryonic phase. The risk of poverty is measured at the household level assuming that income is equitably shared between its members. The main object of this paper is to drop this sharing assumption and to measure poverty based on the level of purely individual income. Parallel to household-based at-risk-of-poverty rates we thus come to define a new individual measure of "financial dependency".

We start off by reviewing the existing poverty literature insisting on its gender dimension (or lack of it). This overview also serves to highlight the very innovative character of the present paper. Its numerous contributions to the existing literature are presented in section 2. Our data, sample and methodology are successively detailed throughout sections 3-5. The descriptive statistics in section 6 serve as valuable background information to interpret the probit results in section 7. In section 8, we take on a more policy-oriented stand. Indeed, the findings of the present analysis suggest many ways in which the current policy mix to fight poverty could be improved. We summarise these policy implications in a proposal of four new indicators to be added to the Laeken indicators. Finally, a conclusion picks up the major findings and lessons to be learned from the present analysis.

1. Review of the literature

Poverty research has a longstanding history but has so far failed to come up with an accurate measure of women's well-being. The earliest conceptualisations and measures of poverty based on GDP failed to allow for meaningful cross-country comparisons and, more importantly, were entirely gender-blind (Waring 1989). Measurement of incomes was thus turned to in order to solve these problems. Across the OECD at least, income measures continue to be the best tool to accurately measure poverty and inequality (Briar 2000). Indeed, in OECD countries men and women usually rely on a cash income to cover their

primary needs. However, the gender-sensitivity of income measures varies widely and leads to women's poverty being systematically understated. This is at least partly linked with the absence of large-scale data collections on personal incomes of partnered women, especially when unemployed or inactive (e.g. ELFS, LIS), because of the still powerful hypothesis that women receive a full share of household income. In the 1990s, research to understand and measure poverty proliferated in type and number: Genuine Progress Indicators, the United Nations Human Development Index, the emergence of the concepts of social exclusion and time poverty and the analysis of the link between poverty and health status. However, income data despite their numerous flaws remain one of the most useful ways to map women's poverty and gender inequalities.

Traditional poverty research was built around the convenient device of the "household utility function", as it was developed in Becker's early work (1974, 1981). Poverty measures were thus based on the resources of family units which are assumed to share these equitably between their members. This implies that each family member has the same poverty status. Adoption of the household as the unit of analysis thus became standard practice although some studies, mainly in the UK literature, applied a narrower unit in terms of blood or marital relationship, or of dependence. As Atkinson and Micklewright (1992) point out, social assistance in Britain refers to the inner family rather than the household. The inner family excludes any grown-up children or other relatives in the household. In 1988, the inner family unit was replaced by that of the household to compute the number of "low-income families" in Britain. The adoption of this wider unit led to a decrease in measured poverty. This illustrates to what point poverty measures are sensitive to the choice of the unit of reference.

Over the years both feminist and mainstream economists have expressed increasing dissatisfaction with some of the poverty measures in common use. Much of the mainstream criticism of poverty measures has focused on the resource side, contending, for example, that in-kind benefits such as housing or other subsidies should be counted as income. Feminist economists, on the other hand, have stressed the inadequacy of the poverty thresholds themselves (Ruggles 1990, Renwick and Bergmann 1993). In addition, many

feminist economists contend that the poverty of women may be understated when it is assumed that income is shared equally within families (Folbre 1986, Kabeer 1994, Woolley and Marshall 1994, Nelson 1996). As Cantillon and Nolan (2001) point out: “A *major objection that feminist economics raises to traditional neoclassical theory is that it neglects what goes on within families.*” In the empirical economic literature, a shift is observed from the family unit as the basis of models of household behaviour (rejection of Becker’s unitary approach) towards the individuals composing the household and interacting cooperatively or not (bargaining theory) (Chiappori, 1988, 1992, 1997; Bourguignon and Chiappori, 1992; Browning et alii, 1994; Browning and Chiappori, 1998, Purkayastha 1999, Kooreman and Kapteyn, 1987; Schultz, 1990; Lundberg et alii, 1997; Fortin and Lacroix, 1997, Manser and Brown, 1980; Horney and McElroy, 1981, 1988; Lundberg and Pollak, 1993, 1996). There is also substantial sociological evidence that access to resources within families is unequal. Graham (1987) showed that most women found themselves better off after a divorce despite the sharp reduction such a rupture entailed in terms of total (household) resources precisely because they felt they had more control over what was left. This shift in approach has particularly strong consequences for the analysis of poverty. Again we agree with Cantillon and Nolan (2001): “*Conventional methods analyzing poverty and income inequality take the household as the income recipient unit, and assume resources are shared so that each individual in a given household has the same standard of living. If different individuals within the household are likely to experience different levels of well-being, this could have major implications for our understanding of poverty and for the way anti-poverty policies are framed...In particular, conventional practice could lead to the extent and nature of gender differences in the experience of poverty being understated, and to the capacity of policy to improve living standards being seriously impaired.*” A study by Sutherland (1997) explored the implications of examining the effect of policy changes (the impact of a minimum wage and the effect of introducing a minimum pension guarantee) on individual (and gender-specific) rather than household incomes. She found that the distributional impact of policy options is very different when analysed at the individual and household levels. As the bottom

of the individual distribution is dominated by women, a policy measure designed to reach the low-paid in fact benefits also women in the middle of the female distribution. In other words, even low-paid part-time workers count as relatively well off when compared with women as a whole. In sum, the policy importance of these findings requires that intra-household sharing patterns be further investigated by economists, sociologists and others.

The gendered nature of poverty is not a new concept. Especially US poverty research starting with the sociological works of Pearce (1978) has revealed women to be much more likely to be poor than men (Ehrenreich and Piven 1984, Pressman 1988, McLanahan, Sorenson and Watson 1989). Sarvasy and Van Allen (1984) drew attention to the significant race and class differences among American women claiming that poverty analysts who neglect these differences by focusing narrowly on gender can at most dress a distorted picture of women's poverty in the US. Sparr (1984) and Malveaux (1985) in turn showed that women's poverty has a longstanding history and cannot be regarded as a recent phenomenon. Finally, Folbre (1984) identified a subgroup of women with an even higher poverty risk, namely mothers, and thus introduced a new concept within the literature on the feminization of poverty, that of the pauperization of motherhood. Although originally very American, research on the feminization of poverty spread to the rest of the developed world over time (Goldberg and Kremen 1987, Casper, McLanahan and Garfinkel 1994, Pressman 2002).

This literature puts forth much less agreement with respect to the causes of the feminization of poverty: demographic factors, human capital, income distribution effects of fiscal policy, household structure, occupational sex segregation, and so forth.

However, in the literature on the feminization of poverty, the issue at stake is the disproportionate number of poor households that are female-headed or the disproportionate number of women in poor households. However, it is household income that serves as the basis to determine the individual poverty status. As mentioned earlier, another problem concerns exactly this assumption of equal sharing of resources within households. Indeed, many feminist economists contend that the poverty of women may be understated when it is

assumed that income is shared equally within families (Folbre 1986, Kabeer 1994, Woolley and Marshall 1994, Nelson 1996). In an important contribution Phipps and Burton (1995) showed that making different assumptions about the extent of income pooling and the existence of 'public goods' within families leads to large differences in the measured amount of individual poverty in Canada. Similar studies covering the UK or Canada were carried out by Borooah and McKee (1994) and Davies and Joshi (1994). Findlay and Wright (1996) also showed with data from the USA and Italy that if intra-household inequality exists, poverty among women is likely to be seriously underestimated.

The question is then how resources are actually distributed amongst household members and consequently how different at-risk-of-poverty rates are within households? Empirical studies have shed light on these questions from different angles. A first approach is to analyse the management of income and expenses within households. The way this is done depends on the power relations between partners, on how they share decision-making responsibilities and on the tax/benefit system (Pahl 1980, 1983, 1989, Vogler 1989, Vogler and Pahl 1993, 1994, Woolley and Marshall 1994). A second approach has bowed over households' expenditure patterns on different types of commodities to detect the gender dimension (Browning, Bourguignon, Chiappori and Lechene 1994). A third approach investigated the extent of income pooling and its sensitivity to changes in the tax/benefit system (Lundberg, Pollak and Wales 1997). An entirely novel methodology has been deployed in the present analysis.

2. Contributions of the present paper

The present paper suggests a fourth approach towards individualising at-risk-of-poverty rates that is entirely innovative in that the existing literature to our knowledge contains no similar studies. Our approach involves evaluating at-risk-of-poverty-rates at the individual rather than at the household level. Indeed, instead of resorting to equivalence scales, financial resources in the broadest sense are fully individualised so that it becomes possible to compute the real

risk of poverty for each individual regardless his or her family configuration. The method used to individualise all financial resources that enter the household tables on a preview of the kind of resource division that would occur in case the household were to dissolve. This same idea has been behind the decision to introduce a new concept, that of “financial dependency” rather than “individual at-risk-of-poverty rate”. Previous attempts towards individualising the measurement of poverty have either focused solely on singles thus entirely evading the difficulties associated with the unknown form in which resources are shared within couples (with or without children) or have considered only individually received income sources such as wages to compute at-risk-of-poverty rates thus ignoring important sources of income that are imputed at the household level (Rake and Daly 2002). The hypothesis underlying the analysis presented in the present paper is at the very opposite of the hypothesis guiding the computation of conventional at-risk-of-poverty rates. Indeed, instead of equal resource sharing within households we assume that no sharing at all takes place. We compute the income of which each individual would dispose freely were he or she suddenly to be left on his/her own.

Several considerations underline the importance of the analysis presented in this paper. Firstly, income is a key factor of our society: it is both the source and consequence of individuals’ social position. Gender differences as regards income are thus at the heart of more general gender inequalities.

Secondly, the analysis of households’ at-risk-of-poverty rate gives valuable insight into the current state of affairs but fails to inform about the precariousness of each of the household’s members’ situation were it to dissolve. However, within an overarching context of a destabilising household model, this latter aspect is of utmost importance. Currently available statistical information fails to sufficiently assess the correlation between income, or personal access to income, and life’s hazards. For example, the “cost” of children, in the sense of the loss of income they entail both in the short and the long run, is unequally borne by women. Another example, the high at-risk-of-poverty rates of elderly women living as singles are directly related to gender inequalities in the constitution of pension rights.

Thirdly, an equal division of income within the household is in fact an abstract notion, not a real-life fact. Indeed, the process of income allocation and the differences in consumption level and behaviour within households are too frequently ignored. As a result, an in-depth gender and income analysis should also include an assessment of gender inequalities in access to financial resources and in the allocation of financial responsibilities within the family.

For all these reasons, the present analysis will substantially contribute to the literature and more importantly to an efficient design of anti-poverty policies.

3. Data

The method used in this paper is applied to EU-SILC 2006 data. The European Statistics on Income and Living Conditions (EU-SILC) are the successor of the European Community Household Panel (ECHP).

The ECHP was a pioneering data collection instrument. It was launched in 1994 but expired in 2001. In the meantime, the EU was enlarged from 15 to 25 member states (and in 2007 to 27 member states). In line with this geographical change, the ECHP was replaced with a new data collection process, the EU-SILC (Statistics on Income and Living Conditions), the first wave of which, 2003, covered seven countries of which six member states (Belgium, Denmark, Greece, Ireland, Luxembourg and Austria) and Norway. The 2004 wave included 14 countries, the 2003 ones plus France, Spain, Italy, Portugal, Finland, Sweden and Estonia. As of 2005 EU-SILC data cover 27 countries, the EU-25 and Iceland and Norway. EU-SILC is now the reference source of statistics on income and social exclusion in the European Union.

It covers only private households, not collective households or people in institutions. Also persons without a fixed place of residence are left out.

Each annual wave contains two types of data:

- Cross-sectional yearly data on income, poverty and social exclusion;

- Longitudinal data for a subset of variables covering 4-year periods.

In this paper only the cross-sectional data were used.

4. Sample

In 2006, EU-SILC provided information on 530 000 individuals of 26 countries³. In this paper we consider all adults above 24 years of age as well as individuals between 18 and 24 years of age who are active on the labour market (i.e. employed or actively looking for a job). In order to compute a net income for each individual person in the sample, it is necessary to measure the amount of taxes on income and social contributions due by the individual. To assess the tax burden all income components need to be systematically available both as gross and as net amounts. In the EU-SILC 2006, this failed to be the case in 17 countries. As a consequence, we obtained a sample of 133 071 individuals spread over 9 countries (Austria, Belgium, Spain, France, Ireland, Luxembourg, Poland, Sweden and the United Kingdom). Sample sizes vary considerably across countries between 7072 adults in Luxembourg and 30332 adult Poles. These final country samples remain representative of the respective populations.

5. Methodology

The detailed description of the methodology of the first stage of this research relative to the computation of individual net incomes is available as a technical note at <http://bgia.ulb.ac.be/>.

To compute strictly individual incomes we relied on the definition established by the Canberra Expert Group in 2001. We did nevertheless introduce some changes concerning public transfers and the definition of gross and net income amounts. We were also guided by

³ For Malta, no information on income is available.

the study of the correspondences between the works of the Canberra Expert Group and the EU-SILC database by Van der Laan (2006). Finally, the recommendation by Atkinson et al. (2007) not to enter into account imputed rents was respected. However, we did not follow these authors in the treatment of negative incomes. In our study negative incomes are not put to zero but are treated as such.

Individualising income implied that certain household-level income categories needed to be shared between the household members. To do so we worked according to a number of hypotheses that are fully described in the technical note. The income posts concerned are:

- income from rental of a property or land;
- interests, dividends, and profits from capital investments in unincorporated businesses;
- regular inter-household cash transfers paid and received;
- family-/child-related allowances;
- tax on income and social contributions.

In a second stage financial dependency rates were computed fixing the poverty threshold at 60% of the median disposable individual income of the country's population.

In a third stage we have estimated bivariate probit models for each of the nine countries in our sample to estimate the effect of various observable individual characteristics on the probability of being financially dependent of men and women separately. Such methodology is common in the literature on poverty (e.g. Nillson 2005, Szulc 2006).

The dependent variable is dichotomous, it equals 1 if individual income is below 60% of the median of individual disposable income and 0 in the opposite case.

The independent variables include age (4 categories : <30 years, 30-49 years, 50-59 years and +60 years of age), activity status (5 categories : full-time work, part-time work, unemployment, retirement, other form of inactivity), education (3 categories : lower

secondary at most, upper secondary, and tertiary education), household type (10 categories: single person; two adults younger than 65 years without dependent children; two adults, at least one aged 65 years and over, without dependent children; three or more adults without dependent children; single parent with dependent children; two adults with one dependent child; two adults with two dependent children; two adults with 3+ dependent children; three or more adults with dependent children; others), and finally, nationality (3 categories: nationals, EU-citizens, and non-EU citizens). These variables are traditionally used in the analysis of poverty and social exclusion (cfr. Jenkins and Rigg 2001, Piachaud 2002, Bardone and Guio 2005). The reference case is a prime-age national, working full-time, having a degree of tertiary education (university-type or other) and living in a couple without children where both partners are aged under 65.

The estimated coefficients of this model report the marginal effects of each independent variable separately on the likelihood of financial dependency holding all other characteristics constant. Table 2 presents the marginal effects of all independent variables in comparison with the reference case. We will discuss these results in section 7 after having discussed the descriptive statistics.

6. Descriptive statistics

Table 1 presents financial dependency rates according to different individual characteristics. In all nine countries, women's financial dependency rate by far exceeds men's. The gap is largest in Luxembourg (34.5 percentage points) and Spain (34.2 percentage points) and smallest in Poland (7.4 percentage points) and Sweden (6 percentage points). It is worth commenting on Poland as the only new EU member state. In his empirical cross-country comparison of earnings, Lydall (1968) already showed Poland to be in the group of Western countries with less inequality, alongside Denmark and Sweden. Atkinson and Micklewright (1991) updated the analysis by Lydall (1968) and showed that in the latter part of the 1980s,

the degree of dispersion in earnings was not very different from that described by Lydall (1968). Watson (2000) argues that the governments in communist countries strove for equality and took measures to diminish income inequality between men and women. Moreover, with the transition to a free market economy attaining cruising speed in Poland, economic growth has been booming. As shown by Wiepking and Maas (2005), women's poverty risks are smaller in countries with strong economic growth. In absolute terms, men's financial dependency rate varies between 8.7% in Luxembourg and 20.8% in Poland whereas women's rate varies at a considerably higher level between 19.5% in Sweden and 48.7% in Spain.

Figure 1 illustrates the huge consequences of dropping the hypothesis that income is shared within households, especially for women. Recall that the EU defines the at-risk-of-poverty rate as the proportion of people living in households with an equivalent disposable income below 60% of the equivalent median income in the country of residence. Parallel to this definition we defined a financial dependency rate as the proportion of individuals with an individual disposable income below 60% of the median individual income in the country of residence. Men's financial dependency and poverty rates are generally pretty similar but for women, the former by far exceed the latter. In all countries but Poland and the UK, women's financial dependency rate is twice to three times higher than their at-risk-of-poverty rate. This indicates that many women would indeed be poor if they could not rely on a share of household income. Our results are thus entirely in line with Rake and Daly (2002): *"Measuring household income and calculating poverty rates at the household level implies that incomes are shared equally within households. Where such sharing does not occur, it is women who are most likely to be affected, since they command lower incomes on average. Hence, this methodological practice tends to overstate women's access to income (and understate their poverty rates)"* (Rake and Daly 2002, appendix p.3).

« place Figure 1 here »

In all of the countries, full-time work is associated with the lowest financial dependency levels for both men and women although even amongst full-timers a significant gender gap remains, except for Ireland, Sweden and the UK. This finding is in line with the study by Wiepking and Maas (2005) on gender differences in poverty from a cross-national perspective. These authors review the results of four comparative studies besides their own and show that Ireland and Sweden are generally characterised by very small gender differences or even differences in favour of women. Concerning the UK, women are a bit - but only a bit - more likely to live in low-income households than men and the gap has narrowed considerably in recent years⁴. Moreover, in Ireland and the United Kingdom, being at work reduces the risk of poverty by two thirds or more (Bardone and Guio 2005). In Ireland, the difference between the total poverty rate and the in-work poverty rate is mainly explained by the high incidence of poverty risk for the non-employed groups (54% for the unemployed, 39% for the retired and 33% for the other inactive) and their respective shares in the total adult population (Bardone and Guio 2005). Part-time work obviously does not procure the same level of protection against financial dependency. More precisely, financial dependency rates of female part-timers vary between 14.5% in Sweden and Belgium and 44.5% in Spain. For male part-timers the rates range from 11.8% in Belgium to 37.5% in Poland. Living on an old-age pension is even worse than on a part-time wage in most countries. Moreover, the insufficiency of female pensions in particular is illustrated by the fact that retirement has a much more marked effect on their financial dependency than it is the case for men. Finally, the worst activity statuses with respect to financial dependency are unemployment and inactivity (other than retirement). In the latter case, female financial dependency rates increase up to 88.2% in Spain and men's up to 75.7% in Austria.

A very gendered pattern is revealed when financial dependency is analysed for different age groups. Indeed, whereas men are most vulnerable when they are under 30 years of age,

⁴ <http://www.poverty.org.uk/summary/gender.htm>

their financial dependency rate shows much more constancy over higher ages than does women's. Young women just like men have very high financial dependency levels. These rates decrease in the most active age groups but then unlike for men, for women the figures show a very pronounced negative retirement impact. As of the age of 60, women's financial dependency rate increases substantially in most countries with the exception of Poland and Austria.

Financial dependency is also strongly affected by the type of household to which the individual belongs. The presence of children lowers financial dependency for both women and men. This may have different explanations. A first one relates to our methodology. Indeed, although the measure of individual income used incorporates child-related allowances and benefits, we do not take into account the additional cost children impose on their parents' budget. Secondly, research into the issue of maternity postponement has shown there to be a certain sequence in the implementation of the fertility/work decision in practice: women first enter the labour market and try to obtain a solid, secure and stable position before they start realising their fertility plans (Gustafsson et al. 2002, 2003). This sequence is based upon women's aspiration to first establish a firm and stable financial safety net, not only for themselves, but also to guarantee that their children get the best possible early childhood conditions. More than children, individuals' cohabitation status influences their financial dependency rate. Indeed, financial dependency is systematically higher for coupled than for single people. This is contrary to the fact that lone parents are one of the groups most vulnerable to poverty. However, recall that poverty research is based on the analysis of conventional household-based at-risk-of-poverty rates that assume income is shared within households. Dropping this assumption as it is done in the present paper reveals that there are many coupled individuals, mainly women, whose financial dependency is higher than that of singles. In other words, there are many individuals, mainly women, living in couples who rely on the share of household income that is imputed to them in conventional poverty analysis in order to escape poverty. Once they are to rely on their

proper individual income, as in the present study, it appears that this income is insufficient so that they fall into financial dependency.

Education is also set forth as a major player to reduce financial dependency. As the level of education increases, financial dependency weakens. There is no clear gender pattern in the descriptive statistics but we will see further on (section 7) that when other characteristics are held constant, education is more effective to reduce women's financial dependency rate as compared with its effect on men's dependency levels.

Finally, nationality appears to be an important determinant of financial dependency. Nationals are always far less likely to be financially dependent than non-nationals. Moreover, non-EU citizens are worse off than non-nationals from other EU member states.

“place Table 1 here”

7. Results

As explained above, we estimated a bivariate probit model to measure the marginal effect of a series of observed individual characteristics on the risk of being financially dependent. Recall that the dependent variable is dichotomous, it equals 1 if net individual disposable income is below 60% of the median of individual income and 0 in the opposite case. All estimations were done separately for men and women and for each of the nine countries in our sample. However, as a way of introducing this gender analysis, we first estimated the effect of the sex variable only on the probability of financial dependency. The model was thus run on the entire sample of men and women including just sex as an independent variable. As shown in Table 2, being a man substantially reduces the risk of financial dependency in all countries. In Luxembourg and Spain, the sex effect is largest, being a man reduces the dependency risk by 34-35%. It is weakest in Sweden (-6%) and Poland (-7%). If observable characteristics other than sex are kept constant then being a man has a smaller impact on the probability of being financially dependent but the sign remains negative. In this case, the dependency risk is reduced by between 4% in Sweden and 19% in Belgium.

The results of the sex-specific estimations yield some more interesting results. The reference case is a prime-age national, working full-time, having a degree of tertiary education (university-type or other) and living in a couple without children where both partners are aged under 65.

Active labour market participation is the most effective way to avoid financial dependency. Indeed, Table 2 shows that in all countries for women as well as for men having an activity status other than full-time work increases the risk of financial dependency (the signs of the estimated coefficients are systematically positive). For women, working part-time rather than full-time increases their probability of financial dependency by between 9% in Sweden and 50% in Ireland. For men, the risk increase ranges between 10% in Austria and Luxembourg

and 32% in France. In some countries the negative impact of part-time exceeds that of being retired whereas it is the opposite in others. Also effects are different between the sexes. For women, retirement increases their dependency risk even more than part-time work in all countries but Austria, France and particularly Poland. In the UK, Ireland and Luxembourg, retired women have a financial dependency risk that is more than 60% above that of full-time working women. There are just three countries in which retirement has a pronounced impact on men's financial dependency, the UK and Ireland but also Belgium. The worst situations are those of the unemployed and the inactive (other than the retired). Regarding the effect of unemployment, there are only small gender differences. On average, unemployment (as compared with full-time work) increases the probability of financial dependency by more than 55% (a few exceptions aside). On the contrary, huge gender differences characterise the effect of being inactive on the dependency risk. The increase in the risk associated with this activity status ranges between 42% in Sweden and 84% Luxembourg for women but at a lower level, between 24% in Poland and 68% in Austria and Ireland, for men.

Activity status is obviously closely linked to age. In general, financial dependency tends to be lowest in the middle age group thanks to more active labour market participation and greater human capital accumulation. At the outset we would thus expect the risk of financial dependency to first decrease with age and then as of the retirement age to increase again. The results confirm at least the first part of this expectation. Indeed, compared with the reference group of 30-49 year olds young men and women have a greater risk of being financially dependent. Signs are positive and marginal effects highly significant in all countries (except for Irish women). The increase in the probability of financial dependency that is associated with this young age is generally rather small, 10% at most, in most countries (except for women in Luxembourg and men in Ireland). However, in Sweden women under thirty years of age have a 32% higher risk than those aged 30-49 and for men the increase amounts to 16%. Contrary to what we expected at the outset, when age rises above 50 the marginal impact on financial dependency is generally negative and there is no

pronounced inversion of signs at the level of the retirement age (except for Belgian women). In Ireland and in the UK, women aged 50-59 have a slightly greater risk of being financially dependent compared with the reference group of 30-49 year olds. The commonly observed scenario is that of an ever more decreased risk of financial dependency as age increases over and above 50. The lesser degree of statistical significance of the estimated marginal effects of age is probably due to the fact that these effects are to a great extent absorbed by the impact of the activity status.

The estimated marginal impact of the level of education on financial dependency is straightforward across all countries. Any level of education below tertiary leads to increase the risk of financial dependency. Results put forth pronounced gender differences. Indeed, having a lower level of education is much more penalising for women than it is for men. Indeed, for women whose highest degree is in lower secondary education the risk of financial dependency increases by between 11% in Ireland and 32% in Luxembourg as compared with tertiary educated women. For men this increase is in the lower range of between 2% in Belgium and 21% in Poland. Women having at most a degree in upper secondary education are between 3% (Sweden) and 22% (Luxembourg) more likely to be financially dependent than the tertiary educated. For men again the increase is smaller, between 1% in Sweden, Austria and Luxembourg and 8% in Poland.

The probit results confirm the effects by household type that were put forth by the descriptive statistics. Having children generally reduces the risk of financial dependency. This result is not confirmed for women in Spain, Poland and the UK who if they are mothers see their dependency risk increase. On the contrary, persons in households with more than two adults have a greater probability of being financially dependent. Also the astonishing fact that singles with or without children are less likely to be financially dependent is confirmed by the results of Table 2 (except for single men in Spain and Sweden). We explained this by the fact that when the within-household income sharing assumption is dropped as it is done in the

present paper, there appear to be many individuals, mainly women, living in couples who rely on the share of household income that is imputed to them in order to escape poverty. When they have to rely on their own individual income they fall into financial dependency. In gender terms, the results in Table 2 show that household type is a more decisive factor in women's financial dependency than it is in men's. Not only are the estimated coefficients more highly statistically significant for women but in absolute value the marginal effects are also greater.

Unfortunately, nationality also plays a role in determining the risk of financial dependency. Even more unfortunately, this finding concerns mostly women. Being a non-national EU citizen increases the probability of being financially dependent in 7 of the nine countries for women whereas it plays a role only in 2 countries for men (France: +7% and Sweden: +26%). The impact is substantial, non-national women from other EU member states have a probability of financial dependency that is between 12% (Austria) and 27% (Spain) above that of national women. The relative situation of non-EU citizens is even worse. Results are significant in 6 countries for women and in 4 for men. For women the increase in the risk of financial dependency ranges between 8% in the UK and 38% in Belgium. For men, it is comprised between 6% in the UK and 16% in Belgium and France.

To conclude, the probit analysis has allowed to put forth the marginal effect of different observed individual characteristics on the probability of being financially dependent of women and men. Marked gender differences were revealed. Indeed, with otherwise identical observed characteristics, women are almost systematically more likely to be financially dependent than men. Amongst the characteristics that were taken into account, the most substantial impact comes from activity status. Holding a full-time job is most important to avoid financial dependency: to overcome poverty it is crucial to earn a full-time wage rather than to have to rely on intra-household income altruism.

“place Table 2 here”

8. A proposal of 4 additional indicators

The European Union has agreed a core set of poverty and social exclusion indicators which are regularly produced for every EU country on a comparable basis. These indicators are known as the 'Laeken Indicators'. To conclude on the present analysis we would like to suggest four additional indicators to the Laeken ones (cfr. Table 3). These additional indicators would considerably contribute to improving poverty analysis and monitoring throughout the EU.

The first one corresponds to the ratio of women's to men's financial dependency rate. As shown by Table 3 this indicator varies between 1.4 in Poland and Sweden and 4.9 in Luxembourg. Women's financial dependency risk is thus between 1.4 and 4.9 times higher than that of men.

The second indicator is the ratio of women's to men's relative median financial dependency gap. The relative median gap represents the difference between the median individual income of people below the financial dependency threshold and this threshold itself expressed as a percentage of the financial dependency threshold. The financial dependency threshold is fixed at 60% of median individual income. The relative median gap thus measures the distance between the individual income of the financially dependent and this 60% line. As the indicator shows, financially dependent women have an individual income that is much more below the financial dependency threshold than that of financially dependent men in all countries. The ratio of women's to men's relative median gap ranges between 1.1 in Poland and the UK (indicating that there is hardly any gender dimension to the relative median financial dependency gap in those countries) and 2.3 in Ireland (where women's financial dependency is thus far harsher than men's).

The third indicator is the ratio of women's to men's financial dependency intensity. This intensity is measured as the product of the financial dependency rate and the relative median financial dependency gap. This indicator thus joins two factors: the number of women (respectively men) below the financial dependency threshold and the extent of their respective financial dependency. Results are alarming from a gender perspective. Indeed, women's financial dependency intensity is up to 10 times higher than men's in Luxembourg. Gender equality in terms of financial dependency intensity is almost attained in Sweden where the indicator equals 1.1. Women's dependency intensity is 1.5 times that of men in Poland. In France and the UK, the ratios are at 3.0 and 2.6 respectively. In Austria it is at 4.7. In the remaining countries, women's financial dependency is at least five times as intensive as men's.

A fourth indicator investigates the gender dimension in income distribution by comparing the proportion of women in the lowest and the highest deciles of the distribution of net individual income. As shown by Table 3, women make up 80-90% of the first decile of the net individual income distribution in five of our nine countries (Austria, Belgium, Spain, Ireland and Luxembourg). On the contrary, they represent merely 23-30% of the highest decile in all countries but Poland (where they represent one third of the last decile). The ratio of women's proportions in the lowest and highest deciles ranges between 1.7 in Poland and 3.8 in Luxembourg. In Luxembourg 90% of the lowest decile are women compared with less than a quarter in the highest decile. In other words, there are nine times more women than men in the lowest decile of the net individual income distribution and three times more men than women in the highest decile.

“place Table 3 here”

Conclusion

The hypothesis underlying conventional methods of poverty analysis is that resources are shared in such a way that each household member has an identical standard of living or level of well-being. This paper starts out from the consideration that it matters a great deal what is assumed about how financial resources are shared within households. To illustrate this, we dropped the equal sharing assumption in order to replace it by one of zero sharing. In as far as the proper incomes of which men and women dispose individually differ enormously, their vulnerability with respect to poverty is also very different, even when they are in the same household, when the sharing assumption is departed from. The zero sharing hypothesis is in no way more extreme or abstract than the equal sharing one. The analysis of households' at-risk-of-poverty rate gives valuable insight into the current state of affairs in terms of household well-being but fails to inform about the precariousness of each member's situation were the household to dissolve. However, within an overarching context of a destabilising household model, this latter aspect is of utmost importance. The zero sharing approach therefore computes a purely individual net income of which one can freely dispose were one to become self-reliant. As a result, this approach compensates for the fact that currently available statistical information fails to sufficiently assess the correlation between personal income and life's hazards. Moreover, we regard it as a very fruitful approach to tackling a sensitive and analytically difficult issue.

The analysis presented in the present paper proceeded in three steps. First, all income components reported in the EU Statistics on Income and Living Conditions (2006) were fully individualised and summed up to give rise to a total amount of net disposable income for each individual in our sample. Secondly, this individual income was used to compute financial dependency rates that can be understood as at-risk-of-poverty rates computed at the individual rather than at the household level. In all nine countries, we found women's financial dependency rate to by far exceed men's. Except in Poland and the UK, women's

financial dependency rate is twice to three times higher than their at-risk-of-poverty rate. This indicates that many women would indeed be poor if they were to rely on their proper income rather than being imputed a share of household income. In other words, women would bear a disproportionate share of the consequences whenever their families would dissolve.

Although a descriptive statistical analysis already took us a long way, we clarified the role played by different individual characteristics regarding the likelihood of being financially dependent by the estimation of bivariate probit models. The idea is that countries may differ in the composition of their population with respect to individual characteristics that increase the likelihood for men and women to become financially dependent. The probit results clearly show how financial dependency risks vary according to age, activity status, education, household type and nationality. Amongst the characteristics that were taken into account, the most substantial impact comes from activity status. Holding a full-time job is most important to avoid financial dependency: to overcome poverty, it is crucial to earn a full-time wage rather than to have to rely on intra-household income altruism.

The policy implications of our analysis are summarised by means of four new synthetic indicators that we suggest be collected regularly and in a comparable fashion in each EU member state in order for the fight against poverty and social exclusion to become more gender-sensitive. The proposed indicators highlight the need to consider not just the proportions of men and women in financial dependency but the intensity and depth of this dependency. It will always be those in the deepest financial dependency who will find it hardest to escape.

To compute such indicators, however, gender-sensitive data are needed. For the income information that is collected and disseminated by governments and other agencies to be made more gender-sensitive, the focus needs to be shifted radically and systematically from household to individual income. This cannot be achieved without the necessary political

goodwill and sufficient awareness. To quote Briar (2000): *“Ways of conceptualising and measuring poverty, inequality and well-being are political and contestable, and thus are subject to constant reinterpretation and change. Indices and concepts, to a considerable extent, reflect the values of the people responsible for framing them. Concepts and measures potentially can be framed in ways that expose the poverty of disadvantaged groups, such as women, and that act as a basis for action to improve the situation of these groups. However, the choice of concepts and measures also can be used by governments to present the results of their policies in a more favourable light, or to restrict demands for assistance.”* (Briar 2000, p. 12).

Moreover, it is imperative that policy design incorporates the academic discussion on intra-household income sharing. Without imposing the zero sharing assumption that was followed throughout the present analysis, we do believe policies should not be blindly modelled on an equal sharing scenario. To prevent policies from increasing the economic vulnerability of already vulnerable groups, policy-makers should at least consider the possibility that within the household, the different members may not be equally well off (Phipps and Burton 1995).

To achieve gender equality in financial dependency rates, one strategy is to encourage women to become more economically independent by increasing female employment rates. However, the fact that, in financial terms at least, women disproportionately bear the consequences of a family dissolution, combined with the finding that the best way to stay out of financial dependency is by holding a full-time job, implies that policy-makers, set out to reduce poverty, should not just strive to create jobs but also to make work pay.

Another strategy to enhance gender equality in financial dependency is to institute policy to grant individual social rights and benefits to all, regardless of their sex or family configuration. State welfare policies should protect all citizens. However, so far, tax and transfer systems in place throughout Europe often remain impregnated with the traditional male breadwinner

notion. Only the breadwinner has proper social rights, the rights of his dependents being derived from his breadwinner status. In many cases, such systems convey substantial incentives to women to stay at home, thus hindering female labour supply. The individualisation of social security schemes granting protection to individuals regardless of their family configuration is thus of prime importance.

Perhaps most important, the findings in this paper suggest the need for further research in this still under-developed field of study. More particularly, data and methodologies should be developed to correctly assess the sharing rule within households.

References (cfr. JabRef bibliography "odorchai.bib")

Table 1: Descriptive statistics

financial dependency rates	AT		BE		ES		FR		IE	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total (observations)	5856	5252	4964	4657	12114	11359	7495	6977	5412	4911
	37.8	11.0	36.0	11.2	48.7	14.5	31.0	13.2	39.7	18.7
Activity status										
Full-time work	11.0	5.2	6.9	3.3	10.3	7.0	7.1	4.5	4.9	4.9
Part-time work	33.3	15.4	14.5	11.8	44.5	33.4	31.6	30.6	32.5	26.6
Unemployment	61.2	61.8	45.6	28.9	90.0	76.2	49.3	46.1	62.6	62.3
Retirement	29.1	6.5	40.9	9.8	31.8	10.5	30.0	14.6	32.1	24.9
Other inactives	85.6	75.7	84.0	56.4	88.2	67.1	83.8	73.9	72.7	71.7
Age categories										
< 30 years	42.6	23.4	35.8	26.8	43.0	28.1	38.5	27.4	32.1	32.9
30-49 years	34.3	8.5	23.1	7.1	46.2	12.0	23.9	6.6	34.2	10.5
50-59 years	38.7	10.7	40.6	9.6	61.3	14.4	28.9	11.0	49.6	17.3
60-65 years	39.2	6.1	51.4	10.0	70.5	16.2	33.6	9.7	72.4	27.3
>65 years	38.4	7.2	51.1	10.0	55.8	10.8	37.3	18.2	47.8	20.9
Household types										
Single person	17.9	12.8	21.4	15.2	24.2	16.5	16.6	15.0	20.7	26.8
Two adults younger than 65 years without dependent children	34.9	12.1	39.4	11.0	35.9	12.1	34.6	12.6	42.0	22.3
Two adults, at least one aged 65 years and over without dependent children	53.7	6.4	71.2	8.0	67.6	13.0	51.1	19.2	73.1	27.8
Three or more adults without dependent children	48.1	16.9	49.9	17.4	59.5	21.0	47.3	28.3	48.2	26.7
Single parent with dependent children	7.3	21.8	2.3	1.4	19.2	8.2	4.5	6.4	8.5	0.0
Two adults with one dependent child	40.8	6.2	28.3	5.9	45.2	8.6	23.1	7.1	34.2	7.9
Two adults with two dependent children	50.3	3.5	24.0	4.4	55.0	9.7	29.4	4.3	41.6	9.8
Two adults with 3+ dependent children	46.8	3.9	28.4	4.5	58.8	5.8	39.3	3.7	44.9	7.3
Three or more adults with dependent children	43.3	14.0	45.5	22.7	60.4	21.2	44.9	28.6	47.0	19.2
Others	-	-	38.6	40.4	-	-	40.4	7.0	-	-
Education										
Pre-primary, primary and lower secondary education - levels 0-2 (ISCED 1997)	51.9	21.7	52.7	14.3	65.3	17.4	42.0	20.3	55.9	24.5
Upper secondary and post-secondary non-tertiary education - levels 3-4 (ISCED 1997)	33.8	9.4	38.6	11.7	43.3	15.2	29.7	11.2	42.2	22.8
Tertiary education - levels 5-6 (ISCED 1997)	24.4	7.2	19.1	8.5	26.8	11.4	19.1	10.2	25.1	10.6
Origine										
nationals	36.1	9.8	35.4	10.5	51.4	15.3	30.0	12.3	41.4	19.6
non-EU	55.5	24.4	70.7	39.8	52.9	15.8	50.6	42.3	49.0	30.5
EU	46.2	13.5	40.3	12.5	52.7	25.3	39.0	18.5	40.8	10.9

Table 1 continued on the next page

Table 1 (continued from the previous page): Descriptive statistics

financial dependency rates	LU		PL		SE		UK	
	Women	Men	Women	Men	Women	Men	Women	Men
Total (observations)	3536	3536	16262	14070	5448	5288	8590	7344
	43.2	8.7	28.2	20.8	19.5	13.5	36.4	16.0
Activity status								
Full-time work	10.2	5.5	13.6	10.9	8.0	8.4	8.0	7.1
Part-time work	36.3	17.0	42.3	37.5	14.5	23.4	39.6	26.3
Unemployment	68.4	65.5	96.0	92.2	44.4	38.9	66.7	70.7
Retirement	30.1	3.8	4.5	2.1	27.9	9.0	51.8	20.7
Other inactives	81.6	53.5	49.3	34.1	58.3	63.2	65.8	51.7
Age categories								
< 30 years	44.1	27.6	50.4	38.1	45.5	37.3	33.0	24.0
30-49 years	43.9	6.2	37.5	21.7	10.0	8.9	28.4	10.7
50-59 years	53.4	7.1	27.2	23.5	9.2	6.8	39.3	16.7
60-65 years	56.0	9.6	10.9	10.0	16.3	6.3	47.8	21.2
>65 years	46.0	4.0	7.0	2.3	32.2	6.3	48.1	17.8
Household types								
Single person	9.1	11.7	4.3	19.3	17.1	20.8	20.7	20.2
Two adults younger than 65 years without dependent children	42.9	7.7	26.6	18.7	17.8	11.9	30.3	12.9
Two adults, at least one aged 65 years and over without dependent children	80.5	4.0	14.0	12.8	33.5	6.0	66.9	18.4
Three or more adults without dependent children	62.3	18.5	34.0	30.0	36.1	26.1	42.7	22.9
Single parent with dependent children	10.6	0.0	13.8	7.9	9.5	11.9	5.0	4.8
Two adults with one dependent child	43.1	5.2	31.3	12.9	18.5	7.3	40.5	12.9
Two adults with two dependent children	56.2	4.6	41.1	12.6	13.0	5.3	41.7	7.2
Two adults with 3+ dependent children	63.3	1.5	55.3	18.0	13.5	7.3	49.8	8.0
Three or more adults with dependent children	59.6	20.7	44.0	30.2	32.4	32.3	46.1	23.6
Others	-	-	37.7	28.1	49.2	21.4	39.3	14.4
Education								
Pre-primary, primary and lower secondary education - levels 0-2 (ISCED 1997)	57.4	13.3	26.2	27.8	30.7	12.5	50.9	22.9
Upper secondary and post-secondary non-tertiary education - levels 3-4 (ISCED 1997)	45.1	7.0	36.9	23.1	18.4	13.2	36.0	16.9
Tertiary education - levels 5-6 (ISCED 1997)	26.1	7.9	15.8	8.9	15.7	13.6	24.0	9.3
Origine								
nationals	44.5	7.5	29.6	21.8	18.4	12.5	36.6	16.0
non-EU	71.7	35.2	36.8	9.9	49.9	26.8	41.8	21.7
EU	48.5	11.5	11.6	16.9	34.7	31.9	47.7	9.6

Table 2: Results of the probit estimations: marginal effects of individual characteristics on the risk of financial dependency by sex in 9 countries

	AT		BE		ES		FR		IE		LU	
	women	men	women	men	women	men	women	men	women	men	women	men
sex (ref: women)												
men	-0.268*** (27.78)		-0.248*** (27.24)		-0.342*** (41.80)		-0.178*** (21.59)		-0.21*** (17.22)		-0.345*** (21.71)	
men (with controls)	-0.158*** (14.47)		-0.185*** (19.41)		-0.165*** (16.56)		-0.099*** (11.75)		-0.079*** (5.34)		-0.179*** (9.52)	
activity status (ref: full-time)												
part-time	0.329*** (11.8)	0.102*** (3.37)	0.129*** (4.24)	0.13*** (4.81)	0.375*** (17.06)	0.279*** (7.99)	0.354*** (15.67)	0.323*** (10.25)	0.499*** (12.92)	0.276*** (7.41)	0.39*** (7.62)	0.104** (2.38)
unemployed	0.573*** (12.27)	0.553*** (14.31)	0.545*** (15.58)	0.368*** (14.19)	0.595*** (30.43)	0.664*** (26.37)	0.551*** (16.29)	0.463*** (16.75)	0.632*** (8.89)	0.64*** (16.61)	0.556*** (5.34)	0.547*** (8.78)
retired	0.308*** (8.4)	0.043** (1.98)	0.389*** (8.43)	0.224*** (6.58)	0.438*** (15.56)	0.087*** (4.14)	0.245*** (6.41)	0.062** (2.09)	0.63*** (13.10)	0.376*** (9.96)	0.604*** (9.38)	0.009 (-0.27)
other inactives	0.746*** (32)	0.675*** (15.38)	0.761*** (27.94)	0.583*** (20.96)	0.77*** (46.01)	0.589*** (24.95)	0.77*** (34.87)	0.674*** (22.07)	0.796*** (25.61)	0.676*** (20.65)	0.838*** (21.58)	0.409*** (9.41)
age groups (ref: 30-49y)												
< 30 years	0.072** (2.45)	0.026** (1.98)	0.104*** (3.69)	0.086*** (6.08)	0.041* (1.68)	0.052*** (4.47)	0.068*** (2.75)	0.101*** (6.71)	0.03 (-0.77)	0.128*** (5.12)	0.137*** (2.72)	0.083*** (4.26)
50-59 years	-0.034 (-1.17)	-0.019 (-1.41)	-0.024 (-0.81)	-0.037*** (3.08)	-0.048* (1.87)	-0.014 (-1.05)	-0.078*** (3.48)	-0.008 (-0.6)	0.063* (1.66)	-0.013 (-0.57)	-0.139*** (2.93)	-0.032** (2.06)
60-65 years	-0.083** (2.06)	-0.048*** (2.92)	-0.024 (-0.58)	-0.056*** (4.94)	-0.125*** (3.49)	-0.021 (-1.31)	-0.062* (1.73)	-0.014 (-0.56)	0.079 (-1.39)	-0.027 (-1.09)	-0.305*** (5.37)	-0.02 (-0.86)
>65 years	-0.106*** (2.58)	-0.031 (-1.46)	0.095* (1.89)	-0.045** (2.37)	-0.308*** (9.63)	-0.047** (2.46)	0.002 (-0.04)	0.022 (-0.66)	-0.257*** (6.18)	-0.095*** (4.06)	-0.423*** (7.17)	-0.017 (-0.55)
level of education (ref: higher education)												
lower secondary	0.29*** (11.66)	0.084*** (5.37)	0.216*** (9.31)	0.019* (1.90)	0.232*** (12.26)	0.062*** (6.48)	0.241*** (11.32)	0.098*** (6.90)	0.109*** (3.66)	0.072*** (4.00)	0.319*** (7.88)	0.027* (1.86)
upper secondary	0.098*** (4.42)	0.006 (-0.6)	0.162*** (7.38)	0.019** (2.02)	0.088*** (3.69)	0.054*** (3.99)	0.11*** (6.18)	0.024** (2.32)	0.11*** (3.52)	0.058*** (2.74)	0.217*** (5.07)	0.005 (-0.38)

Table 2 continued on the next page

Table 2 (continued from the previous page): Results of the probit estimations: marginal effects of individual characteristics on the risk of financial dependency by sex in 9 countries

	AT		BE		ES		FR		IE		LU	
	women	men	women	men	women	men	women	men	women	men	women	men
household type (ref: 2 adults (<65y) without children)												
single	-0.186*** (5.87)	-0.004 (-0.29)	-0.226*** (7.96)	0.016 (-1.2)	-0.236*** (6.28)	0.044* (1.79)	-0.188*** (8.34)	-0.016 (-1.26)	-0.275*** (7.44)	0.009 (-0.37)	-0.389*** (6.25)	0.018 (-0.86)
2 adults (1>65y) without children	0.121*** (3.41)	-0.024 (-1.45)	0.135*** (3.53)	-0.015 (-0.91)	0.18*** (5.18)	0.023 (-1.08)	0.074** (2.38)	0.042** (1.97)	0.153*** (2.98)	0.044 (-1.51)	0.303*** (4.14)	0.01 (-0.35)
2+ adults without children	0.083*** (2.78)	0.022 (-1.59)	0.119*** (3.81)	0.04*** (2.72)	0.143*** (5.36)	0.04** (2.45)	0.096*** (3.15)	0.067*** (4.14)	0.021 (-0.59)	0.002 (-0.09)	0.075 (-1.4)	0.053** (2.23)
lone parent	-0.335*** (8.01)	-0.027 (-0.64)	-0.323*** (7.09)	-0.064** (2.39)	-0.255*** (4.46)	-0.068 (-1.02)	-0.255*** (7.92)	-0.04 (-1.03)	-0.365*** (8.71)		-0.356*** (5.13)	
2 adults, 1 child	-0.066* (1.96)	-0.039*** (2.76)		-0.025 (1.68)	0.016 (-0.51)	-0.004 (-0.21)	-0.075*** (2.98)	-0.016 (-1.01)	-0.116** (2.52)	-0.076*** (3.15)	-0.076 (-1.51)	-0.024 (-1.39)
2 adults, 2 children	-0.001 (-0.02)	-0.052*** (3.26)	-0.029 (-0.88)	-0.02 (-1.34)	0.101*** (3.24)	0.027 (-1.44)	-0.072*** (2.77)	-0.04*** (2.83)	-0.078* (1.70)	-0.045 (-1.37)	-0.054 (-0.97)	-0.014 (-0.63)
2 adults, 3+ children	-0.106** (2.47)	-0.061*** (3.91)	-0.009 (-0.21)	-0.021 (-1.09)	0.171*** (3.39)	-0.024 (-0.84)	-0.06** (2.08)	-0.058*** (3.81)	-0.138*** (3.01)	-0.089*** (3.17)	-0.06 (-0.81)	-0.034 (-1.08)
3+ adults with children	0.012 (-0.37)	-0.018 (-1.29)	0.133*** (3.29)	0.054*** (3.15)	0.092*** (2.92)	0.038** (2.07)	-0.003 (-0.08)	0.083*** (3.93)	-0.073* (1.77)	-0.049** (2.05)	-0.048 (-0.76)	0.048* (1.90)
others			0.176 (-1.09)	0.5*** (3.06)			0.064 (-0.78)	-0.043 (-1.05)				
Nationality (ref: nationals)												
non-EU citizens	0.045 (-1.08)	0.026 (-1.47)	0.384*** (5.14)	0.155*** (4.73)	0.159*** (3.89)	0.013 (-0.65)	0.083 (-1.48)	0.163*** (4.52)	0.248* (1.92)	-0.001 (-0.02)	0.308*** (4.20)	0.094** (2.46)
EU citizens	0.122** (1.97)	-0.002 (-0.07)	0.046 (-1.05)	0.018 (-1.06)	0.273** (2.31)	0.041 (-0.92)	0.138** (2.29)	0.066** (2.06)	0.171*** (2.77)	-0.038 (-1.14)	0.14*** (4.00)	0.018 (-1.54)
Number of observations	5856	5252	4964	4657	12114	11359	7495	6977	5412	4882	3536	3520
Wald chi²(20)	1474.99	534.71	1492.79	710.77	3263.01	1404.44	1661.76	1027.93	1054.37	691.76	745.87	268.26
Prob > chi²	0	0	0	0	0	0	0	0	0	0	0	0
Pseudo R²	0.3407	0.3078	0.4022	0.2917	0.4346	0.2735	0.337	0.2996	0.4098	0.3489	0.4589	0.3067

Table 2 continued on the next page

Table 2 (continued from the previous page): Results of the probit estimations: marginal effects of individual characteristics on the risk of financial dependency by sex in 9 countries

	PL		SE		UK	
	women	men	women	men	women	men
sex (ref: women)						
men	-0.074*** (13.37)		-0.061*** (7.30)		-0.205*** (26.92)	
men (with controls)	-0.082*** (14.34)		-0.036*** (4.63)		-0.14*** (17.86)	
activity status (ref: full-time)						
part-time	0.332*** (17.15)	0.292*** (13.86)	0.094*** (5.46)	0.156*** (6.70)	0.426*** (20.98)	0.259*** (9.90)
unemployed	0.791*** (45.81)	0.756*** (41.84)	0.356*** (8.35)	0.295*** (8.21)	0.657*** (12.71)	0.663*** (16.01)
retired	0.039** (2.23)	-0.05*** (2.81)	0.234*** (9.36)	0.109*** (4.62)	0.643*** (22.38)	0.305*** (11.71)
other inactives	0.478*** (33.58)	0.24*** (17.64)	0.418*** (14.82)	0.397*** (12.16)	0.675*** (32.98)	0.452*** (20.39)
age groups (ref: 30-49y)						
< 30 years	0.052*** (4.20)	0.058*** (5.54)	0.316*** (13.94)	0.152*** (8.85)	0.053** (2.42)	0.058*** (3.66)
50-59 years	-0.121*** (10.24)	-0.048*** (4.70)	-0.032 (-1.42)	-0.043*** (3.05)	0.062*** (2.87)	0.012 (-0.91)
60-65 years	-0.156*** (9.33)	-0.11*** (8.27)	0 (-0.02)	-0.067*** (4.18)	-0.059** (2.07)	-0.026 (-1.47)
>65 years	-0.233*** (15.53)	-0.16*** (10.49)	0.05 (-1.43)	-0.076*** (3.25)	-0.107*** (3.34)	-0.099*** (5.26)
level of education (ref: higher education)						
lower secondary	0.231*** (13.08)	0.211*** (11.18)	0.121*** (6.22)	0.031** (2.01)	0.171*** (9.83)	0.095*** (7.64)
upper secondary	0.13*** (11.62)	0.084*** (6.92)	0.029** (2.13)	0.007 (-0.61)	0.106*** (6.83)	0.071*** (6.01)

Table 2 continued on the next page

Table 2 (continued from the previous page): Results of the probit estimations: marginal effects of individual characteristics on the risk of financial dependency by sex in 9 countries

	PL		SE		UK	
	women	men	women	men	women	men
household type (ref: 2 adults (<65y) without children)						
single	-0.175*** (9.25)	0.017 (-0.86)	-0.061*** (3.40)	0.027* (1.90)	-0.25*** (11.31)	0.019 (-1.25)
2 adults (1>65y) without children	0.105*** (4.44)	0.106*** (4.41)	0.076*** (2.85)	-0.002 (-0.06)	0.099*** (3.69)	0.017 (-0.9)
2+ adults without children	0.078*** (4.51)	0.075*** (5.15)	0.14*** (5.16)	0.086*** (4.24)	0.051** (2.20)	0.049*** (3.12)
lone parent	-0.172*** (8.03)	-0.122*** (2.71)	-0.034 (-0.64)	0.007 (-0.21)	-0.33*** (14.88)	-0.106** (2.40)
2 adults, 1 child	0.01 (-0.55)	-0.047*** (3.07)	0.033* (1.65)	-0.038** (2.57)	0.072*** (2.71)	0.018 (-0.99)
2 adults, 2 children	0.064*** (3.30)	-0.048*** (3.20)	0.001 (-0.04)	-0.044*** (2.88)	0.043* (1.75)	-0.031* (1.73)
2 adults, 3+ children	0.167*** (6.35)	-0.013 (-0.62)	-0.004 (-0.15)	-0.029 (-1.11)	0.027 (-0.79)	-0.048** (1.97)
3+ adults with children	0.126*** (7.41)	0.064*** (4.54)	0.088*** (3.52)	0.118*** (5.54)	0.067** (2.08)	0.084*** (3.57)
others	0.089** (2.23)	0.083** (2.13)	0.395*** (3.51)	0.18* (1.82)	-0.002 (-0.04)	-0.019 (-0.57)
Nationality (ref: nationals)						
non-EU citizens	0.083 (-0.66)	-0.13 (-1.5)	0.165*** (2.90)	0.03 (-0.79)	0.081** (2.24)	0.056** (2.13)
EU citizens	-0.174 (-1.5)	-0.128 (-1.32)	0.257*** (3.41)	0.255*** (4.41)	0.178** (2.20)	-0.013 (-0.24)
Number of observations						
	16262	14070	5448	5288	8590	7344
Wald chi²(20)	3724.5	2763.8	872.56	702.41	1919.98	862.13
Prob > chi²	0	0	0	0	0	0
Pseudo R²	0.4218	0.3678	0.242	0.2387	0.2938	0.1948

Table 3: Proposal of 4 indicators

	AT	BE	ES	FR	IE	LU	PL	SE	UK
Financial dependency rate									
women	37.8	36.0	48.7	31.0	39.7	43.2	28.2	19.5	36.4
men	11.0	11.2	14.5	13.2	18.7	8.7	20.8	13.5	16.0
I1: ratio of women's to men's financial dependency rate	3.4	3.2	3.4	2.3	2.1	4.9	1.4	1.4	2.3
Financial dependency threshold	786.0	814.3	490.0	835.7	858.5	1256.3	130.2	890.3	826.3
Medium income under the threshold									
women	380.5	248.2	0.8	413.3	375.4	358.9	21.5	631.3	429.0
men	491.2	501.2	179.5	508.8	652.5	815.0	31.2	554.7	474.1
Relative median gap under the threshold									
Relative median gap for women	0.5	0.7	1.0	0.5	0.6	0.7	0.8	0.3	0.5
Relative median gap for men	0.4	0.4	0.6	0.4	0.2	0.4	0.8	0.4	0.4
I2: Ratio of women's to men's relative median gap	1.4	1.8	1.6	1.3	2.3	2.0	1.1	0.8	1.1
Intensity of financial dependency									
women	19.5	25.0	48.6	15.7	22.3	30.9	23.5	5.7	17.5
men	4.1	4.3	9.2	5.2	4.5	3.1	15.8	5.1	6.8
I3: Ratio of women's to men's intensity of financial dependency	4.7	5.8	5.3	3.0	5.0	10.1	1.5	1.1	2.6
Share of women in the lowest and highest decile of the net individual income distribution									
lowest decile	83.7	84.7	84.0	75.8	79.5	90.4	62.4	57.9	72.3
highest decile	24.3	24.4	26.2	30.1	22.6	24.1	35.8	25.6	25.4
I4: Ratio of women's proportion of the lowest decile to their share of the highest decile	3.4	3.5	3.2	2.5	3.5	3.8	1.7	2.3	2.8

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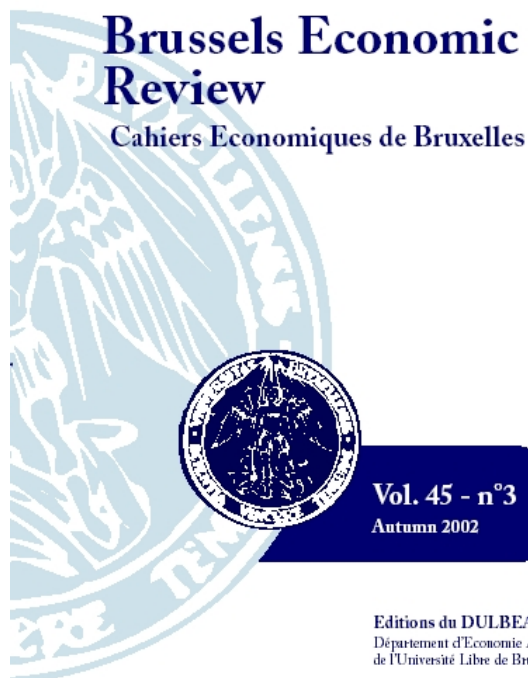
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