

# **Gender and Income Analysis and development of indicators (BGIA)**

## **Summary**

**Danièle Meulders and Síle O’Dorchai**

Université Libre de Bruxelles  
Département d’Economie Appliquée (DULBEA)

**Institute for the equality of women and men**

**Directorate-General Statistics and Economic Information**

**Programme “AGORA” of the Belgian Science Policy Office**

**Contract no.:** AG/00/144

**Acronym:** BGIA

**Project:** Gender and income: analysis and development of indicators – BGIA (*Belgian Gender and Income Analysis*)

"*Genre et revenu: analyse et développement d'indicateurs* - Belgian Gender and Income Analysis (BGIA)" is a joint project on the part of the *Belgian Science Policy Office*, the *Institute for the equality of women and men*, the *Directorate-General Statistics and Economic Information* and the *Departement of Applied Economics of the Université Libre de Bruxelles* (DULBEA) that has carried out this research. The aim of this project was to analyse the data relating to women's and men's incomes contained in the various databases available in Belgium, to measure inequalities between men's and women's individual incomes, to carry out a statistical and econometric study of these income disparities and to propose indicators for monitoring purposes; it also examined the individual incomes of people living in couples and analysed the effects of a break-up on individual incomes.

### ***Individuals' incomes and poverty***

Under this project we endeavoured first of all to calculate the individual incomes of women and men in Belgium, and we have proposed the calculation of various indicators to measure the income disparities between men and women and the risk of individual poverty they face. This analysis is based on the establishment of a tailor-made methodology and the development of specific indicators.

What is original about this study is that it looks at the personal incomes of individuals - namely those possessed by them alone as a result of their work, any State benefits they may receive, and their income from immovable and movable property - whatever the nature of their lifestyle and the household to which they belong. Thus our approach is radically different from that of traditional investigations of poverty and incomes, which consider the household as a unit of analysis where sharing occurs. Whereas many studies have examined the gender pay gap measured at individual level, few have covered the gap between the total (gross or net) individual incomes of women and men. This is partly due to the absence of any reliable statistical data on several components of individual incomes: many databases are still constructed around households, for which aggregate data are collected for the various items of income and expenditure.

The poverty rate is traditionally estimated on the basis of a clear hypothesis that, however much individual members of a household contribute, they pool and fully share all of their income. According to this approach, a person belonging to a poor household is poor, however much he or she earns personally.

One might question the validity of this hypothesis, a legacy of the neoclassical approach whereby the household was viewed as a black box behaving "as one man", altruistically maximising the homogeneous utility of the household.

It is worrying that this key assumption - that households fully share their resources - is neither discussed nor presented as a clear hypothesis by the authors of studies on poverty. They present their results as universal facts, without indicating to what extent they are mindful of this initial assumption.

Even though the hypothesis of income pooling within households is gender-blind, it does provide a way of comparing household poverty internationally. However, when the aim is

to determine those individual characteristics that influence poverty, studies based on this income pooling hypothesis can only produce highly questionable results given that a high level of correlation exists between individuals' personal characteristics and the households to which they belong. Findings related to the risk of poverty, calculated according to the hypothesis that income is pooled and shared according to individual characteristics, can therefore lead to false interpretations, on account of the strong correlation between characteristics and type of household. An analysis of households' rates of poverty risk does not enable us to measure the precarious circumstances of individuals in the event of a break-up of the household.

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.”.....“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.”

Many economists have demonstrated that poverty among women is underestimated if one works on the assumption that income is shared equally between the members of a household (Folbre 1986, Kabeer 1994, Woolley and Marshall 1994, Nelson 1996). The household acts in a sense as a fig-leaf for poverty.

The questions we must ask ourselves concern the distribution of resources between the members of a household and the extent to which each member separately is at risk of poverty. Various studies have attempted to examine how resources and expenditure are managed within households, looking at the power relations between partners, their methods of decision-making, and the taxation and benefit systems (Pahl 1980, 1983, 1989, Vogler 1989, Vogler and Pahl 1993, 1994, Woolley and Marshall 1994). Others have sought to identify the rules on sharing by disaggregating household expenditure according to the goods and services procured (Browning, Bourguignon, Chiappori and Lechene 1994). Others still have quantified the degree of income-sharing within households and its sensitivity to changes in the taxation and benefit systems (Lundberg, Pollak and Wales 1997).

A new methodology was developed for the BGIA project in order to analyse poverty at individual rather than household level: the resources of each individual, whatever the characteristics of the household in which he/she lives. By using this method we can imagine the situation that would confront individuals in the event of a household break-up. The hypothesis that individual incomes are not shared is no more extreme than the hypothesis that resources are shared in full.

Other attempts to individualise measurements of poverty have focused solely on individuals living alone or else have considered only individual incomes, ignoring income that is pooled within the household (Daly and Rake 2002).

An analysis of the individual income disparities between women and men in Belgium reveals that the female/male income distribution is characterised by considerable inequality: on average, women's individual net incomes in 2006 were 38% lower than those of men. All income components, in relation to the number of beneficiaries, are lower for women:

- Earned income is 28% lower on average, and an analysis of its components shows that the disparity observed in respect of basic pay is augmented by the various forms of indirect pay.
- Benefits from the State by no means make up for this inequality, since on average they are 25% lower in the case of women: -34% for pensions and -31% for unemployment benefit. Such inequalities are caused by the non-individualisation of entitlements and by women's discontinuous careers and part-time work.

This picture is completed by an analysis of net individual incomes by decile:

- Women make up 83% of the persons comprising the first decile but only 23% of those in the tenth decile.
- The age effect is very different according to gender. Whereas men aged between 35 and 65 are mainly to be found in the last few deciles, women in the same age group are to be found above all in the first few deciles. The situation is particularly problematical for the oldest women. Whatever work they do, women are always to be found in lower deciles than men even if they work full-time.
- Lastly, the level of educational attainment does not operate in the same manner for both sexes. Having only a low or average educational level exposes women to low earnings more than it does men.

A decomposition of the Gini coefficient shows that, in 2006, 53% of the income inequality within the total population was attributable to male/female differences. Three fifths of this gender-based inequality was due to the fact that men's net annual incomes are higher than women's net incomes. The two indicators of inequality arising from this decomposition - namely the one measuring the distance between the female/male income distributions (where the relative economic distance varies between 0 when the distributions are identical and 1 when they do not overlap) and the one representing the relationship between the intersection of the two distributions (the proportion of inequality between the group of women and that of men which is due to the overlapping of their respective distributions, meaning that women at the top of their distribution have a higher income than men at the bottom of their distribution) and the total inter-group inequality - both reveal pronounced inequality. The relative economic distance in Belgium is 0.605, which demonstrates that there is a relatively wide gap between the income distributions of women and of men. The second indicator, which evolves in the opposite direction

from that of the relative economic distance, stands at 0.395. Both indicators improved slightly in 2007, to 0.586 and 0.414 respectively.

A decomposition of income disparities using the Oaxaca-Blinder (1973) method enables us to measure the effect of differences in characteristics on the income gap between men and women. This effect "explains" 32% of the income gap. The price effect which is traditionally attributed either to differences in the performance of identical characteristics or to unobserved characteristics amounts to 68%. By considering only workers, the "explained" part rises to 43%. The "unexplained" part still represents more than half of the income gap observed (57%). This finding is in line with the decomposition of the pay gap in Belgium. Most studies on the pay gap find that the part unexplained by differences in observable characteristics represents more than half of the gross pay gap (54% in the 2009 report on the gender pay gap in Belgium published by the *Institut pour l'égalité des femmes et des hommes*; 72% in the analysis by O'Dorchai (2008)). Whether it be in respect of their total income or just their earnings, no more than 50% of the gap between women and men can be attributed to the differences in their characteristics. That leaves a proportion of more than 50% which could represent outright discrimination against women.

### *Individual poverty or financial dependence*

We also revisited the traditional approach to poverty: the European "at-risk-of-poverty rate" is defined as the percentage of persons belonging to **households** whose disposable adult equivalent income is less than 60% of the national median equivalent income. This rate of poverty risk therefore implies the clear hypothesis that the incomes of members of a household are pooled and shared in full. On the basis of this definition and of the individual incomes we had calculated, we coined the term "**financial dependence**": people in a situation of financial dependence are those whose **individual net incomes** are less than 60% of the individual median income. The notion of financial dependence in fact represents the poverty risk run by persons having to meet their needs out of their own income without assistance from anyone else. Our hypothesis is that individuals are protected from the risk of poverty solely by the income which they themselves possess. The key difference between this and the European poverty rate is that we do not consider the household as a unit where sharing occurs; we consider every individual separately, irrespective of the household to which they belong, and we examine the individual income of each person.

The level of financial dependence indicates that 36% of women and 11% of men in Belgium have an individual income below the threshold of 60% of the individual median income.

- Women are three times more at risk than men of finding themselves in a situation of financial dependence.
- The income of women who are in a situation of financial dependence is further removed from the dependence threshold than that of men. Thus we conclude that financially dependent women are in a more difficult situation than men.
- The intensity of dependence is five times higher for women.

- Without State intervention the risk of individual poverty would be 46%; the combined effect of taxes and benefits reduces this rate to 24%. The rate falls from 55 to 36% for women, and from 37 to 11% for men. Thus the effect is greater for men in both absolute and relative terms: redistribution by the State benefits men more than women.

The effect of calculating the poverty risk at individual level is twofold: firstly, the percentage of persons at risk is higher when one rejects the hypothesis of sharing within the household; secondly, the risk run by women is far higher if the calculation is done for individuals. The at-risk-of-poverty rate for women is 36% when the calculation is done on the basis of individual incomes, but it is only 16% when - as is the case in the European calculations - the calculation is carried out at household level. The ratio comparing women's and men's levels of financial dependence is 3.16 in the BGIA calculation but only 1.23 in the European calculation.

The level of financial dependence, or the individual poverty risk rate, is 10 points higher than the European at-risk-of-poverty rate. The European at-risk-of-poverty rate is higher for men (+2%), but above all it is considerably lower for women (-20%). This illustrates perfectly the effect of the assumptions made: the European rate underestimates the risks run by women. This conclusion corroborates the findings of Daly and Rake (2002), according to whom the hypothesis of equal income sharing within households minimises the situation of poverty among women.

The estimation of a Probit model reveals the variables determining financial dependence. This model enables us to calculate the net effects of characteristics such as employment status, age, education, lifestyle and nationality - all other things being equal.

All other things being equal - in other words, for persons having the same status as regards employment, belonging to the same age group, having the same level of educational attainment and belonging to the same type of household - the fact of being a man reduces the likelihood of financial dependence by 18.5%. By contrast, if one compares men and women without controlling for the other explanatory variables, the fact of being a man reduces the likelihood of financial dependence by 24.8%.

- **Employment status** is the characteristic with the greatest impact on the level of financial dependence. We find that working full-time is the best way of avoiding financial dependence. Working part-time increases the likelihood of dependence by 13.5 percentage points for women and by 12.8 for men (all other things being equal). For both women and men, maximum financial dependence is associated with inactivity. The effect of unemployment and retirement is much more marked for women than for men whose characteristics are equivalent: this is where the effects of non-individualised social entitlements and discontinuous and part-time careers become manifest.
- The marginal effects of **age** are eliminated by controlling for the other characteristics.

- All other characteristics being equal, having a low level of **educational attainment** leads to a significant rise in the risk of financial dependence for women. Women's incomes are much more sensitive to their level of education, which also affects their activity rate.
- Finally, an analysis of individuals' **nationality** gives cause for concern: being a national of a non-European Union country increases the likelihood of dependence by 11.1 percentage points for men and by 39.6 percentage points for women.

This analysis of the 2006 SILC for Belgium proves that there is considerable gender inequality in Belgium. Whatever types of income are considered, the women receiving them possess lower incomes than men: this is true for earned income and for State benefits. The gap between women's and men's incomes is explained to the tune of only 31% by differences in the observed characteristics. Women therefore run a much higher risk of individual poverty than men, whatever their characteristics. We also discover the extent to which the hypothesis that resources are pooled and fully shared among the members of a household masks the risk of poverty or financial dependence run by women.

### ***Proposal of new inequality and poverty indicators***

As part of the study, we set out to summarise gender inequality in terms of income and poverty, using the set of indicators shown in Table 1.

The first set of income inequality indicators includes the ratio between women's and men's average incomes. As far as gross and net incomes are concerned, these are average incomes for the entire population, whereas for income from economic activity and State benefits and their components, the average incomes are calculated per recipient.

The ratio comparing the percentage of women in the first and last deciles is calculated by dividing the percentage of women in the first decile by the percentage of those in the last decile, with the deciles being calculated on the basis of the net personal incomes of the individuals making up the total population. The indicators relating to the decomposition of the Gini coefficient are calculated on the basis of net individual incomes.

Under the heading "Indicators of inequality regarding the risk of financial dependence or individual poverty", we first present the levels of financial dependence or risk of individual poverty, calculated on the basis of women's and men's net individual incomes. The ratio between women's and men's levels of financial dependence encapsulates the risk differential faced by women and men: women are three times more likely than men to be in a situation of financial dependence. This indicator has similarities with the "gender poverty gap" developed by Casper *et al.* (1994), who define the difference in male/female poverty rates as the ratio between the percentage of poor women and that of poor men.

The relative median gap represents the difference between the median individual income of persons lying below the dependence threshold and the dependence threshold itself, expressed as a percentage of the dependence threshold. This indicator was proposed by Atkinson *et al.* (2002). The ratio between women's and men's relative median gaps enables us to measure the extent of their respective financial dependence.

Finally, the last indicator is the ratio comparing the intensity of the risk of dependence for women and men. The intensity of the risk of dependence is the product of two components: the level of dependence and the relative median gap. Thus this indicator combines the number of individuals below the dependence threshold by gender with the severity of that dependence among the individuals in a situation of dependence.

**Table 1: Proposed indicators**

	<b>SILC- Belgium 2006</b>	<b>SILC- Belgium 2007</b>
<b>Indicators of income inequality</b>		
<b>Ratio between women's and men's average incomes</b>		
<b>Gross income</b>	0.55	0.56
<b>Net income</b>	0.62	0.63
<b>Income from economic activity</b>	0.72	0.71
Incl.: Earnings of employees	0.72	0.70
Incl.: Pay	0.74	0.73
Bonuses	0.58	0.58
Incl.: Holiday pay	0.61	0.61
End-of-year bonus	0.68	0.66
Thirteenth month	0.70	0.72
Income from self-employment	0.67	0.68
<b>State benefits</b>	0.75	0.77
Incl.: Pensions	0.66	0.70
Unemployment	0.68	0.71
Incl.: Unemployment benefit	0.89	0.88
Invalidity benefit	0.83	0.87
<b>Ratio comparing the percentage of women in the first and last deciles</b>	3.6	3.6
<b>Indicators relating to decomposition of the Gini coefficient</b>		
<b>Relative economic distance</b>	0.605	0.586
<b>Ratio between transvariation and gross inter-group inequalities</b>	0.393	0.414
<b>Indicators of inequality regarding the risk of financial dependence or individual poverty</b>		
<b>Level of financial dependence or rate of individual poverty risk</b>		
Total	24%	23%
Women	36%	34%
Men	11%	11%
<b>Ratio between women's and men's levels of financial dependence</b>	3.3	3.1
<b>Ratio between women's and men's relative median gaps</b>	1.7	1.6
<b>Ratio between women's and men's intensity of financial dependence</b>	5.6	5

Source: SILC 2006+2007, our calculations



### *A European comparison*

The same estimations were carried out for various European countries. Women's net individual incomes were lower than those of men in all of the nine countries studied, with the gap varying from -45% in Luxembourg to -20% in Sweden.

**Table 2: Inequality between women's and men's net incomes and financial dependence in 9 European countries**

	AT	BE	ES	FR	IE	LU	PL	SE	UK
<b>Ratio between women's and men's net individual incomes</b>	<b>0.61</b>	<b>0.62</b>	<b>0.63</b>	<b>0.70</b>	<b>0.59</b>	<b>0.55</b>	<b>0.75</b>	<b>0.80</b>	<b>0.61</b>
<b>Ratio comparing the percentage of women in the first and last deciles</b>	<b>3.4</b>	<b>3.5</b>	<b>3.2</b>	<b>2.5</b>	<b>3.5</b>	<b>3.8</b>	<b>1.7</b>	<b>2.3</b>	<b>2.8</b>
<b>Level of financial dependence</b>									
Women	<b>38</b>	<b>36</b>	<b>49</b>	<b>31</b>	<b>40</b>	<b>43</b>	<b>28</b>	<b>20</b>	<b>36</b>
Men	<b>11</b>	<b>11</b>	<b>15</b>	<b>13</b>	<b>19</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>16</b>
<b>Ratio between women's and men's levels of financial dependence</b>	<b>3.4</b>	<b>3.2</b>	<b>3.4</b>	<b>2.3</b>	<b>2.1</b>	<b>4.9</b>	<b>1.4</b>	<b>1.4</b>	<b>2.3</b>
<b>Ratio of W/M relative median gaps</b>	<b>1.4</b>	<b>1.8</b>	<b>1.6</b>	<b>1.3</b>	<b>2.3</b>	<b>2.0</b>	<b>1.1</b>	<b>0.8</b>	<b>1.1</b>
<b>Ratio of W/M intensity of dependence</b>	<b>4.7</b>	<b>5.8</b>	<b>5.3</b>	<b>3.0</b>	<b>5.0</b>	<b>10.1</b>	<b>1.5</b>	<b>1.1</b>	<b>2.6</b>

Source: SILC 2006+2007, our calculations

Sweden (-20%), Poland (-25%) and France (-30%) have the narrowest gaps; Luxembourg (-45%) and Ireland (-41%) are at the opposite end of the scale. Given that France and especially Sweden have some of the highest gender pay gaps in Europe, the lesser inequality between net incomes can be explained by the system of State benefits. The same applies in the case of Poland. Figures recently published by Eurostat (Wolff 2009) show that the percentage reduction in the rate of poverty risk engendered by State benefits is very high in countries such as Sweden and France: around 62% and 50% respectively. The gender pay gap in Poland is relatively small, and State benefits reduce the rates of poverty risk by approximately 37%.

The level of risk of financial dependence was higher for women than for men in all of the nine countries studied. The difference is particularly marked in Luxembourg and Spain (34 percentage points), whereas it is lower in Poland and Sweden (7 percentage points). In absolute terms, the level of financial dependence among men ranges from 9% in Luxembourg to 21% in Poland, whereas that among women ranges from 20% in Sweden to 49% in Spain.

Women account for between 80 and 90% of the population in the first decile in five of the nine countries (Austria, Belgium, Spain, Ireland and Luxembourg). However, they represent no more than 23-30% of the population in the last decile in all the countries apart from Poland (where they represent 35% of the population in this decile). The ratio comparing the proportion of women in the first decile and last deciles ranges from 1.7 in Poland to 3.8 in Luxembourg, where we note that in Luxembourg there are nine times more women than men on the lowest incomes and three times more men than women on the highest incomes.

In addition to the ratio comparing women's and men's levels of financial dependence, we also calculated the other indicators of financial dependence for various European countries (Table 2).

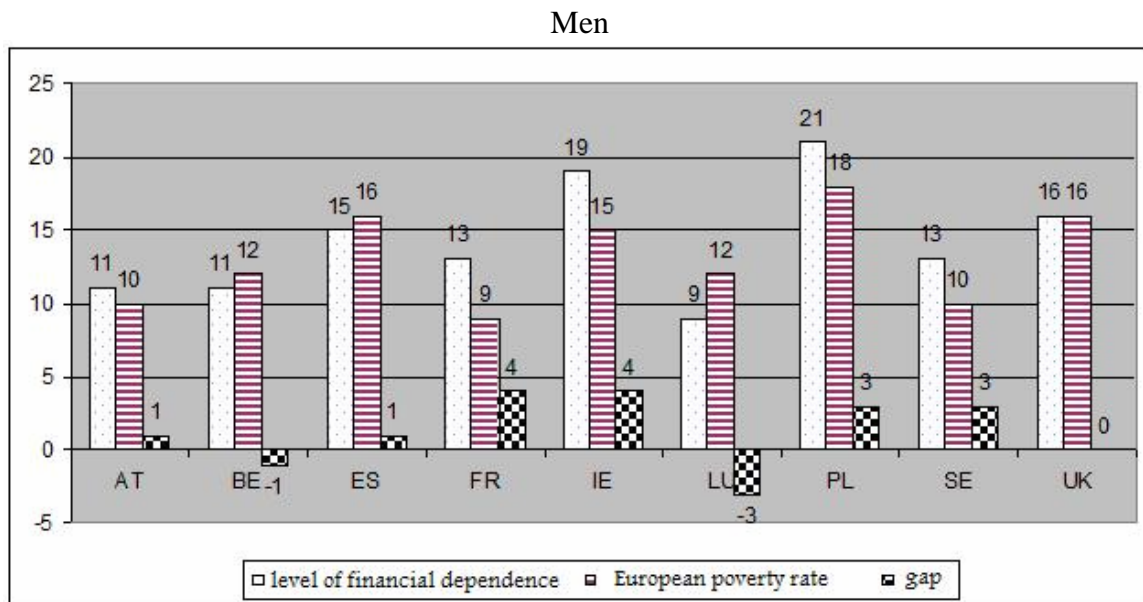
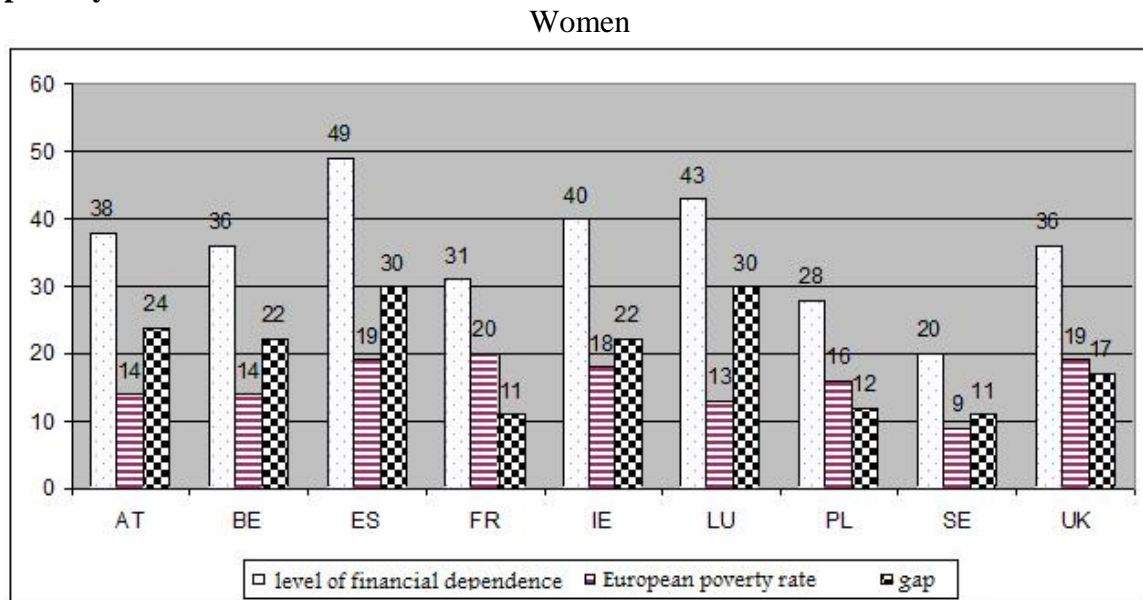
The relative median gap ratio for women and men indicates that, in all of the countries studied, women in a situation of financial dependence have much lower individual incomes than men in the same situation: the ratio ranges from 1.1 in Poland and the United Kingdom (indicating little gender difference between the relative median gaps for women and for men) to 2.3 in Ireland (where women's financial dependence is hence much greater than men's).

The ratio between women's and men's intensity of dependence indicates that the intensity of financial dependence among women is 10 times higher than among men in Luxembourg, whereas gender equality has almost been achieved in Sweden, with an indicator of 1.1.

Graph 1 compares the levels of financial dependence and the European at-risk-of-poverty rates for women and men. It enables us to make a comparison between the level of financial dependence, calculated according to the hypothesis that there is no sharing of individual resources within the household, and the rate of poverty risk based on an equivalent income for all members of the household.

The differences are substantial in the case of women, and the level of financial dependence is much higher than the rate of poverty risk. Conversely, men's level of financial dependence is relatively similar to their rate of poverty risk.

**Graph 1: Comparison of financial dependence levels and European at-risk-of-poverty rates**



Source: EU-SILC 2006

In all of the countries studied, apart from Poland and the United Kingdom, the level of financial dependence among women is at least twice as high as their rate of poverty risk. This indicates that many women would find themselves in poverty if they were unable to avail themselves of part of the income of another member of the household.

These findings bear out those of Daly and Rake (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)" (Daly and Rake 2002, appendix p.3).*

### ***Inequalities within couples***

Men and women forming part of a couple present certain differences in relation to the total population. Individuals living in couples are more likely to have dependent children, and their level of educational attainment is slightly higher. Couples also account for more full-time workers and fewer unemployed persons, and the percentage of part-time working women and inactive women is higher within couples than it is within the total population.

A comparison of inequality indicators and income ratios by beneficiary between people living in couples and the total population clearly indicates a greater inequality for people living in couples. The gap between women's and men's net average income is 46% for people living in couples, whereas it is 38% for the population as a whole. An analysis by income type reveals that State benefits present the highest disparity (the ratio between women's and men's average benefits is 23 percentage points lower for couples): 13% for pensions and 16% for unemployment benefit.

The more precarious situation of women living in a couple is apparent from an analysis of the ratio comparing the percentage of women in the first and last deciles of total net income, which is 5.5, compared to 3.6 for women as a whole. The level of financial dependence is the same for people living in couples and for the population as a whole, but the level of dependence among women living in a couple is 4 points higher than that for all women, whereas the level of dependence among men living in a couple is only half of that of men making up the total population. The ratio between women's and men's levels of dependence is almost double that observed for the total population.

We then looked at inequality between partners within couples. In 78% of couples, the man's income is higher than the woman's income; this percentage is 69% for cohabiting couples and 81% for married couples. Women with a higher income than their partner are more frequently encountered among cohabiting couples than married couples (23% compared to 14%). Only 6% of couples present virtual equality between women's and men's incomes (5% for married couples and 9% for cohabiting couples). The gap between women's and men's incomes is largest in the first two deciles. The situation of women is all the more precarious in low-income households. Income inequality between partners is less marked among cohabiting couples than among married couples.

In more than one half of couples, neither partner is financially dependent; in 42% of cases, one partner is in a situation of financial dependence, and in 90% of cases it is the woman who is dependent. This situation is more marked among married couples than among cohabiting couples.

The gap between women's and men's incomes within couples increases with the couple's average age: it is smallest among couples whose average age is under 35 and largest for those aged over 65. Needless to say, this reflects the difficulties faced by women in developing a continuous career, coupled with the effect of career breaks which are often forced on them. The gap is still narrower if we consider the population as a whole, among which we also find that the gap increases with age, other than in the final age-group. This is a further illustration of the high level of vulnerability of elderly women, even if they are living in a couple.

Childless couples account for 52% of all couples, 41% of couples whose average age is under 35, and 16% of couples whose average age is between 35 and 50. The percentage of couples with one dependent child is highest among couples aged under 35: 28%, compared to 24% for the 35-50 age bracket and 18% for couples as a whole. The percentage of couples with two or more children is highest between age 35 and 50.

The gaps between women's and men's incomes within couples as a whole are higher than among the youngest age groups, regardless of the number of dependent children. Among couples as a whole, the largest gaps are observed for childless couples; they are at their smallest where the couple has one dependent child, and then increase where there is a second and especially a third dependent child.

The gap between women's and men's incomes is systematically higher within married couples than within cohabiting couples, regardless of the couple's average age and the number of dependent children.

We may therefore conclude from this analysis that disparities within couples increase with the number of children; the observation of a high inequality level among childless couples as a whole bears witness to a generation effect, which is less marked when we look at the younger age brackets.

The majority of couples comprise two working partners (48% of the total), followed by couples where both partners are retired (12%). Among couples in which both partners are working, 22% comprise two people working full-time and 16% where the man works full-time and the woman works part-time, and 9% of couples are made up of a man working full-time and a woman who is not working. Couples with both partners working are much more common among cohabiting couples than among married couples.

Among couples as a whole, in all cases, full-time workers have a higher average income than their partner. The gap is smallest if the woman works full-time (-19%), and largest where the woman does not work (-87%). For all other types of employment status, the man's average income is less than his partner's if she works full-time (except for the self-employed) and he is unemployed or works part-time and if she works part-time where he is unemployed. We can therefore clearly see the extent to which full-time employment status is the best mechanism to protect women from inequality within the couple.

If we compare married couples and cohabiting couples, we find that in all scenarios, inequality is greater within married couples, unless they are both self-employed.

Among couples as a whole, women's and men's levels of educational attainment are very similar: 41% of men and 40% of women have received higher education, 34% of men and 32% of women are educated to upper secondary level, and 25% of men and 28% of women are educated to lower secondary level or below this level. 58% of couples are made up of members with the same level of educational attainment.

The educational level of partners living in cohabiting couples is higher than that of those living in married couples. Thus 51% of cohabiting women are qualified to higher education level, compared to 45% of cohabiting men, while 37% of married women have been educated to this level, compared to 39% of married men.

At the level of couples as a whole, income disparities are mainly a function of the woman's educational level: they are highest where the woman's educational level is lowest (-63% to -67%) and lowest where her educational level is highest (-16% to -36%). Nevertheless, there is a significant gap where the man and the woman have both received higher education (-36%).

It is interesting to distinguish within couples between those who are married and those cohabiting. In point of fact, on average cohabiting couples are younger and the inequalities between the partners' incomes are much less pronounced than they are for married couples. More cohabiting women than married women go out to work, which protects them from being financially dependent on their partner.

This analysis of income inequalities within couples in the 2006 and 2007 Belgian SILC shows a high level of dependence on their partner among married women: married women have lower individual incomes and a higher level of financial dependence than do women making up the population as a whole. This situation is not observed for cohabiting women, for whom the inequality level is lower than that observed for the population as a whole. In all cases, working is the mechanism that best protects women from financial dependence.

### ***Effects of a break-up***

The objective of this part of our study is to measure the effects on net individual income and on financial dependence of a couple breaking up, or the death of one partner.

In the literature, there is a widespread belief that divorce produces negative economic consequences, especially for women, whose economic situation is assumed to deteriorate sharply following a break-up (Fritzell 1990, Burkhauser *et al.* 1991, Smock 1994, Jarvis and Jenkins 1999, Poortman 2000, 2002, Andreß *et al.* 2003, Manting and Bouman 2006). The extent of this deterioration varies widely from country to country, depending on the methods and the timescale employed in the study: the effects are most marked in

the short term. As far as men are concerned, these studies reveal a *status quo* or a lower level of deterioration than that observed for women.

Nevertheless, we also find that most divorce proceedings are instigated by women (Emmerling 2005, Brinig and Allen 2000, Braver, Whitley and Ng 1993). This contradiction between the desire to divorce and the traumatic consequences of a divorce can be explained in several ways. Firstly, women under-estimate the future economic consequences of a break-up. Secondly, there are many reasons why people divorce, and the financial losses may be offset by other benefits: greater independence, satisfaction, etc. A third reason might lie in the way that the financial effects are measured: incorrect measurement of the effects of a divorce on the partners' income, resulting in the financial loss being overstated, especially for women. As Smock, Manning and Gupta (1999, p.794) indicate, "*Women experiencing separation or divorce typically undergo marked declines in family income and in measures of economic well-being that take account of family size*".

The latter explanation is a matter of concern to us, as a review of the literature relating to this topic produces an initial finding: the majority of studies that try to measure the effects of break-ups on couples' incomes work on the clear hypothesis that incomes are shared among household members prior to the break-up, and thus compare a total household income shared among its members with each member's presumed individual income following the break-up. For example, a wife with an income of 5,000 euros living with a man who earns 10,000 euros is notionally credited with an income of 7,500 euros before the break-up and an income of 5,000 after the divorce, i.e. a loss of 2,500 or 33%. Yet based on our hypotheses (we reject the assumption that the household income is shared among its members and we consider only the personal incomes of individuals, i.e. those possessed by them alone as a result of their work, any State benefits they may receive, and their income from immovable and movable property – whatever the nature of their lifestyle and the household to which they belong), the woman's income would be 5,000 euros in both cases, and consequently she would not be losing anything.

This hypothesis of sharing adopted by authors clearly explains the disastrous results observed for women who, prior to separation or divorce, possessed a more or less substantial share of their partner's income, but no longer possess this afterwards.

We tried, unsuccessfully, to use the data in the 2004-2007 SILC longitudinal database to measure the effects of a break-up on the partners' individual incomes. The longitudinal approach would have involved identifying households that had suffered a break-up during a certain period, in our case 2004-2007, and comparing the situation of the individuals comprising them one year before and one year after the break-up. We had to abandon the idea of using the longitudinal component of the SILC for Belgium, in view of the small number of couples who had suffered a break-up and for whom information was available on each partner over the three-year period.

To try to come close to the effects of a break-up, in the first instance, we made an in-depth comparison of the incomes and financial dependence situation of people who

were either divorced, separated or widowed, with those living in couples, using a sample from the 2006 and 2007 waves of the Belgian SILC. Secondly, we performed a longitudinal study based on longitudinal data from the 2004-2007 European SILC for 18 countries. Using this approach, households that have suffered a break-up are identified and their net individual incomes calculated and compared one year before and one year after the break-up.

The initial approach to the effects of a break-up on net individual income and on financial dependence involved comparing three categories of individuals: people who are widowed, people who are divorced or separated, and finally people living in couples. The results are strongly determined by these various types of marital status, as well as by individual characteristics.

The widowed group is characterised mainly by an advanced age and by the retired status associated with this. The generation effect also explains why this group has a lower level of educational attainment. The differences that emerge from a comparison between people living in couples and those who are divorced or separated are characterised by their age: on average, divorced and separated people are 4 years older than those living in couples. Those who are divorced or separated have a lower educational level. As far as employment status is concerned, this group comprises a higher number of unemployed persons and a lower number of full-time workers. As regards the number of dependent children, this is lower in the case of divorced and separated people than it is for couples. The differences between women and men are characterised by their employment status: little difference is apparent between the percentage of women working full-time within both groups (around 31%). On the other hand, many more divorced women are unemployed, very few do not work, and fewer of them work part-time.

Whatever his marital status, the man's net individual income is always higher than the woman's. The gap is at its largest within couples. However, income inequalities are at their lowest between divorced and separated women and men.

On average, divorced men have an income derived from economic activity which is slightly lower than that of men living in a couple, and the composition of their income is fairly similar, other than in the case of maintenance paid, which is higher. As regards a comparison between women living in a couple and those who are divorced or separated, differences in income widen at the level of State benefits (unemployment benefit and pensions). Whereas divorced and separated women receive relatively high allowances compared to those received by divorced and separated men when these women are unemployed, women living in a couple receive much less than men living in a couple. The unemployment benefit system is graduated according to the recipient's family situation, and thus strongly favours men who are heads of households. The retirement pensions paid to women are systematically lower than those paid to men, and the gap is particularly wide among the group comprising people living in a couple. The substantial family allowances paid to divorced and separated women are indicative of the fact that they are usually divorced mothers with custody of dependent children. The average income of widows and widowers primarily consists of State pensions.

Levels of financial dependence are lowest for men living in a couple (6%), and for widowers, and they are highest for men who are divorced or separated (11%).



Conversely, the level of dependence among women living in a couple is more than twice that observed for divorced or separated women and for widows.

We supplemented this analysis with a longitudinal study. To perform a longitudinal analysis of the effects of a couple breaking up on women's and men's individual incomes, we used the data from the 2007 European SILC longitudinal database for 18 European countries. Our sample is made up of adults forming part of a couple during the survey conducted in year  $t$  (2004 or 2005), but who did not have a partner at the time of the survey conducted the following year, i.e. in  $t+1$  (2005 or 2006). Among these individuals suffering a break-up, we considered only those for whom we still possess all of the information required in year  $t+2$  (2006 or 2007). Our results show that following a break-up, men's average net individual income increases by 6%, whereas for women this figure is as high as 40% and above. Our results contradict the rest of the literature, which generally reports negative economic consequences resulting from a break-up, especially for women. This can be explained by the hypothesis that resources within households are fully shared, which is adopted in most income and poverty studies but is rejected in our analysis. Indeed, what is original about this study is that it looks at the personal incomes of individuals, i.e. those possessed by them alone as a result of their work, any State benefits they may receive, and their income from immovable and movable property – whatever the nature of their lifestyle and the household to which they belong. Despite the substantial rise in women's net individual income highlighted by our results in the event of a break-up, their average income remains lower than men's.

The rise in women's net average income following a break-up is primarily due to State benefits. The income women possess on account of their economic activity seems to be relatively little affected by the break-up.

We took Uunk's study (2004) as our starting point, but unlike him we worked on individual incomes, to estimate an econometric model that would enable us to identify the individual and macro-economic variables influencing the variation in net individual income where a couple breaks up. At the level of individual characteristics, we show that the income received prior to the break-up exerts a negative influence on the rise in income following the break-up, and consequently the rise in income brought about by the break-up is less marked for an individual with a high income before the break-up. Age exerts a positive influence on the variation in income as a proxy for occupational experience. Individuals with a high level of educational attainment see their income rise to a greater extent following the break-up than do the least-educated individuals. A high level of educational attainment enables women who were not working before the break-up to return to the labour market more easily following this event. Lastly, the break-up produces a rise in net individual income which is all the more significant in that the event prompts the person to (re-)enter the labour market.

As far as macro-economic variables are concerned, an increase in the number of places available at public childcare facilities exerts a positive influence on the variation in income in the event of a break-up. Public childcare therefore appears to be a key policy to enable women, and especially single mothers, to combine their family and work-related responsibilities. Interpreting the estimated impact of the type of welfare state on the economic consequences of a break-up often proves complicated. This finding underlines

the need to adopt a very critical approach to dealing with welfare state classifications of the type produced by Esping-Andersen (1990 and 1999).

### *Other forms of inequality*

Inequality between individuals and between women and men is not confined to income disparities. Conventional income-based approaches have been criticised on the grounds that other dimensions of inequality and poverty need to be addressed. The main stimulus behind this multi-dimensional approach has been the work of the Nobel prize winner for economics Amartya Sen (1981, 1985, 1992, 1995), who reassessed the concepts of inequality and poverty basing himself on the notion of capabilities. A person's ability to participate in society and lead a decent life is typified by a certain number of functions, ranging from the simplest (eating one's fill, drinking, etc.) to the most complicated (taking part in community life, etc.), and poverty is conceptualised as a lack of the capabilities (education, resources, time, etc.) enabling these functions to be ensured (Jenkins and Micklewright 2007, p.9).

With a view to identifying other forms of inequality, we investigated the possibility of using the individual data for Belgium on consumption and time contained in the databases of the Household Budget Survey and the Time Use Survey for the year 2005.

The Household Budget Survey contains detailed information on consumption. However, these data are available only at household level and it is not possible to ascertain individual consumption. It therefore proved impossible to analyse inequality in consumption by women and by men. If such information were available, it would be possible to establish a link between individual income and consumption, and to better identify the mechanisms at work within households.

The Time Use Survey provides individual data relating to time allocation by women and men (among a number of very detailed disaggregated activities). On the basis of this survey we analysed inequality in the way in which women and men spend their time. This inequality was studied in relation to different individual characteristics.

Time use analysis refers to the notion of time poverty, which can be defined as the fact that - after deducting the time devoted to work, be it paid (gainful employment) or unpaid (domestic and parental activities) - certain people do not have enough time to rest or to engage in leisure activities (Bardasi and Wodon, 2006).

We therefore constructed five indicators which summarise the inequality in the way in which men and women use their time and experience time poverty.

**Table 3: Time inequality indicators in Belgium**

	Men	Women	Ratio of women/men
Percentage of people who are time-poor	15.19	16.6	1.09
Intensity of time poverty	129.12	125.88	0.97
Time devoted to paid work	21.99	14.57	0.66
Time devoted to unpaid work	16.89	27.55	1.63
Total time poverty	<i>0.01</i>	<i>0.07</i>	<i>6.50</i>

Source: Time Use Survey - Belgium 2005, our calculations

The first indicator is an indicator of inequality of time poverty. It represents the ratio between the percentage of women and men who are time-poor. To measure this time poverty we adopted a threshold equal to 1.5 times the median number of hours devoted by the population to work (be it paid or unpaid), which is the threshold generally used in the literature (Bardasi and Wodon, 2006; Lawson, 2007).

The indicator stands at 1.09 and shows that women are more subject than men to time poverty, which affects 16.6% of women.

Next we calculated a second indicator, which measures female/male inequality in terms of intensity of time poverty. This is the ratio between women's and men's average remaining time. It emerges that the time available to women for rest purposes and for social and cultural activities (i.e. the time remaining once paid and unpaid working time has been deducted), is equal to 97% of that of men, which represents 3 hours less per week on average.

Time poverty is based on the notion of total working time, both paid and unpaid. We looked at gender inequality in these different types of time in order to find out whether inequality of time poverty can be explained more by the inequality observed in respect of paid or of unpaid working time. We constructed two indicators to this end. The first is the ratio between women's and men's paid working time; the second is the ratio between women's and men's unpaid working time.

Gender differences in terms of time poverty can be explained by the inequality observed for these two types of work. The inequality indicator for unpaid work shows that, on average, women devote 63% more time to domestic and parental tasks than men (i.e. just over 10 hours per week), whereas the inequality indicator for paid work shows that women's paid working time represents on average 66% of that of men (the difference being roughly 7 hours more per week).

Furthermore, our findings illustrate that inequality in respect of both paid and unpaid work varies considerably depending on the socio-economic characteristics studied: the fact of being married and of having children increases inequality whereas, conversely, the fact of working on full-time pay and of having a high level of educational attainment reduces it.

One last indicator is the ratio comparing the percentage of women and men who combine income poverty with time poverty. It emerges that time poverty and financial poverty are

two distinct types of poverty, since our results demonstrate that some 16% of the population is affected by either time poverty or financial poverty but only 6% combine both types of poverty. The majority of these people are women.

This finding can be explained by the fact that, in general, people who are financially poor are those who have no paid work and for that reason have more time available.

Women are proportionately more affected than men by both of these types of poverty.

### ***Policy implications and recommendations***

The fact that the principal databases do not contain any individual data that can be used to study resources and consumption reflects a particular - and partial - vision of society equating to the unitary model where the family acts “as one man”, ignoring the preferences and respective resources of each of its members. This outmoded view likewise becomes apparent when we note that social entitlements are not always assigned on an individual basis, as is the case in Belgium; it is also evident from the way in which the indicators for policy monitoring are calculated. As Briar (2000) puts it, “*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).

It is therefore politicians who are accountable, and this has far-reaching implications. How can gender inequality be combated effectively unless these forms of inequality are measured in the light of individual incomes? How can poverty among women be combated if it is hidden by being buried within the household?

### ***Databases supplemented by information on individuals***

One initial reform would be to develop databases that make it possible to identify precisely what is produced and consumed by each individual member of a household: i.e. no longer hiding behind the household but examining how it functions.

Such data are crucial in order to identify the exact make-up of inequality and what effects it has. Formulating theories on the basis of non-existent data is the best way of designing ineffective policies.

We therefore recommend that the SILC databases and the Household Budget Survey be remodelled in such a way that personal data concerning all individuals covered by the survey, whatever their family status, can be precisely identified.

The SILC database is the most comprehensive statistical source in existence in Belgium today as concerns incomes and living conditions. Its construction is based on the notion of a household because households are a starting-point for the gathering of information about the individuals comprising it. One problem that arises, however, is that not all the

variables that would make it possible to calculate the individual incomes of members of those households are available; some are available only for the household and must therefore be broken down on a hypothetical basis. Consequently, an initial requirement would be that all income-related data should be gathered separately for each individual belonging to a household.

- A certain number of variables are available at individual level in the Belgian SILC, but these variables are grouped together at household level in the European SILC. This is the case for maternity/paternity allowances (individual question no. I116 in the 2007 Belgian questionnaire) and parental leave (question no. I117 in the same questionnaire), which are brought together in variable HY050 “Family/children related allowances”. This information therefore needs to be individualised at European level too.
- As for other types of income, since only some of the variables comprising them are available at individual level, the question posed for the other income variables needs to be altered so as to identify the recipient. This applies in particular to the various components of investment income.
- Information about other income components is collected for the household as a whole, so these variables need to be individualised at the outset. This is the case for the following variables: HY080 "Regular inter-household cash transfer received" and HY130 "Regular inter-household cash transfer paid", HY060 "Social exclusion not elsewhere classified", HY070 "Housing allowances" and HY140 "Tax on income and social contributions". To these should be added two more variables which are of less concern in Belgium's case: HY120 "Regular taxes on wealth" and HY110 "Income received by people under 16".
- In addition, variables relating to living conditions and deprivation must also be the subject of individual questions. These include ownership of a mobile phone (HS070) or a car (HS110), and more generally all the questions assessing the financial difficulty confronting individuals.

Finally, initiatives aimed at opening up the household “black box” by asking about methods of decision-making and sharing are to be welcomed. In France, the Time Use Survey conducted by the INSEE, aimed at gathering data about how individuals organise their time, has been supplemented in 2009 by a module entitled “Decision-making within the couple” (DDC). The new module investigates how decisions are made within the household, as concerns the discussions/negotiations that take place within couples; disparities in the spouses’ resources; and the management of personal and joint resources. A module on “intra-household sharing of resources”<sup>1</sup> is to be included in the 2010 SILC. This module comprises seven compulsory variables relating to the regime and management of household finances, which will be explored at household level; all the other variables are to be explored at individual level. They relate to the contribution to the

---

<sup>1</sup> [Regulation \(EC\) No 646/2009](#) of 23/07/2009 on the 2010 list of target secondary variables on intra-household sharing of resources, published in the Official Journal of 24/09/2009.

common household budget, access to a bank account, the ability to decide about everyday expenditure, significant outgoings concerning the children, major purchases and furniture, a financial loan or the use of savings. The variables also concern decision-making: the individual's ability to make decisions regarding a series of items of expenditure. There are other questions on time use and the amount of personal expenditure.

The Household Budget Survey makes available a large number of variables relating to consumption and living conditions. Indeed, it comprises almost 1,500 variables including:

- expenditure on food (bread and cereals, meat, fish, dairy produce, fruit, vegetables, sweetmeats and confectionery, ready meals, alcoholic and non-alcoholic drinks, tobacco);
- expenditure on items of clothing (clothes, baby clothes, clothing accessories, footwear, repairs to clothes/footwear);
- expenditure on housing (gross rental costs; heating, lighting and water);
- expenditure on purchases of furniture, domestic appliances, kitchenware and regular maintenance (fixtures and fittings, carpets, other floor coverings, repairs; household textiles, furnishings and repairs; heating appliances and large domestic appliances, etc.);
- expenditure on personal hygiene and health care (medicines and pharmaceutical products, therapeutic appliances and equipment, the services of doctors, nurses and other practitioners, etc.);
- expenditure on transport and communications (vehicle purchases, cost of using a private car, transport services, etc.);
- expenditure on cultural and leisure activities and education (equipment and accessories; leisure, entertainment and cultural services; newspapers, books, stationery, education);
- expenditure on other goods and services (personal hygiene; personal articles; restaurants, cafes and hotels; tourist trips; financial services and insurance, etc.);
- expenditure not included under consumer items (taxes, transfers to persons and organisations, investments, loans, etc.);
- housing conditions (type of accommodation occupied, e.g. detached/semi-detached/terraced single-family home, apartment in a building of 2/3-4/5-9/10 or more dwellings, etc.; property tax; year of construction; dimensions and number of kitchen/bedrooms/etc.; garden/balcony/etc.; garage, etc.);
- availability of vehicles (number of cars; ownership of the car e.g. purchased/leased/etc.; number of company cars, etc.);
- durable goods available on the last day of the reference month (number of motorbikes, bicycles, caravans, telephones, mobile phones, internet connections, televisions, cine cameras, DVD readers, washing machines, vacuum cleaners, etc.).

The major drawback here is that all these data are collected at household level, whereas gender inequality – be it in terms of consumption or living conditions – must inevitably be analysed on the basis of individual data, since the collection of such data at household

level can mask real differences between women and men. This database must therefore be modified by individualising the questionnaires.

The Time Use Survey has the benefit of gathering a very detailed set of information. These data are collected individually, which makes it possible to carry out an analysis of gender inequality in terms of time allocation. For this reason we have no recommendations to make with respect to this survey.

***Indicators calculated at individual level which do not underestimate income inequality and women's poverty risk***

Once individual data have been added to these databases, it will also be necessary to revisit the inequality and poverty indicators, and to challenge at long last the clear hypothesis that resources are shared equally between members of a household.

As far as Belgium is concerned, we propose that the BGIA indicators be monitored on a regular basis. Such monitoring already takes place for the gender pay gap, with the annual publication of the report on the pay gap between men and women in Belgium issued by the *Institute for the equality of women and men*. Given the considerable inequality between women and men in terms of income and financial dependence revealed by the BGIA analysis, it seems vital to us that the indicators set out below should be published and monitored annually, in order to keep track of the trend in gender inequality in Europe.

It is likewise crucial, in our opinion, for all official reports dealing with poverty and inequality to include an analysis based on individualised indicators. This should apply in particular to the Social Barometers and other annual publications monitoring the trend in poverty, all of which are marred by the "household hypothesis".

At European level, the common indicators geared to monitoring the process of social protection and social inclusion ought also to be supplemented by indicators based on individual incomes: the rates of poverty and income inequality presented are calculated without taking individual incomes into account, relying on the clear hypothesis that resources are shared in full within couples.

Inasmuch as the effects of national policies on social integration, pensions and health care are measured on the basis of these indicators, indicators that are skewed from a gender perspective could cause governments to neglect inequality between women and men that is masked by these indicators. Policies could prove inappropriate for promoting women's employment and social inclusion, given that their specific situation is not correctly reflected by the indicators used. We therefore believe that it is essential to devise new indicators, measured at individual level, to complement the "Laeken" indicators.

### ***Individualised social and taxation policies***

Even after the databases have been redesigned, and the indicators calculated and monitored, there will still be a need to revisit the social security systems operating in Europe, in order to ensure individual social entitlements for everyone, irrespective of gender and the type of household to which individuals belong. All too often, taxation systems and social benefits are still predicated on the traditional formula of the male breadwinner meeting the needs of his family.



**Table 4: Proposed indicators**

	SILC Belgium 2006	SILC Belgium 2007
<b>Indicators of income inequality</b>		
<b>Ratio between women's and men's average incomes</b>		
<b>Gross income</b>	0.55	0.56
<b>Net income</b>	0.62	0.63
<b>Income from economic activity</b>	0.72	0.71
Incl.: Earnings of employees	0.72	0.70
Incl.: Pay	0.74	0.73
Bonuses	0.58	0.58
Incl.: Holiday pay	0.61	0.61
End-of-year bonus	0.68	0.66
Thirteenth month	0.70	0.72
Income from self-employment	0.67	0.68
<b>State benefits</b>	0.75	0.77
Incl.: Pensions	0.66	0.70
Unemployment	0.68	0.71
Incl.: Unemployment benefit	0.89	0.88
Invalidity benefit	0.83	0.87
<b>Ratio comparing the percentage of women in the first and last deciles</b>	3.6	3.6
<b>Indicators relating to decomposition of the Gini coefficient</b>		
<b>Relative economic distance</b>	0.605	0.586
<b>Ratio between transvariation and gross inter-group inequalities</b>	0.393	0.414
<b>Indicators of inequality regarding the risk of financial dependence or individual poverty</b>		
<b>Level of financial dependence or rate of individual poverty risk</b>		
Total	24%	23%
Women	36%	34%
Men	11%	11%
<b>Ratio between women's and men's levels of financial dependence</b>	3.3	3.1
<b>Ratio between women's and men's relative median gaps</b>	1.7	1.6
<b>Ratio between women's and men's intensity of financial dependence</b>	5.6	5
<b>Indicators of time inequality</b>		
	<b>Time Use Survey - Belgium 2005</b>	
<b>Inequality of time poverty</b>	1.09	
<b>Inequality of intensity of time poverty</b>	0.97	
<b>Inequality of paid working time</b>	0.66	
<b>Inequality of unpaid working time</b>	1.63	
<b>Inequality of total time poverty</b>	6.5	

Source: SILC 2006+2007, Time Use Survey - Belgium 2005, our calculations

## References

- Andreß, H.-J., B. Borgloh, M. Gullner and K. Wilking**, 2003. Wenn aus Liebe rote Zahlen werden. Über die wirtschaftlichen Folgen von Trennung und Scheidung [When love becomes being in the red. About the economic consequences of separation and divorce]. Wiesbaden (DE), Westdeutscher Verlag.
- Atkinson, T., B. Cantillon, E. Marlier, and B. Nolan**, 2002. Social Indicators: The EU and Social Inclusion, Oxford University Press, Oxford.
- Blinder, A.S.**, 1973. "Wage Discrimination: Reduced Form and Structural Variables", *Journal of Human Resources*, Vol. 8, pp. 436-465.
- Braver, S. L., M. Whitley and C. Ng**, 1993. "Who divorced whom? Methodological and theoretical issues", *Journal of Divorce and Remarriage*, 20, pp.1-19.
- Briar, C.**, 2000. "In search of gender-sensitive concepts and measures of poverty, inequality and well-being", *Social Policy Journal of New Zealand*, Issue 14 (July), pp. 17-29.
- Browning, M., F. Bourguignon, P.-A. Chiappori and V. Lechene**, 1994. "Income and Outcomes: A Structural Model of Intra-Household Allocation", *Journal of Political Economy*, Vol. 102, pp. 1067-96.
- Brinig, M. F. and D. W. Allen**, 2000. "These boots are made for walking: Why most divorce filers are women", *American Law and Economics Review*, 2, pp.126-169.
- Burkhauser, R., G. Duncan, R. Hauser and R. Berntsen**, 1991. "Wife or frau, women do worse: a comparison of men and women in the United States and Germany after marital dissolution", *Demography*, Vol.28, 3, pp.353-360.
- Cantillon, S. and B. Nolan**, 2001. "Poverty within households: measuring gender differences using nonmonetary indicators", *Feminist Economics*, Vol. 7, 1, pp. 5-23.
- Casper, L. M., S. S. McLanahan and I. Garfinkel**, 1994, "The gender-poverty gap: what we can learn from other countries", *American Sociological Review*, Vol. 59, 4, pp. 594-60.
- Daly, M. and Rake, K.**, 2002, "Gender, household and individual income in France, Germany, Italy, the Netherlands, Sweden, the USA and the UK", *Luxembourg Income Study working paper series*, working paper no. 332, November, 26 p. + appendix.
- Emmerling, D.**, 2005. "Ehescheidungen 2003 [Divorce in 2003]", *Wirtschaft und Statistik*, 2, pp.97-108.
- Esping-Andersen, G.**, 1990. *The Three Worlds of Welfare Capitalism*, Oxford: Polity Press.
- Esping-Andersen, G.**, 1999. *Social Foundations of Postindustrial Economies*, Oxford: Oxford University Press.
- Folbre, N.**, 1986, "Hearts and spades: paradigms of household economics", *World Development*, Vol. 14, 2, pp. 245-55.
- Fritzell, J.**, 1990. "The dynamics of income distribution: Economic mobility in Sweden in comparison with the United States". *Social Science Research*, 19, 17 – 46.

**Jarvis, S. and S. Jenkins**, 1999. "Marital splits and income changes: Evidence from the British Household Panel Survey", *Population Studies*, Vol.53, 2, pp.237-254.

**Jenkins, S. and J. Mickelright**, eds., 2007, *Inequality and Poverty Re-examined*, Oxford University Press

**Kabeer, N.**, 1994, *Reversed realities: gender hierarchies in development thought*. London, Verso.

**Lundberg S., R. A. Pollak and T. J. Wales**, 1997, "Do Husbands and Wives Pool their Resources? Evidence from the U.K. Child Benefit", *Journal of Human Resources*, 22, pp. 463-80.

**Manting, D. and A. Bouman**, 2006. "Short and long-term economic consequences of union dissolution of marital and consensual unions. The example of the Netherlands", *European Sociological Review*, Vol.22, 4, pp.413-429.

**Nelson, J.**, 1996, *Feminism, objectivity, and economics*. London and New York, Routledge.

**Oaxaca, R.**, 1973, "Male-female wage differentials in urban labour markets", *International Economic Review* 14(3), pp. 693-709

**Pahl, J.**, 1980, "Patterns of money management within marriage", *Journal of Social Policy*, Vol. 9, 3, pp. 313-36.

**Pahl, J.**, 1983, "The allocation of money and the structuring of inequality within marriage", *Sociological Review*, Vol. 31, 2, pp. 235-62.

**Pahl, J.**, 1989, *Money and Marriage*. Basingstoke, Macmillan.

**Poortman, A. and M. Kalmijn**, 2002. "Women's labour market position and divorce in the Netherlands: evaluating economic interpretations of the work effect", *European Journal of Population*, Vol.18, 2, pp.175-202.

**Poortman, A.**, 2000. "Sex differences in the economic consequences of separation: A panel study of The Netherlands", *European Sociological Review*, Vol.16, 4, pp.367-383.

**Sen, A.**, 1982, *Choice, Welfare and Measurement*, Oxford, Basil Blackwell, 480 p.

**Sen, A.**, 1985, *Commodities and Capabilities*, London, Elsevier Science Publishing Company.

**Sen, A.**, 1992, *Inequality Re-examined*, Harvard, Harvard University Press.

**Smock, P., W. Manning and S. Gupta**, 1999. "The Effects of Marriage and Divorce on Women's Economic Well-being", *American Sociological Review*, Vol.64, 6, pp.794-812.

**Uunk, W.**, 2004. "The economic consequences of divorce for women in the European Union: The impact of Welfare State Arrangements", *European Journal of Population*, Vol.20, 3, pp.251-285.

**Vogler, C.**, 1989, "Labour market change and patterns of financial allocation within households", Oxford, ESRC Social Change and Economic Life Initiative.

**Vogler, C. and J. Pahl**, 1993, "Social and economic change and the organisation of money in marriage", *Work, Employment and Society*, 7, pp. 71-95.

**Wolff, P.**, 2009, “79 million EU citizens were at-risk-of-poverty in 2007, of whom 32 million were also materially deprived”, Eurostat, *Statistics in Focus*, Population and social conditions, 46/2009, 12 p.

**Woolley, F. and J. Marshall**, 1994, “Measuring inequality within the household”, *Review of Income and Wealth*, Vol. 40, 4 (December), pp. 415-31.