GENDER AND INCOME
ANALYSIS AND DEVELOPMENT OF INDICATORS

BELGIAN GENDER AND INCOME ANALYSIS (BGIA)

Institute For the Equality of Women and Men

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Authors:
Zouhair Alaoui Amine
Kim Fredericq Evangelista
Leila Maron
Natalie Simeu

Under the supervision of:
Prof. dr. Danièle Meulders
Prof. dr. Síle O'Dorchai
Prof. dr. Robert Plasman
Prof. dr. François Rycx

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FOREWORD

This report is the result of a unique project: the Belgian Gender and Income Analysis (BGIA). Its objective was to produce a gender-aware analysis of the existing income data and the development of gender and income indicators. This was necessary for several reasons. The first and probably most obvious reason is gender mainstreaming: adequate policy preparation demands that the situations of men and women are taken into account in every domain. This is most certainly the case in the field of the prevention of and the fight against poverty, where income indicators have been well-established for a long time. A second important reason is to further explore the possibilities of existing income data. The collection and processing of high quality statistics gains value when maximum use is made of these data. The third reason is a scientific one. The field of tension between the analysis of data on a household level or an individual level is a recurrent theme in science. Both approaches have their merit. In poverty research the analysis on an individual level has hitherto been lacking. Among other things within the context of the debate on the individualization of social security rights it is important to be able to compare both analyses.

The BGIA project is the result of a cooperation between the Institute for the equality of women and men, the General Direction for Statistical and Economical information and the FPS Federal Science Policy. DULBEA, the research centre for Applied Economics of the Université Libre de Bruxelles, was commissioned to carry out the project.

The BGIA project has had a long previous history. In 2001 professor dr. Mieke Van Haegendoren (2001) calculated in her study "Mannen en vrouwen op de drempel van de 21e eeuw" (Men and women on the threshold of the 21st century) based on fiscal data that eighty percent of the highest income category were men.[1] In May 2002 the then minister of Employment and Equal Opportunities, Laurette Onkelinx, and the then minister of Economy and Scientific Research, Charles Picqué, gave the impetus for the seminar on "Making women and men visible in statistics". One of the most important conclusions of the seminar was that income statistics are problematic:

> *'There is not enough information about the repartition of income within the households. Often the individual is used as a unit of measure, or the household on the basis of a scale of equivalence, after which the income is spread out over all household members. In the first case the income of women who have access to (a part of) their partner's income is underestimated, in the second the income of women who do not have a say in the total household income is overestimated. The income can be distributed in different ways within the household (one person makes all the decisions, one partner decides on how to spend the housekeeping money, both partners decide everything together, both partners have a separate budget).'[2]*

Good gender and income data are indispensable. This is why the Institute for the equality of women and men wanted a gender-aware analysis of income data and clear and accessible gender indicators that can be updated annually. The BGIA-project was developed to meet this need for gender-aware income statistics.

The existing income and poverty indicators also have a long previous history. During the Belgian EU-Presidency in 2001 a comprehensive set of indicators was approved by the Council of the European

1 Mieke Van Haegendoren et al (2001) Mannen en vrouwen op de drempel van de 21e eeuw. Gebruikershandboek genderstatistieken. (Men and women on the threshold of the 21st century. User manual gender statistics) Brussels: Federal Ministry of Employment and Labour p. 212.
2 Vrouwen en mannen zichtbaar maken in de statistieken. Verslag van de studiedag van 6 mei 2002 (Making women and men visible in statistics. Account of the seminar of 6 May 2002 (2003) Brussels: FPS Employment, Labour and Social Dialogue, Equal opportunities Unit. p 70.

Union, the so-called 'Laeken indicators'. Besides indicators with regard to insufficient income, this set also includes indicators for other dimensions of poverty: insufficient access to paid labour, good housing, health care, schooling and social integration and participation. This set forms the basis of the indicator appendix of the National Action Plan for Social Inclusion. The poverty barometer is a limited selection of these indicators. Especially the annually published poverty risk percentages have become well-established. Although these percentages are also broken down by sex, they contain a specific gender bias. In the indicator annex enclosed with the report 2005-2006 this is expressed as follows:

> *'As regards the monetary indicators this break down provides only partial information about the comparative situation of men and women with regard to poverty, in so far as the total income of the household (the sum of all individual incomes) is used in this analysis. So in this kind of calculation the underlying hypothesis is that each member of the household has equal access to the income of the household. Even if this hypothesis is not unrealistic (in so far as it can be assumed that an individual's situation with regard to poverty is indeed determined by the income of his or her household), it obscures the different situations of men and women with regard to poverty. The published poverty (risk) percentages by sex only give indirect information about the prosperity differences between women and men to the extent that they will be different if the situation of single men and women (or men or women living in households with an unequal composition man/woman) is different.'[3]*

In other words, the gender bias is a consequence of the analysis: the different incomes in a household are added up and redistributed according to a formula based on the principle that the household is a non-conflict zone where means are spent according to the needs of its members. This does not correspond to the concrete situation of a great number of women, who have no control over the whole income or certain expenditures, but who do shoulder the largest part of the responsibility for the needs of the family. Only in the case of singles can it be said that the income attributed to the individual are really those of the man or woman in question. So to paint a correct picture of poverty risks and more in general of the income situation of women and men the household income data must be processed differently.

A second limitation of the classic poverty risk percentages is the fact that it concerns a snapshot in time. Because families are less stable than a couple of decades ago, there exists a kind of hidden risk of poverty inside families, certainly when viewed over a longer period. The current figures insufficiently show the relationship between income, or the personal access to it, and events in the course of life. In this way the 'cost' of having children, in the sense of losing income in the short or longer term and in the future, is shouldered disproportionately by women. For instance: the high poverty risks of older single women are directly connected with the gender differences in built up pension rights. In other words, the analysis of poverty risks at household level offers too little information about the precarious circumstances of the different family members in case of a break-up. This question is relevant in the context of family destabilization.

De goal of the BGIA-project was to surmount these limitations. Belgium has good income data, however, insufficiently analyzed from a gender perspective. The yearly poverty percentages are calculated on the basis of the Statistics on Income and Living Conditions (SILC). This annual household survey

3 Nationaal Actieplan Sociale Insluiting 2005-2006. Indicatoren. (National Action Plan Social Inclusion 2005-2006. Indicators) Brussels: FPS Social Security. pp. 26-27.

is organized by the General Direction for Statistical and Economical Information. Besides a series of household related questions, the survey also contains an individual questionnaire for all household members who are sixteen or older. The availability of information in which individual data is linked to household level data offers unique possibilities for alternative analyses and the development of new indicators. Moreover, the survey is also a partial panel study: families from the sample are questioned for a number of years in a row, enabling longitudinal analysis.

Belgium has been a European trend-setter in the field of poverty indicators. Analysing income from a gender perspective is in fact pioneering research. The difficulty of studying gender differences in income based on the current indicators is not a problem specific to Belgium. Although the tax and social security systems certainly differ between member states, the method used for calculating the developed indicators is explained in detail. Furthermore, the report contains an extensive comparison between eight Member States. In this way the method and results can certainly be useful and relevant in a European context.

Our special thanks go out to Aziz Naji and Margarida Freire of the FPS Federal Science Policy, Annie Versonnen, Lydia Merckx, Geneviève Geenens and Patrick Lusyne of the General Direction for Statistical and Economical Information, Hildegard Van Hove and Geraldine Reymenants of the Institute for the equality of women and men, Danièle Meulders, Síle O'Dorchai, Robert Plasman, François Rycx, Kim Fredericq Evangelista, Zouhair Alaoui Amine, Leila Maron and Natalie Simeu of DULBEA, the research centre for Applied Economics of the Université Libre de Bruxelles and the members of the steering committee, who gave expert feedback in the course of the research project.

Michel Pasteel
Director of the Institute for the equality of women and men

Annie Versonnen
Director-General a.i. of the Directorate General Statistics and Economic Information

GENERAL INTRODUCTION

The 'Belgian Gender and Income Analysis (BGIA)' is a joint project on the part of Belgium's Federal Scientific Policy, the Gender Equality Institute, the Directorate General for Statistics and Economic Information and the Department of Applied Economics at the Université Libre de Bruxelles (DULBEA), which carried it out. The aim of this project is 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. 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 the 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.

Indeed, the traditional approach to poverty is to look at the household as a whole, considering it – in keeping with micro-economic theory – as the basic decision-making unit. People belonging to households identified as 'poor' are considered 'poor', whatever their individual incomes. Taking the household as the unit of analysis leads to two hypotheses: the first, known as 'aggregation' or 'income pooling', assumes that income is pooled and shared equally among members of the household. According to this approach, each member has access to the shared resources and everyone's individual resources are pooled. Osberg (2000) and Sierminska et al. (2008) assert that the choice of this hypothesis is justified by the contstraints imposed by databases, primarily the non-individualisation of certain information. Data making it possible to usefully analyse the structure of intra-household inequality are rarely available because their collection is complex and costly (Wright and Findlay 1996, Sutherland 1997). The second hypothesis, which is a consequence of the first, considers that members of poor households experience identical types and degrees of hardship. Ruspini (1999) criticises this approach for masking poverty among women.

These hypotheses have been challenged by means of empirical studies on the distribution of resources within families, carried out in developing countries in the 1970s. The account given by Sen (1984) is fascinating. It appears in fact that in India women and girls do not have the same access to household resources as men and boys, and that some females go hungry even when the household to which they belong is 'non-poor'.
These studies represented the first break with the traditional approach to poverty. Thereafter, several authors (Daly 1992, Haddad and Kanbur 1990, Lazear and Michael 1986) maintained that it was unrealistic to assume an equal sharing of resources within the household, since that hypothesis takes no account of personal preferences and interactions in the household's decision-making process. It therefore tends to overestimate male poverty and underestimate that among women (Wright and Findlay 1996, p.336), as women who really are 'poor' may belong to so-called 'non-poor' households. This underestimate of female poverty in the traditional approach has been commented on by many economists (Folbre 1986, Kabeer 1994, Woolley and Marshall 1994, Nelson 1996). The household acts in a sense as a fig-leaf for poverty.
Borooah and McKee (1994) demonstrated that, where income is shared equally between partners, 33% of couples are poor; however, bearing in mind that the man's and woman's shares are 70% and 30% respectively, the results reveal that 66% of women are poor, as opposed to 14% of men.

One might well 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 however worrying that this key assumption – that households fully share their resources – is almost always used in studies investigating poverty and in the European social inclusion indicators. What is more, in these studies and in the monitoring of indicators, the pooling hypothesis is neither discussed nor presented as a strong hypothesis by authors. They present their results as universal facts, without indicating to what extent they are mindful of this initial hypothesis.

The hypothesis of income pooling does provide a way of comparing household circumstances in different countries in the context of large-scale, gender-blind, international comparisons. Yet when the aim is to determine those individual characteristics likely to lead to poverty, studies based on income pooling can only produce highly questionable results given that a high level of correlation can be assumed between individuals' personal characteristics and the type of 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.'*

The question we must ask ourselves concerns 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 study by Sierminska et al. (2008) based on the 2002 module of the German Socio-Economic Panel found that equal sharing of income seemed to be the norm for just 15% of couples.

In this project we move right away from the traditional household-based approach. Our aim is to examine women's and men's individual incomes and to assess the risk of poverty or dependence that they run individually.

In order to do so, we began by developing a methodology to calculate the individual incomes of women

and men based on the SILC (European Statistics on Income and Living Conditions) database: financial resources are fully individualised so as to measure income inequality, and a poverty risk is calculated for every individual.

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 individually perceived incomes, ignoring income that is pooled within the household (Daly and Rake 2002).

Since inequality and poverty come in many shapes and sizes, we also sought to determine what other types of inequality could be examined thanks to the databases available in Belgium. The main stimulus behind this multi-dimensional approach has been the work of 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).

This report is divided into five chapters.

In **Chapter 1** we put forward a methodology for calculating the individual incomes of women and men in Belgium on the basis of the SILC 2006 and 2007 data; using these individual incomes we measure and analyse the income inequality between women and men. These analyses are carried out according to the different socioeconomic characteristics of the persons concerned (age, marital status, type of household, level of educational attainment and employment status) and the various income components are examined (earnings from economic activity: wages, holiday pay, end-of-year bonus, non-wage income, etc.; and State benefits: pension, unemployment benefit, invalidity or sickness benefit, etc.). A set of basic indicators enabling us to measure the inequality between individual women's and men's incomes is then constructed based on these analyses.

Our study is complemented by a detailed examination of the distribution of the persons concerned by decile and according to two econometric analyses: a decomposition of inequality measured by the Gini coefficient according to gender, and an Oaxaca-Blinder decomposition of income disparities between women and men. This analysis also leads to suggestions of indicators.

Next we present the concept of financial dependence or individual poverty, which consists in measuring the risk of poverty without assuming that income is shared within couples. We propose various indicators of financial dependence measuring the risks of relative poverty to which women and men are individually exposed; these indicators are compared with the European poverty risk rates calculated on the assumption that resources are pooled and fully shared among all members of a household. The effects of State intervention on financial dependence are also analysed, and the sensitivity of our findings is tested by applying a scale of equivalence taking account of dependent children.

At the end of Chapter 1 we analyse the effect of different characteristics on the likelihood of financial dependence by estimating a probit model that enables us to isolate the particular effects of different socioeconomic variables and to highlight the determinants of financial dependence.

In **Chapter 2** the same methodology is applied to calculate women's and men's individual incomes and the inequality indicators for nine European countries: Austria, Belgium, France, Ireland, Luxem-

bourg, Poland, Spain, Sweden and the United Kingdom. Our aim is to compare the income disparities between women and men in these countries and to measure the gaps between the rates of financial dependence and the European at-risk-of-poverty rates for women and for men.

In **Chapter 3** we attempt to open the 'black box' that is the household by analysing the inequality between partners' individual incomes within couples. The analysis is carried out by decile and according to the scale and significance of the income disparity between partners.
Financial dependence is studied by classifying couples into four groups: couples where each of the partners is financially dependent, couples where neither partner is financially dependent, couples where the woman is financially dependent and couples where the man is financially dependent.
These analyses too are carried out taking into account a range of characteristics such as age, number of dependent children, employment status and level of educational attainment.

In **Chapter 4** we measure and analyse the effects of a break-up of the couple or the death of a partner on the individual net income and financial dependence of women and men in Belgium. This entails, first of all, comparing the incomes and financial dependence of people who are divorced/separated and widowed with those of people living as a couple, in the light of their different personal characteristics (age, level of educational attainment, employment status, number of dependent children).
The longitudinal data of the European SILC are then used to measure the effects of a break-up on women's and men's individual incomes: to do this, we compare individual net incomes before and after the break-up, namely one year before and one year after the dissolution of the household. Econometric estimations are also performed so as to reveal the factors determining the trend in the woman's net income after the break-up, the explanatory variables being individual characteristics as well as variables reflecting the type of welfare state.

In **Chapter 5** we look at the other types of gender inequality that can be measured on the basis of Belgian databases, and we find that the only types of inequality that can be calculated are those observed in relation to time usage, since no data relating to consumption exist for individuals.
We therefore analyse the working time devoted to gainful employment and to unpaid work (i.e. time spent on domestic and parental duties), as well as the time remaining (which may be used for rest, leisure, social and cultural activities, etc.): this approach has to do with the concept of time poverty. We construct five indicators for time inequality between the sexes according to socioeconomic characteristics such as age, marital status, type of household, level of educational attainment, number of dependent children, employment status and poverty status measured on the basis of individual income.

Finally, by way of **conclusion**, we highlight the political implications of our findings and make some recommendations. Three topics are addressed:

• How can the existing databases be improved so as to explore more effectively the inequality and risks to which women and men are exposed?
• What indicators should be selected in order to identify and monitor the trend in inequality between women and men, without minimising the risks run by women?
• How can policy bias owing to the use of partial indicators and measurements be avoided?

CHAPTER 1

Analysis of women's and men's individual incomes and financial dependence in Belgium

INTRODUCTION

This chapter presents the results of an analysis of women's and men's individual incomes and the risk of financial dependence they run in Belgium. The calculations and estimations are based on the 2006 SILC database for Belgium, which is the Belgian component of EU-SILC (European Statistics on Income and Living Conditions).[4] The 2006 database relating to Belgium comprises 5,860 households and 14,329 individuals, of whom 11,314 are aged 16 or over. The results obtained have been updated using the 2007 version of SILC Belgium, which contains slightly more observations than its 2006 counterpart (6,348 households and 12,322 individuals aged 16 or over). The figures relating to SILC Belgium 2007 appear in the last column of the summary tables.

The study relates to the adults present in SILC Belgium 2006 and 2007, whom we have defined as persons aged over 24, plus those aged 18 to 24 who are active in the labour market (i.e. either working or available for work and actively seeking employment, in accordance with the definition established by the International Labour Organization).

The SILC database is constructed on the basis of two separate questionnaires (one for the household and one for the individuals comprising it) and numerous variables are globalised within the household, which remains the base unit of these statistics. Consequently, using this source to identify the exact individual incomes of the various household members is no easy task, as several income components are aggregated at household level. This applies to income from (movable and immovable) investments, regular inter-household transfers, family allowances, social integration income (even though this variable is individualised as from SILC 2007) and taxes, which are data available only at household level. As a result, in the first instance we decomposed these aggregates in order to isolate, within households, the specific individual incomes of the various adults comprising them.

Part One of this chapter presents the individual incomes of Belgian women and men in 2006. Calculating ratios between these incomes and their various components enables us to measure inequalities between women and men. These ratios constitute an initial group of indicators which we call basic indicators. The analysis is supplemented by a detailed examination of the distribution of persons by decile, and by two econometric analyses: the inequality decomposition as measured by the Gini index according to gender, and an Oaxaca-Blinder decomposition of income disparities between women and men.

Part Two is devoted to calculating financial dependence indicators. The proposed indicators are based on the calculation of individual poverty rates, which we call financial dependence rates. These rates stipulate that anyone whose individual income is below 60% of the median individual income is in a situation of financial dependence or at risk of individual poverty: their own income does not cover their needs, so they are at risk of poverty if there is a breakdown in their relationship with other household members who are supposed to share their income with them. The dependence rate is based on individual incomes. In this sense, it differs from the European at-risk-of-poverty rate, which assumes that a household's income will be shared in full between its members.

A simulation is also carried out with the application of an equivalence scale taking account of dependent children, to measure the sensitivity of our results to this hypothesis.

Part Three studies the effects of various characteristics on the likelihood of financial dependence, and an analysis using the probit method is used to isolate the specific effects of the different variables. Several characteristics are examined; activity status, age, education, household type and nationality.

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4 European Statistics on Income and Living Conditions (EU-SILC) is an instrument used for gathering multi-dimensional, cross-sectional and longitudinal microdata, in a comparable format, on income, poverty, social exclusion and living conditions. For further information on EU-SILC, please consult: http://forum.europa.eu.int/Public/irc/dsis/eusilc/library.

The results are compared with the 'traditional' at-risk-of-poverty rates calculated by applying the European definition to our sample. A probit analysis is performed to isolate the effects specific to each variable.

Indicators are proposed in the various parts of the chapter, and are summarised in a table presented in the conclusion.

1   ANALYSIS OF THE DISTRIBUTION OF WOMEN'S AND MEN'S INDIVIDUAL INCOMES

In the first part of this exercise, we analyse the distribution of individual income between men and women, based on SILC Belgium 2006; this analysis is detailed by income category, according to different individual characteristics and by decile.

Eurostat uses the previous year's incomes as the best proxy for tackling incomes for the current year. As a result, SILC Belgium 2006 is based on 2005 income, so our calculations and results concerning SILC Belgium 2006 relate to men's and women's incomes in 2005.

1.1   Definition and calculation of women's and men's individual incomes

In the context of the BGIA project, a method has been proposed for calculating, based on the SILC survey, the net individual incomes of all persons aged over 24 and of individuals aged 18 to 24 who are active in the labour market (i.e. either working or available for work and actively seeking employment, in accordance with the definition established by the International Labour Organization).

In its definition of income, the Canberra Group[5] identifies five income categories:

• Employees' earnings
• Earnings from self-employment
• Income from property rentals (other than land)
• Income from interest and dividends, and from land rentals
• Transfers received (whether from other households or State transfers)

The sum total of these incomes forms what the Canberra Group calls 'total income'; transfers paid (taxes paid to the State and transfers paid to other households) are deducted from this total income, to arrive at the amount of 'disposable income'. Finally, the Canberra Group mentions the possibility of calculating 'adjusted disposable income' by deducting from this 'disposable income' any 'social transfers in kind' (STIK) received: these include benefits and services provided by the State, such as education, healthcare and cultural services, whether free of charge or at reduced rates.

The logic used by the Canberra Group is a 'flow' logic: the net income measurement is presented as the sum total of all 'receipts' (income and positive transfers) less all 'outgoings' (negative transfers). To highlight the effects of State intervention, we have adopted a slightly different definition: gross income is defined as the sum total of income prior to State intervention (income from economic activity + investment income + net income from inter-household transfers), and net income is defined as being equal to gross income less taxes plus State transfers.

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5 International Expert Group on Household Income Statistics ('Canberra Group') (2001), Final Report and Recommendations, Ottawa, Ontario: Statistics Canada, pp.22-25. See also table in annex.

Our definition of income is therefore as follows:

Gross income = Income from economic activity + Investment income + Income from inter-household transfers

Net income = Gross income + State transfers - Taxes

Hypotheses have been established concerning the way in which non-individual incomes are distributed among household members in SILC Belgium 2006: this applies to income from movable and immovable property, income from financial investments, inter-household transfers, family-related allowances and taxes:[6]

- Income from movable and immovable property, income from financial investments and inter-household transfers have been divided equally among the adults present in the household.
- Family allowances have been shared between the parents present in the household.
- Taxes have been broken down in two stages. Firstly, taxes relating to individual incomes have been identified by calculating the difference between the gross and net amounts of this income. Secondly, the taxes for which SILC Belgium 2006 does not provide any individual information are divided between the various household members, based on the relative shares of individual taxes calculated previously. Several scenarios may however arise:

  - If the amount of individual tax payable by adult members of the household is zero but the household's taxes represent a positive amount, each adult contributes an equal sum towards the payment of these taxes.
  - If the amount of individual tax payable by all adult members of the household is negative, the proportion rule is applied inversely. Each person contributes progressively more as his/her individual tax bill becomes relatively less negative.
  - If the individual tax bill of one household member is negative and that of another member is positive, the latter will pay the household's entire tax bill.
  - If the tax bill is negative, the tax credit will be applied proportionately to each person's individual tax bill.

1.2   Analysis of individual incomes

The figures in red and in italics in all tables within the document indicate fewer than 100 observations, which corresponds to the significance threshold adopted by Eurostat.
The first five tables and summary tables 13 and 23 have been supplemented by the 2007 SILC Belgium figures in order to test the stability of the results.

1.2.1   Individual gross and net incomes

According to the Canberra Group, the net income measurement is equal to the sum total of all 'receipts' (earnings and positive transfers) less 'outgoings' (negative transfers). The same approach is applied here: net income is equal to the sum total of income from economic activity, plus investment income, plus net inter-household transfers, plus State transfers, less taxes (income tax and social security contributions).

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6 For further details of the description of income variables in SILC Belgium 2006, the definition of income we have adopted and our hypotheses regarding distribution, please refer to the technical memorandum annexed to this report.

Average and median individual incomes are calculated by gender, on an annual basis. The results are shown in Table 1. Women's average gross income equates to 55% of men's average gross income, and their average net income to 62%. The effect of State intervention is therefore to reduce the disparity between women's and men's incomes. On average, women's net income is higher than gross income, whereas for men the opposite is true.

TABLE 1 • AVERAGE AND MEDIAN GROSS AND NET INDIVIDUALISED INCOMES BY GENDER (TOTAL POPULATION)[7]

Income	Women			Men			Total			2006 ratio of averages (net) between women and men	2007 ratio of averages (net) between women and men
	Obser-vations	Average	Median	Obser-vations	Average	Median	Obser-vations	Average	Median		
2006 gross income	4,970	12,603	4,320	4,660	22,962	22,468	9,630	17,660	13,800	**0.55**	**0.56**
2006 net income	4,970	12,938	12,610	4,660	20,881	18,702	9,630	16,816	15,730	**0.62**	**0.63**

Source: SILC Belgium 2006 and 2007 (last column), our calculations

Net individual income by age group:

Women's average net income is lower for all age groups (Table 2). The disparity is lowest for the youngest age categories: the under 25s and 25-34 year-olds. The disparity increases for subsequent age categories and is largest for 55-64 year-olds, a group in which women's average income equates to half that of men.

TABLE 2 • AVERAGE NET INDIVIDUALISED INCOMES BY AGE GROUP AND GENDER

Age group	2006 net incomes		2006 ratio of averages (net) between women and men	2007 ratio of averages (net) between women and men
	Women	Men		
‹ 25	8,463	10,906	**0.78**	**0.78**
25-34	15,161	19,599	**0.77**	**0.76**
35-44	16,275	24,665	**0.66**	**0.68**
45-54	15,065	24,882	**0.61**	**0.62**
55-64	10,776	21,551	**0.50**	**0.52**
› 64	9,254	16,176	**0.57**	**0.57**

Source: SILC Belgium 2006 and 2007 (last column), our calculations

7 The 'Observations' column shows the number of observations with a non-zero income that are present in the sample. In the rest of the document, this column provides important information on the significance of the sample (particularly for the probit analysis). All of the other figures are weighted and therefore correspond to the total Belgian population, insofar as the SILC sample is representative.

Net individual income by household type:

Household types are derived from the 'HT. Household type' variable in SILC Belgium 2006.
As Table 3 shows, the gap in average net incomes is greater for individuals living in a household made up of two adults with no dependent children, at least one of whose members is aged over 65 (63%). The smallest gap is for lone parents (12%).[8]

TABLE 3 • AVERAGE NET INDIVIDUALISED INCOMES BY HOUSEHOLD TYPE AND GENDER

Household type	2006 net incomes		2006 ratio of averages between women and men	2007 ratio of averages between women and men
	Women	Men		
Single person	14,775	18,573	0.80	0.83
2 adults with no dependent children (< 65)	11,901	19,922	0.60	0.62
2 adults with no dependent children (at least 1 adult is aged 65 or over)	6,343	16,927	0.37	0.40
Other households with no dependent children	10,476	18,311	0.57	0.56
Lone parents	21,252	*24,079*	*0.88*	*0.90*
2 adults, 1 dependent child	14,088	22,663	0.62	0.60
2 adults, 2 dependent children	15,822	26,915	0.59	0.58
2 adults, 3 or more dependent children	16,708	32,213	0.52	0.54
3 adults or more with dependent children	11,285	20,155	0.56	0.60

Source: SILC Belgium 2006 and 2007 (last column), our calculations

Individual income by activity status:

Activity status is defined according to the SILC variable 'ACTSTA. Activity status'. This variable operates on a calendar basis: someone who has been unemployed for more than six months of the year will be classified as 'unemployed' even if he/she has worked for the remaining 5 months.
Among the working population too, the distinction between full-time work and part-time work is measured by the relative number of months spent in each working arrangement: someone who works more months full-time than part-time will be deemed to be working full-time.

8 The small number of men present in the 'single parents' category in our sample means that these figures should be interpreted with caution.

The variable relating to activity status is based on responses to Question I40 of the individual question-naire. This activity status is as defined by the interviewee. However, this variable is checked to ensure that incomes do correspond to the activity status selected. For example, individuals deemed to be 'pensioners' are those who have indicated that they were in receipt of a pension for most of the reference period.

According to this classification, the largest income disparity is between non-active women and men, and equates to 58% (Table 4). For retired people, the disparity is 34%. The smallest gap is that observed between the unemployed: 16%.

TABLE 4 • AVERAGE NET INDIVIDUALISED INCOMES BY ACTIVITY STATUS AND GENDER

	2006 net incomes		2006 ratio of averages between women and men	2007 ratio of averages between women and men
Activity status	**Women**	**Men**		
Full-time work	20,117	25,154	**0.80**	**0.81**
Part-time work	15,734	19,899	**0.79**	**0.77**
Unemployed	10,846	12,979	**0.84**	**0.85**
Retired	10,954	16,533	**0.66**	**0.68**
Non-active	4,019	9,667	**0.42**	**0.46**

Source: SILC Belgium 2006 and 2007 (last column), our calculations

The classification presented in Table 4 and the income disparities calculated are biased by the mix of different status types which may co-exist during the course of the same year.
To make up for this drawback, Table 5 shows the information relating to individuals who have retained the same status all year round.

TABLE 5 • AVERAGE NET INDIVIDUALISED INCOMES (SAME STATUS OVER A 12-MONTH PERIOD) BY GENDER

Activity status	2006 net incomes		2006 ratio of averages between women and men	2007 ratio of averages between women and men
	Women	Men		
Full-time work	20,360	25,408	0.80	0.82
Part-time work	16,000	19,577	0.82	0.74
Unemployed	10,210	12,759	0.80	0.85
Retired	10,930	16,362	0.67	0.67
Non-active	3,899	11,885	0.33	0.39

Source: SILC Belgium 2006 and 2007 (last column), our calculations

Analysis of net income components:

Four income categories make up net income:

• **Income from economic activity**: this comprises employees' earnings and earnings from self-employment.
  In the case of employees, earnings include pay, bonuses, income from additional activity, income in kind plus other employment-related benefits. The amounts given are gross: neither social security contributions paid by the employee nor any amounts withheld at source by the employer are deducted. For the self-employed, earnings include any profits or losses resulting from self-employment that constitutes their main activity or an additional line of work. The amounts given are gross, and therefore include any advance tax payments and social security contributions.

• **Investment income**: this represents income from individual private pensions, income from property and land rentals (after costs have been deducted) and income and interests on capital and financial investments.

• **State transfers**: these include unemployment benefit, pensions, sick pay, invalidity benefit, maternity leave, survivors' pensions, career-break allowances, student grants and social integration income. These amounts are gross.

• **Inter-household transfers**: these comprise maintenance payments plus any regular financial support received and paid. This category is divided into two: regular inter-household transfers received and regular inter-household transfers paid.

Given that we ourselves disaggregated investment income and inter-household transfers between household members, we shall not analyse their distribution between women and men.
Table 6 shows average and median figures for income from economic activity and for State transfers.

The calculation is made by beneficiary, on an annual basis.

State transfers present the least high level of inequality between men and women, as the average transfer received by women represents 75% of that received by men. Next comes income from economic activity, with a disparity of 28%; fewer women receive this income (44%, compared with 56% for men, which corresponds to the Labour Force Survey figures for the period 2000-2007: 43% of working people in employment are women, and 57% are men).[9]

TABLE 6 • AVERAGE AND MEDIAN GROSS INCOMES BY INCOME CATEGORY, BENEFICIARY AND GENDER

	Women			Men			Total			Ratio of averages between women and men
Income	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
1. Income from economic activity	44%	24,808	23,500	56%	34,544	30,396	5,614	30,264	27,372	**0.72**
2. State transfers	52%	7,229	5,172	48%	9,675	7,440	6,340	8,410	6,000	**0.75**

Source: SILC Belgium 2006, our calculations

1.2.2 Detailed analysis of income components

Income from economic activity:

Table 7 presents a decomposition of the first income category: income from economic activity. This comprises employees' earnings, non-wage incomes (which included only company cars in 2006) and earnings from self-employment.

TABLE 7 • INCOME FROM ECONOMIC ACTIVITY BY BENEFICIARY AND GENDER

Income	Women			Men			Total			Ratio of averages between women and men
	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
1.1 Employees' earnings	46%	25,119	23,848	54%	35,002	31,151	5,013	30,480	27,755	**0.72**
1.2 Non-wage income (company car)	*19%*	*1,675*	*1,637*	81%	1,948	2,024	382	1,895	2,024	***0.86***
1.3 Earnings from self-employment	30%	17,232	15,070	70%	25,793	20,220	729	23,241	18,626	**0.67**

Source: SILC Belgium 2006, our calculations

All income from economic activity is lower on average for women. The pay gap for employees is similar to that for total income from economic activity (28% lower for women). The disparity is greater for earnings from self-employment. Fewer women benefit from a company car, and it has a lower value (-14%).

Employees' earnings:

The first component of income from economic activity is employees' earnings (line 1.1 of Table 7). Table 8 decomposes this category into:

- Basic pay (the wage itself)
- Occasional work
- Bonuses
- Income from additional work (as an employee)
- Redundancy payments

The figures in italics correspond to income categories for which there are insufficient observations in the sample (information available in the 'Observations' column), so the average and median incomes here need to be interpreted with caution.
With the exception of income from additional work, all components of employees' earnings are higher on average for men. The disparities vary from 26% for basic pay to 53% for redundancy payments.

TABLE 8 • EMPLOYEES' EARNINGS BY BENEFICIARY AND GENDER

Income	Women			Men			Total			Ratio of averages between women and men
	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
1.1.1 Pay	45%	23,359	22,008	55%	31,444	27,600	4,860	27,771	25,200	0.74
1.1.2 Occasional work	58%	12,406	9,100	42%	16,451	11,214	143	14,096	9,520	0.75
1.1.3 Bonuses	45%	2,720	2,299	55%	4,675	3,801	3,894	3,796	2,988	0.58
1.1.4 Additional work	30%	4,519	3,000	70%	3,192	1,600	53	3,593	2,012	1.42
1.1.5 Redundancy payments	43%	7,375	4,500	57%	17,507	4,527	55	13,122	4,527	0.42

Source: SILC Belgium 2006, our calculations

Bonuses:

The decomposition of bonuses (line 1.1.3, Table 8) is shown in Table 9.
Here too, for all headings, the average bonuses received by women are lower than those received by men. Men also benefit more frequently from bonuses. This table should be interpreted with caution, given the small number of beneficiaries receiving certain bonuses. The disparities observed for end-of-year bonuses, holiday pay and thirteenth month payments, which vary from 30 to 39%, accentuate the gap observed between women's and men's basic pay.

TABLE 9 • BONUSES BY BENEFICIARY AND GENDER

Income	Women			Men			Total			Ratio of averages between women and men
	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
1.1.3.1 Holiday pay	45%	1,022	900	55%	1,683	1,400	3,665	1,385	1,100	0.61
1.1.3.2 End-of-year bonus	46%	682	550	54%	1,011	818	2,879	861	700	0.68
1.1.3.3 Thirteenth month	39%	1,262	1,150	61%	1,801	1,600	580	1,589	1,400	0.70
1.1.3.4 Overtime	18%	1,138	639	82%	1,842	1,000	116	1,717	1,000	0.62
1.1.3.5 Profit-sharing	35%	1,042	800	65%	2,338	1,319	102	1,886	1,000	0.45
1.1.3.6 Other additional income	39%	1,221	900	61%	2,080	1,500	139	1,745	1,200	0.59
1.1.3.7 Commission	29%	2,265	1,200	71%	3,142	1,600	36	2,886	1,320	0.72
1.1.3.8 Tips	39%	472	500	61%	485	250	24	480	350	0.97
1.1.3.9 Sales or production bonus	34%	1,834	1,041	66%	2,670	982	83	2,386	1,000	0.69
1.1.3.10 Fourteenth month	25%	1,448	1,600	75%	1,620	1,500	47	1,577	1,500	0.89
1.1.3.11 Workplace company shares	26%	471	600	74%	2,085	1,500	16	1,659	1,482	0.23
1.1.3.12 Bonuses for working abroad	24%	906	500	76%	4,556	1,500	31	3,691	1,339	0.20

Source: SILC Belgium 2006, our calculations

State transfers:

Table 10 shows the various State transfers. All State transfers are lower for women when considered as an annual average. The exceptions are parental leave, educational leave, maternity benefit and survivor's pension.

The largest gaps are 32% for unemployment benefit and 34% for pensions. The smallest gaps are observed for invalidity benefit (17%) and sickness benefit (8%).

The presence of men among the recipients of maternity benefit is due to the way in which the question was formulated in the SILC Belgium 2006 questionnaire, which made no provision for a response from men who took paternity leave (this was corrected in SILC Belgium 2007). Consequently, the men questioned who declared that they had received paternity benefit were encoded in the same variable. The unequal duration of paternity and maternity leave explains the disparity between the benefits received by women and by men.

As far as parental leave is concerned, significantly fewer men than women take this form of leave, and when men do make use of it they do so for a shorter period of time; these differing lengths of time are reflected in the disparity between the benefits received.

TABLE 10 • STATE TRANSFERS BY BENEFICIARY AND GENDER

Income	Women			Men			Total			Ratio of averages between women and men
	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
4.1 Pension	50%	12,065	11,040	50%	18,319	16,080	1,849	15,188	13,200	**0.66**
4.2 Unemploy-ment benefit	53%	6,863	6,000	47%	10,064	9,600	1,273	8,378	7,608	**0.68**
4.3 Invalidity benefit	47%	8,608	8,760	53%	10,370	10,480	336	9,551	9,344	**0.83**
4.4 Sick pay	55%	4,613	3,708	45%	4,999	3,900	185	4,785	3,800	**0.92**
4.5 Student grant	51%	455	240	49%	469	220	145	462	222	**0.97**
4.6 Maternity/paternity benefit	87%	3,715	3,135	13%	690	725	97	3,332	2,551	**5.39**
4.7 Survivor's pension	95%	13,360	12,000	5%	9,022	11,040	81	13,136	12,000	**1.48**
4.8 Parental leave	74%	1,508	1,208	26%	601	480	47	1,272	990	**2.51**
4.9 Social integration income	69%	6,641	7,500	31%	6,095	7,150	70	6,469	7,380	**1.09**

Source: SILC Belgium 2006, our calculations

Unemployment benefits:

TABLE 11 • UNEMPLOYMENT BENEFITS BY BENEFICIARY AND GENDER

Income	Women			Men			Total			Ratio of averages between women and men
	%	Average	Median	%	Average	Median	Obser-vations	Average	Median	
4.2.1 Unemployment benefit	59%	6,499	6,687	41%	7,322	7,800	868	6,837	7,200	0.89
4.2.2 Early retirement	26%	16,013	15,600	74%	18,285	16,126	246	17,700	16,126	0.88
4.2.3 Career break allowance (time credit)	66%	2,431	2,004	34%	2,618	2,004	103	2,495	2,004	0.93
4.2.4 Minimum guaranteed income benefit	65%	2,984	2,720	35%	3,114	2,076	16	3,030	2,248	0.96
4.2.5 Welfare fund benefit	23%	2,437	999	77%	1,481	720	21	1,699	720	1.65
4.2.6 Supplement received for take-up of vocational training/ completion bonus	58%	1,446	500	42%	1,608	900	21	1,514	512	0.90
4.2.7 Interim allowance for young school-leavers	76%	3,499	3,000	24%	3,646	5,400	10	3,534	3,000	0.96
4.2.8 Other	39%	3,226	1,800	61%	3,197	1,800	24	3,208	1,800	1.01

Source: SILC Belgium 2006, our calculations

One of the main components of State transfers is unemployment benefit (item 4.2). More details for this type of transfer are available in SILC Belgium 2006, and Table 11 presents a decomposition.
Among the sub-categories of unemployment benefits, 'unemployment benefit' proper presents a disparity of 11%, while the career break allowance applies to twice as many women as men[10] and presents a disparity of 7%. On the other hand, early retirement involves a high proportion of men,[11] and the income gap is 12%.
The disparity for the unemployment category as a whole is 32% (Table 10), yet it varies from 7 to 12% for the main components (Table 11): this is because there are more men in the highest benefit categories (early retirement) and women are better represented in the categories associated with the lowest benefits.

10 According to the ONEM (National Employment Office) statistics for 2008, the proportion of women among those in receipt of a career break allowance varies according to the nature of the career break (complete, part-time, etc.). Almost three times more women than men take a complete break, and twice as many take a partial break.
11 The proportion of women benefiting from early retirement is 17% for 2005. Source: FPS Economy, S.M.E.s, Self-employed and Energy.

Table 12 shows that, among the population receiving an unemployment income, even though the majority of men and women are in receipt of unemployment benefits (76% of women and 59% of men), there are many more men in the early retirement sub-category (29.41% of men compared with 9.16% of women).

TABLE 12 • DISTRIBUTION OF INDIVIDUALS RECEIVING UNEMPLOYMENT BENEFITS BY GENDER

Unemployment income	Women			Men			Total
	Obser-vations	% of female population	% of total population	Obser-vations	% of male population	% of total population	Obser-vations
4.2.1 Unemployment benefit	533	76.11%	40.09%	335	59.13%	27.98%	868
4.2.2 Early retirement	66	*9.16%*	*4.82%*	180	29.41%	13.92%	246
4.2.3 Career break allowance (time credit)	71	*10.42%*	*5.49%*	32	*6.06%*	*2.87%*	103
4.2.4 Minimum guaranteed income benefit	11	*1.69%*	*0.89%*	5	*1.01%*	*0.48%*	16
4.2.5 Welfare fund benefit	5	*0.77%*	*0.40%*	16	*2.90%*	*1.37%*	21
4.2.6 Supplement received for take-up of vocational training/ completion bonus	12	*2.07%*	*1.09%*	9	*1.67%*	*0.79%*	21
4.2.7 Interim allowance for young school-leavers	8	*1.48%*	*0.78%*	2	*0.51%*	*0.24%*	10
4.2.8 Other	10	*1.43%*	*0.75%*	14	*2.46%*	*1.16%*	24

Source: SILC Belgium 2006, our calculations

In other words, there are more women than men in the sub-categories characterised by a lower average income, which explains why the imbalance between men and women is greater in the total average than in the various components comprising the unemployment category.

1.2.3   Summary of results and basic indicators: disparities between women's and men's incomes

An examination of the disparities between women's and men's average incomes reveals significant gaps for all income categories and their components, always to the detriment of women. These gaps are shown in Table 13, and constitute an initial list of basic indicators.

TABLE 13 • TABLE SUMMARISING RATIOS OF AVERAGE INCOMES FOR WOMEN AND MEN FOR ALL INCOME CATEGORIES AND SUB-CATEGORIES: BASIC INDICATORS

Income categories	Basic indicators: ratios of average incomes for women and men	
	SILC 2006	SILC 2007
Gross income	0.55	0.56
Net income	0.62	0.63
1. Income from economic activity	0.72	0.71
1.1 Employees' earnings	0.72	0.70
1.1.1 Pay	0.74	0.73
1.1.2 Occasional work	*0.75*	*0.86*
1.1.3 Bonuses	0.58	0.58
Incl.: 1.1.3.1 Holiday pay	0.61	0.61
1.1.3.2 End-of-year bonus	0.68	0.66
1.1.3.3 Thirteenth month	0.70	0.72
1.1.3.4 Overtime	*0.62*	*0.56*
1.1.3.5 Profit-sharing	*0.45*	*0.53*
1.1.3.6 Other additional income	*0.59*	*0.48*
1.2 Non-wage income (company car)	*0.86*	*0.84*
1.3 Earnings from self-employment	0.67	0.68
2. State transfers	0.75	0.77
2.1 Pension	0.66	0.70
2.2 Unemployment	0.68	0.71
Incl.: 2.2.1 Unemployment benefit	0.89	0.88
2.2.2 Early retirement	*0.88*	*0.91*
2.2.3 Career break allowance	*0.93*	*1.02*
2.3 Invalidity benefit	0.83	0.87
2.4 Sick pay	*0.92*	*0.61*
2.5 Student grant	*0.97*	*0.61*

Source: SILC Belgium 2006 and 2007 (last column), our calculations

1.3 Analysis of net individual incomes by decile

In this section, all individuals making up the sample are classified in increasing order of their net income, and are then grouped together into deciles, the first decile containing the 10% of individuals with the lowest net income, and so on.

We then analyse the composition of each decile according to gender, age and activity status, as well as according to the various income categories and the level of educational attainment.

Proportion of men and women by decile of net individual income:

The distribution of men and women between the various deciles indicates a very strong presence of women within the initial deciles (Figure 1): 84% of persons in the first decile are women. Equality is reached at around the 6th decile, and the proportion of women then declines until it reaches just 23% in the final decile.

FIGURE 1 • PROPORTION OF WOMEN AND MEN BY DECILE OF NET INDIVIDUALISED INCOME
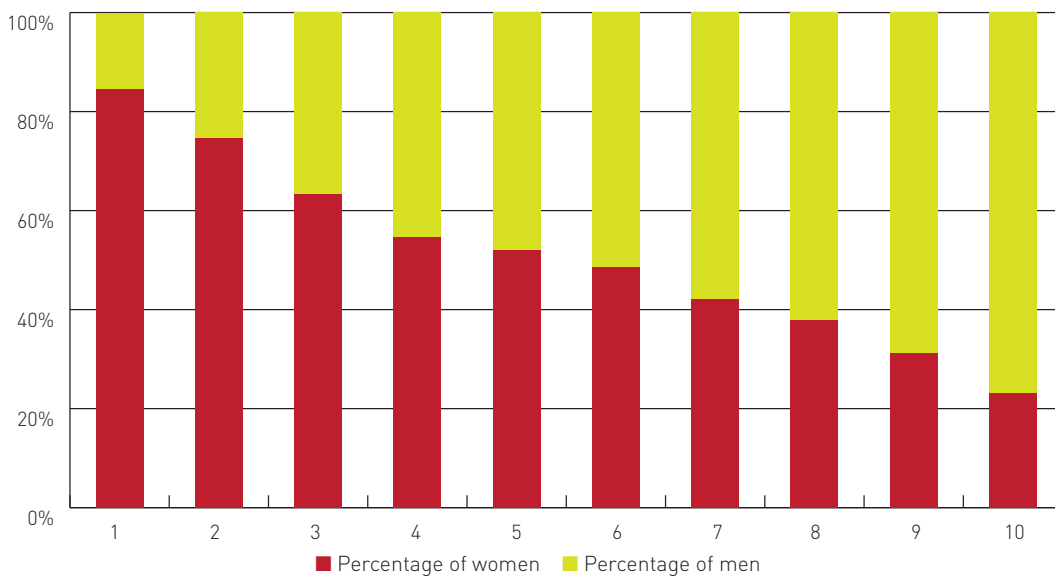
Source: SILC Belgium 2006, our calculations

We propose to adopt as an indicator of gender inequality in Belgium:

- The proportion of women in the first and last deciles: 84% and 23%
- The ratio between the percentage of women in the first and last deciles: 3.6
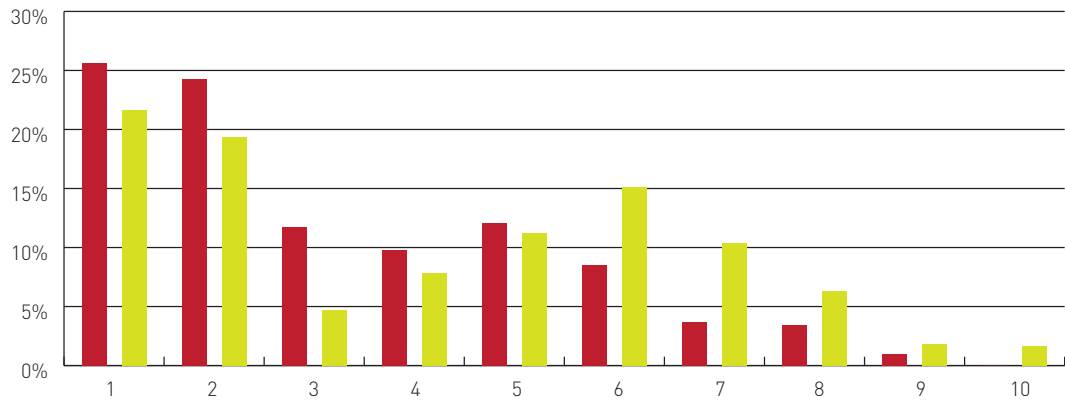
‹ 25 year-olds

25-34 year-olds
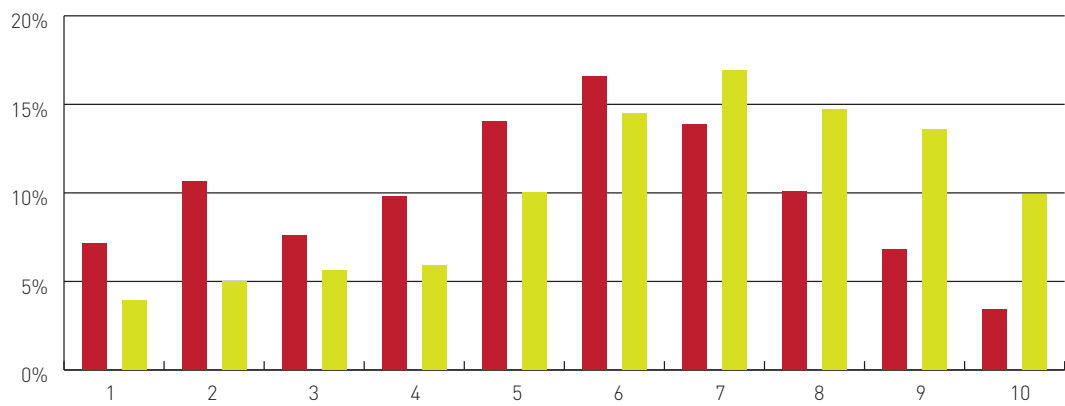
35-44 year-olds
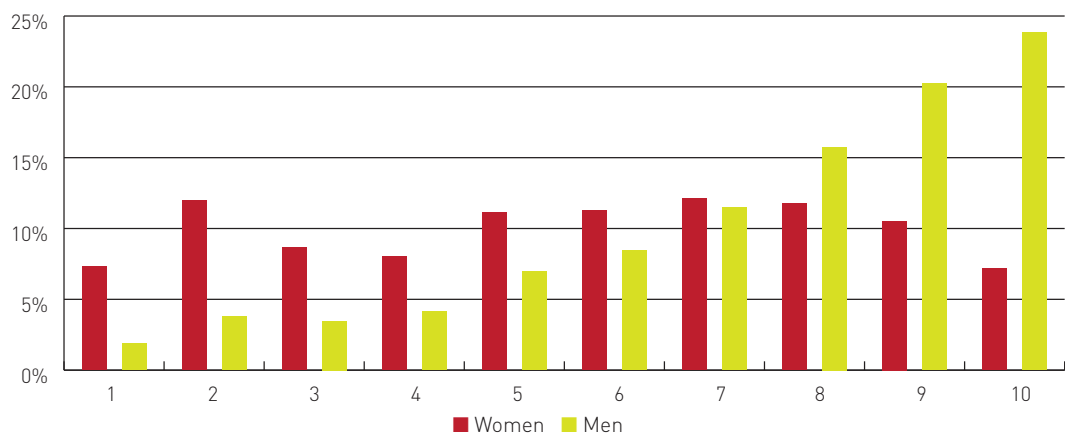
■ Women ■ Men

(continued)

45-54 year-olds
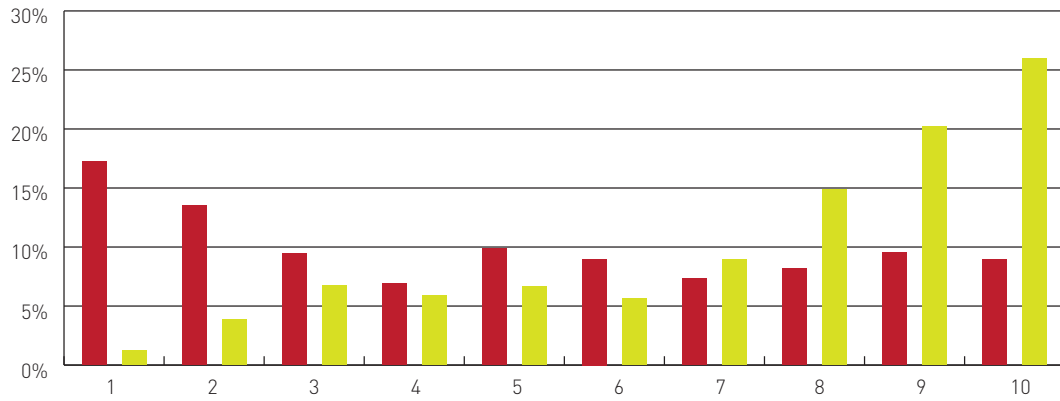
55-64 year-olds
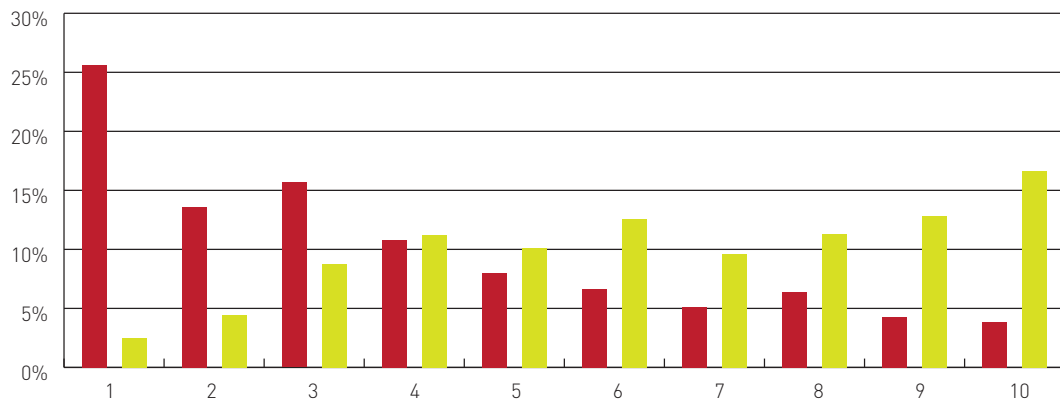
› 64 year-olds
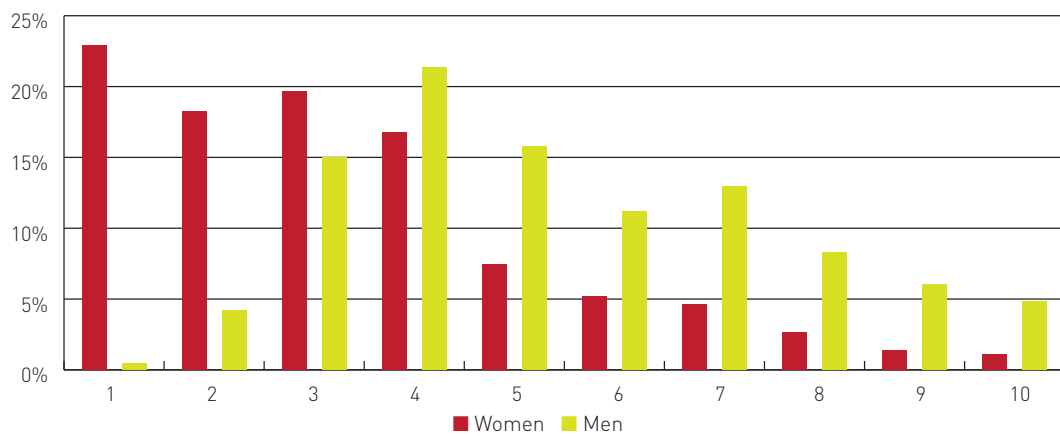
Source: SILC Belgium 2006, our calculations

As far as the age group distribution within the different deciles is concerned, the under 25s are to be found mainly in the first two deciles, while in the case of 25-34 year-olds men are to be found in the last five deciles, whereas women are more strongly represented in the central deciles (Figure 2). Between the ages of 35 and 54, men constitute the majority in the last deciles, whereas the age profile of women is very different: between the ages of 35 and 44, they are distributed fairly evenly among the eight central deciles, but between the ages of 45 and 54, they are to be found at the bottom of the scale, in the initial deciles. Between the ages of 55 and 64, the inverted age profile (men in the last and women in the initial deciles) is similar to that observed for the previous age category. Finally, beyond the age of 65, women are strongly concentrated in the initial deciles, whereas men gravitate towards the central deciles.

FIGURE 3 • DISTRIBUTION OF WOMEN AND MEN WITHIN DECILES BY ACTIVITY STATUS

Full-time work
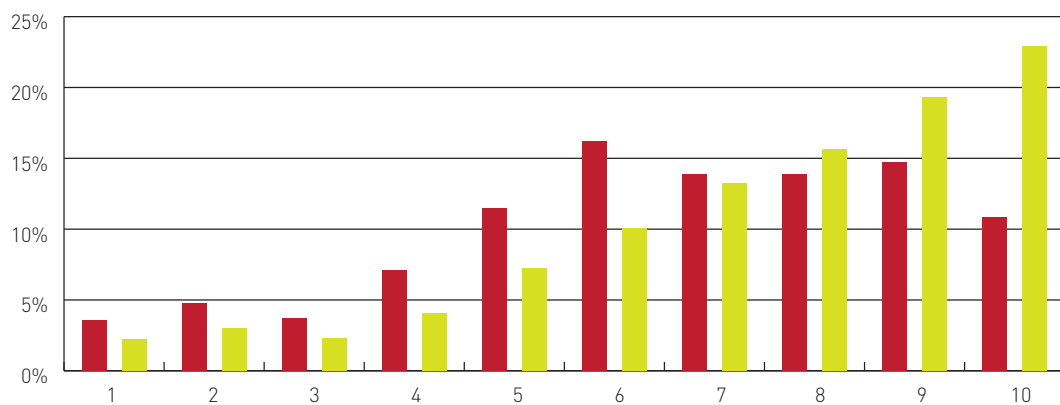
Part-time work
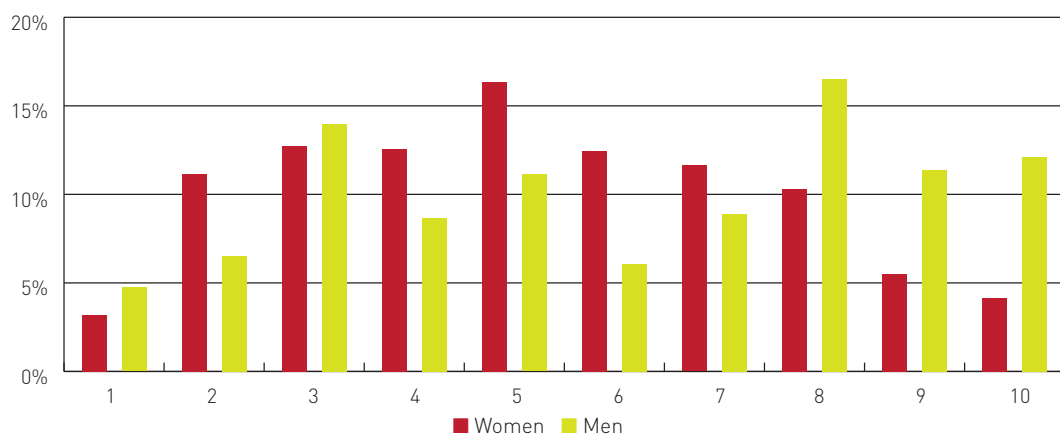
(continued)

Unemployed
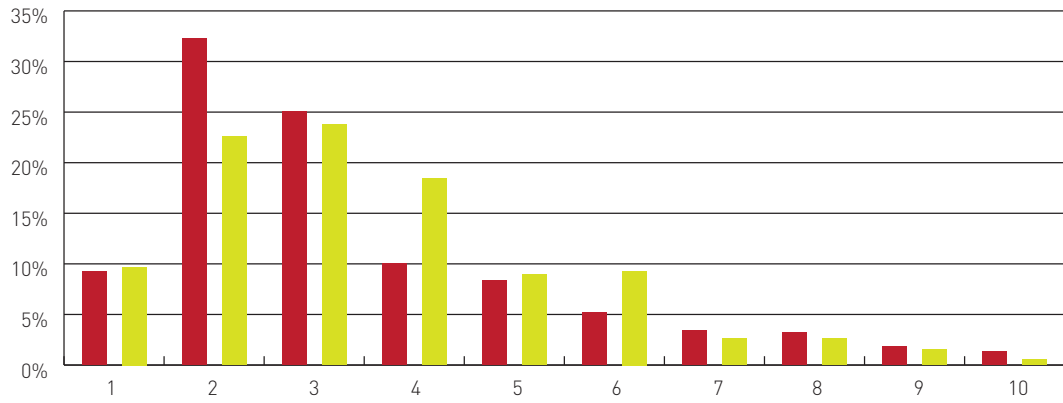
Studies
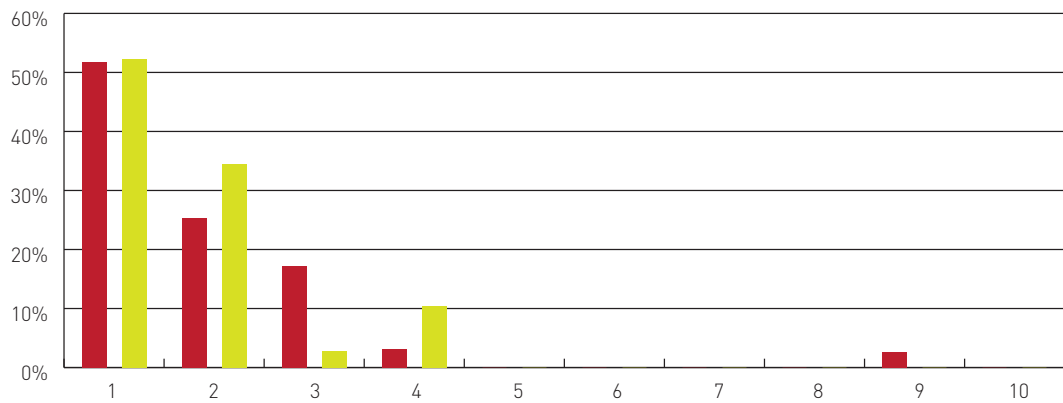
Pension
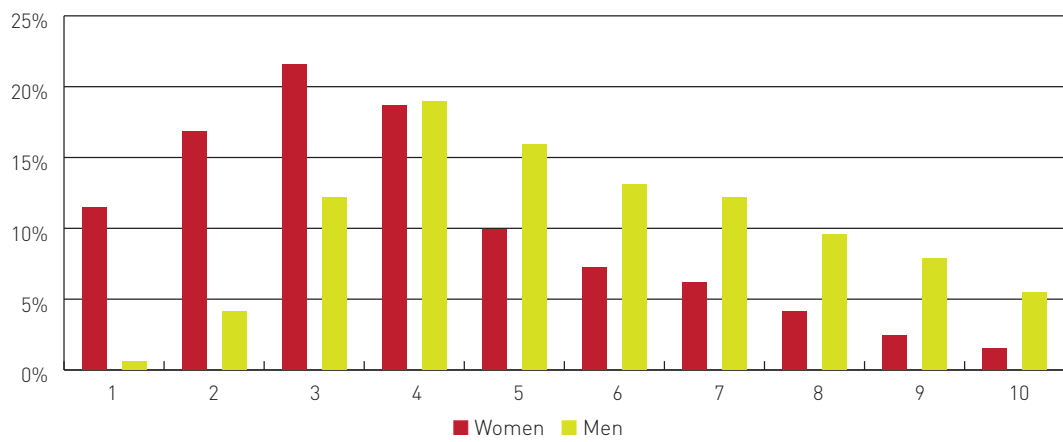
■ Women ■ Men

(continued)

Incapacity for work
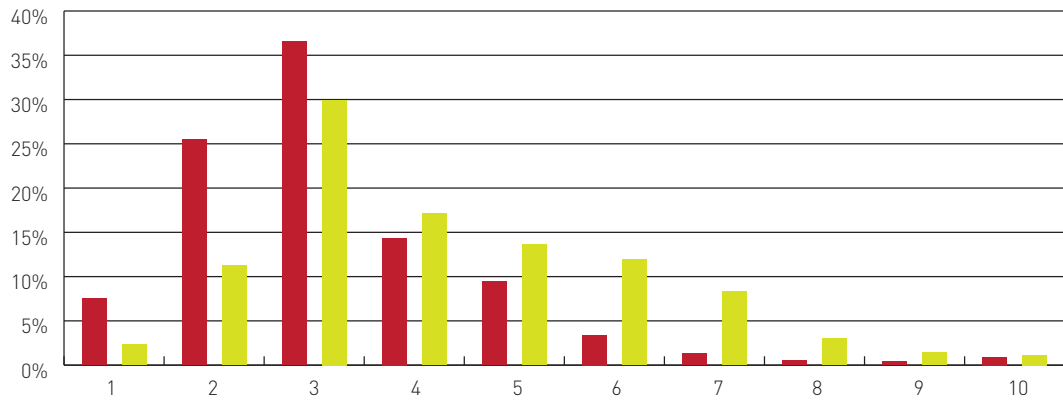
Domestic tasks
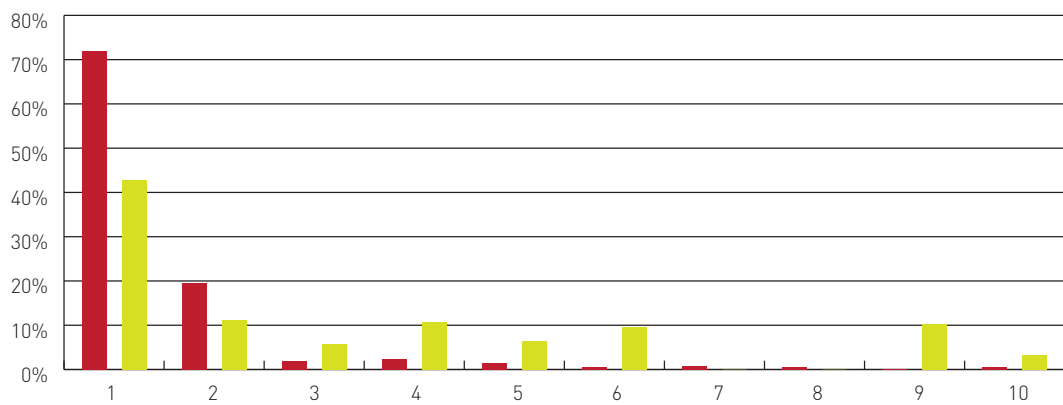
Other inactivity

■ Women ■ Men
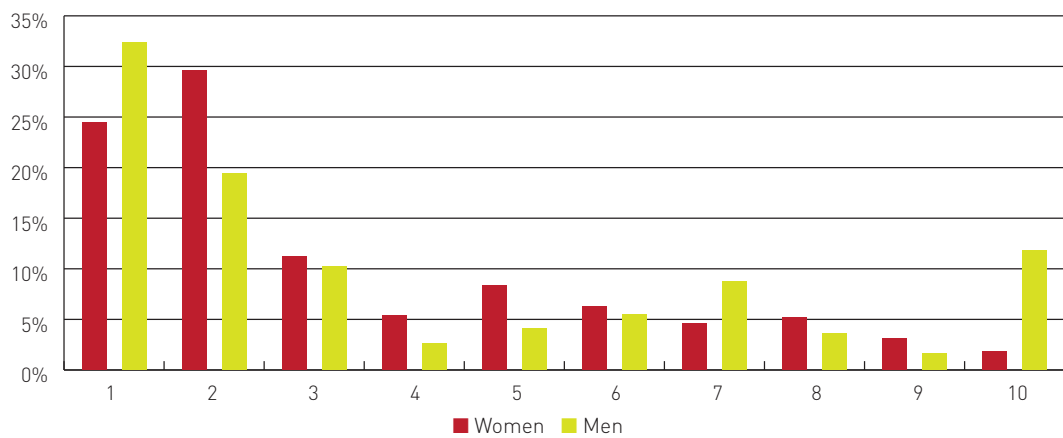
Source: SILC Belgium 2006, our calculations

The distribution between deciles of individuals according to their activity status also reveals significant differences between women and men (Figure 3): while men in full-time work are to be found mainly in the upper deciles, women are more strongly represented in deciles 6 to 9.

The distribution between deciles of part-time workers presents a different gender profile, with women being found in the first five deciles and men in the last five. This confirms the differing realities pertaining to part-time work for men and for women: this is an involuntary decision for the latter, dictated by the difficulty of combining work and parenthood, whereas for men it is a choice that enables them to combine leisure with highly paid work.

The status of unemployment and that of incapacity for work concern persons in the initial deciles, and the same applies to students.[12] However, unemployed women are better represented in the second decile, probably due to the effects of non-individualisation of unemployment entitlements, which translates into lower benefits for women.

Marked differences are apparent among retired people, where women are to be found in the first four deciles and men above them.

Finally, by devoting themselves to domestic tasks, women take on a status of substantial dependence and insecurity: they are without any income of their own, in the first decile, and hence totally dependent on their partner's generosity.

FIGURE 4 • DISTRIBUTION OF WOMEN AND MEN WITHIN DECILES BY LEVEL OF EDUCATIONAL ATTAINMENT

Primary education or lower

■ Women ■ Men
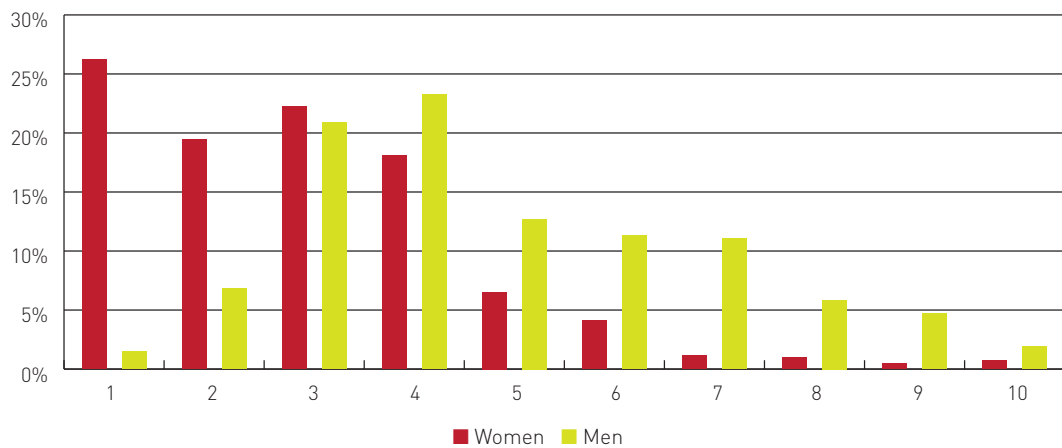
(continued)

12 According to our hypotheses for adults, the 'Students' category comprises persons following courses of study who are either aged over 25 or aged 18 to 25 and deemed to be economically active (i.e. people in this age category not living with their parents, or if they are, then they are either working or actively seeking work). See the technical memorandum annexed to this report for details of our hypotheses concerning adults.

Lower secondary education
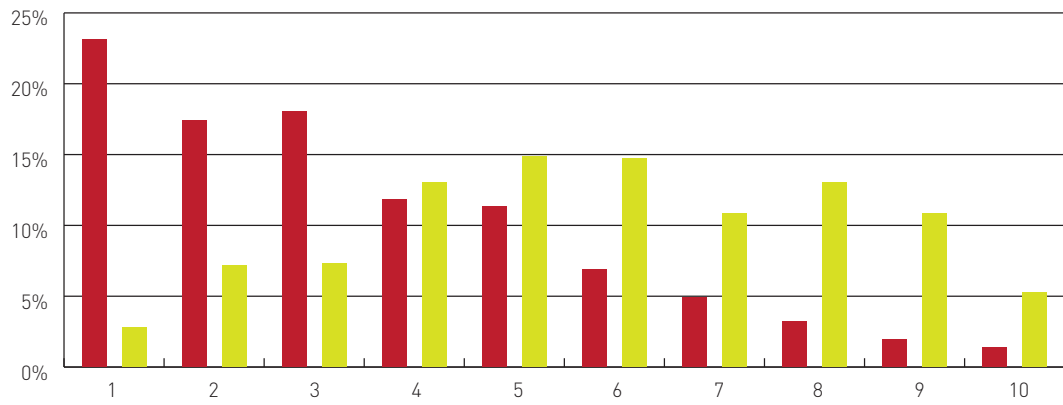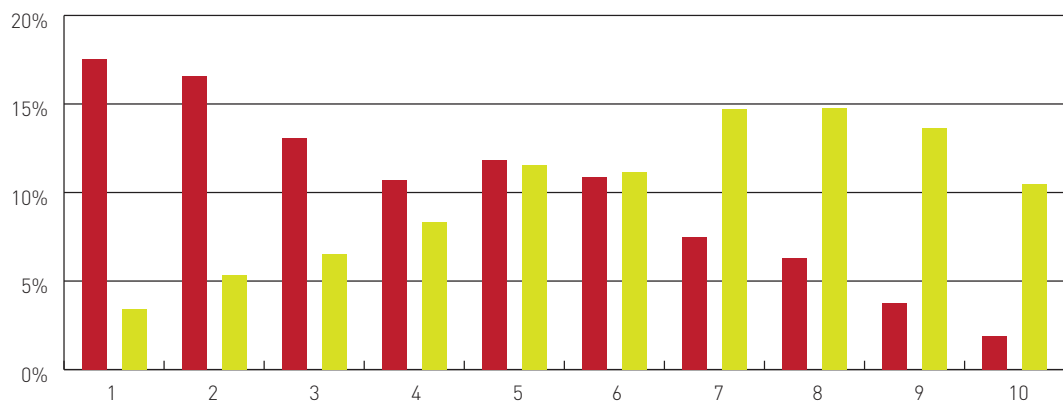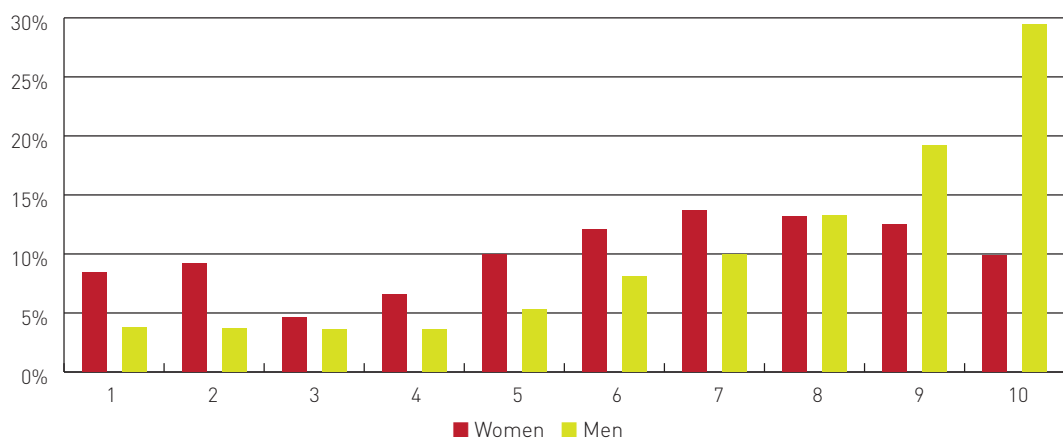
Upper secondary education

Higher education

Women   Men

Source: SILC Belgium 2006, our calculations

1 Analysis of women's and men's individual incomes and financial dependence in Belgium

Regardless of their level of educational attainment, women always find themselves in a less favourable situation than men (Figure 4). Women who do not have a higher education degree are to be found mainly in the first five deciles, whereas men tend to be found more in the central deciles, and even in the upper deciles if they have completed upper secondary education. Only a higher level of educational attainment enables women to escape from the initial deciles.

Figures 5 and 6 indicate the effect of taxes and transfers on women's and men's incomes within the different deciles. In the lowest deciles, net income is usually higher than gross income: individuals pay less tax and receive more transfers. This trend is reversed in the highest deciles (the 7th decile for men and the 6th decile for women), where State intervention tends to reduce the income of individuals rather than increase it, so net income is lower than gross income.

FIGURE 5 • AVERAGE ANNUAL GROSS AND NET INCOME BY DECILE (WOMEN)
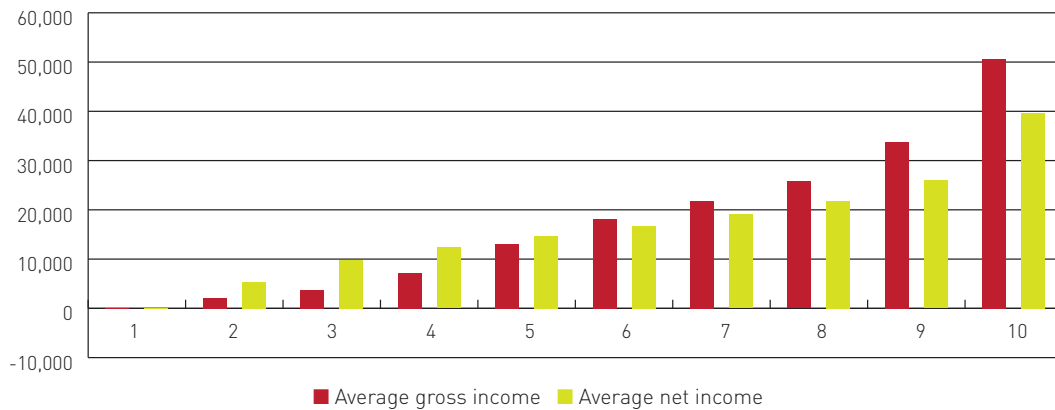
Source: SILC Belgium 2006, our calculations

FIGURE 6 • AVERAGE ANNUAL GROSS AND NET INCOME BY DECILE (MEN)
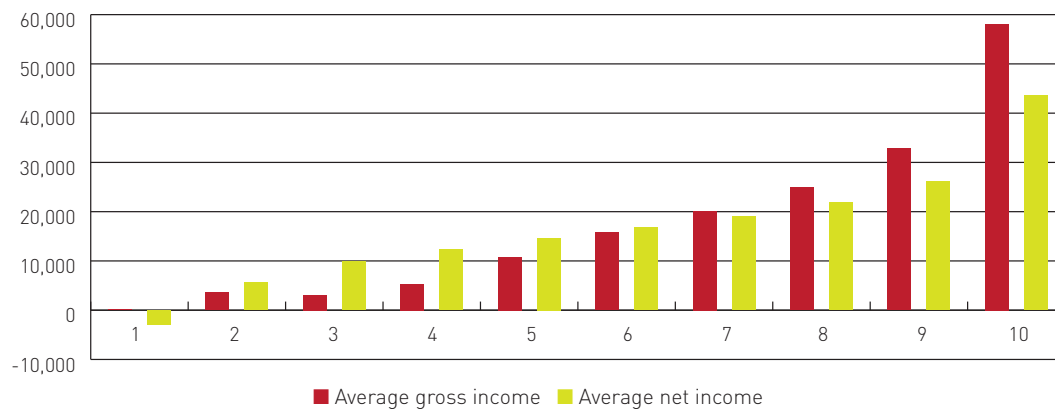
Source: SILC Belgium 2006, our calculations

1.4   Decomposition of the Gini coefficient by gender

The Gini index (1921), calculated from the Lorenz curve (1905), measures inequalities in income distribution and the degree of concentration of an income distribution. As the index approaches 1, it means that income distribution is unequal, with a high degree of concentration. On the other hand, if the indicator is close to 0, income distribution is more equal, with a low concentration.

Decomposition of inequality indices (Theil 1967 and Shorrocks 1980) enables us to make some interesting comparisons and to target groups which tend to increase inequality within the population studied. The decomposition can be effected by characteristic (origin, gender, geographical region, etc.) or by income type (earnings, income from property, State transfers, etc.).

The inequality indices for sub-groups of the population can still be compared without any decomposition, if they are harmonised. This is done by classifying the sub-populations studied in terms of the inequalities within them.
The innovation represented by the decomposition technique lies in the fact that it enables us to explain income inequalities by the degree of involvement of the various groups making up the total population. In other words, by establishing the difference between inequalities within each group (intragroup measurements) and inequalities between the various groups (intergroup measurements), decomposition enables us to determine to what extent inequalities are due to income differences within groups or to income differences between the groups studied.

The Gini coefficient can be decomposed using entropy indices (Theil, Bourguignon, Herfindhal)[16] or by the Dagum method (1997)[14]. In this chapter we use the latter approach, which offers the advantage of revealing a third term to evaluate inequalities deriving from the overlap between the income distributions of the various groups studied: it does so by refining intergroup inequalities.[15]

Applying a decomposition of the Gini coefficient to men's and women's incomes sheds particular light on gender inequalities (Kaya and Senesen 2009).

The aim of decomposing the inequality measurement is to identify intergroup inequalities, in other words to measure the distance between two or more distributions.
The inequality between two non-overlapping income distributions can be established simply by ascertaining the difference between their respective averages (Figure 7).

13 See Mussard et al. (2003) for details of the modelling process.
14 Since the work carried out by Bhattacharya and Mahalanobis (1967), the Gini decomposition has undergone many developments. The Dagum method (1997) is generally viewed in the literature as the most sophisticated decomposition. Griffiths (2008) has also demonstrated that the 'traditional decomposition' of the Gini coefficient (e.g. Silber 1989, Lambert and Aronson 1993) and that of Dagum (1997) were in fact identical.
15 The formulas relating to decomposition of the Gini coefficient according to Dagum's methodology (1997a, 1997b) can be found in an annex to this chapter (Annex 4).
The tool used in this section is a VBA macro developed by Mussard et al. (2002), which is available on the Montpellier1 University website: http://www.lameta.univ-montp1.fr/online/gini.html. It is applied to net individualised income that we defined using SILC Belgium 2006.

FIGURE 7 • TWO NON-OVERLAPPING INCOME DISTRIBUTIONS

WOMEN

MEN
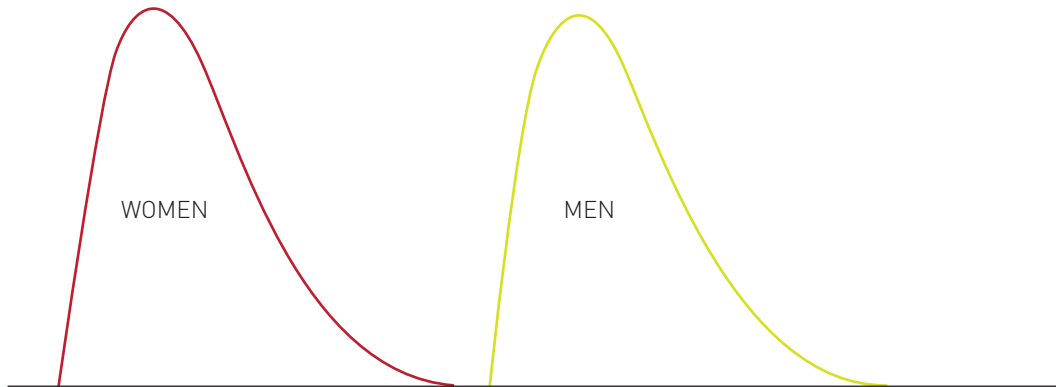
Source: Based on Kaya and Senesen 2010

FIGURE 8 • TWO OVERLAPPING INCOME DISTRIBUTIONS

A

B

C

WOMEN

MEN
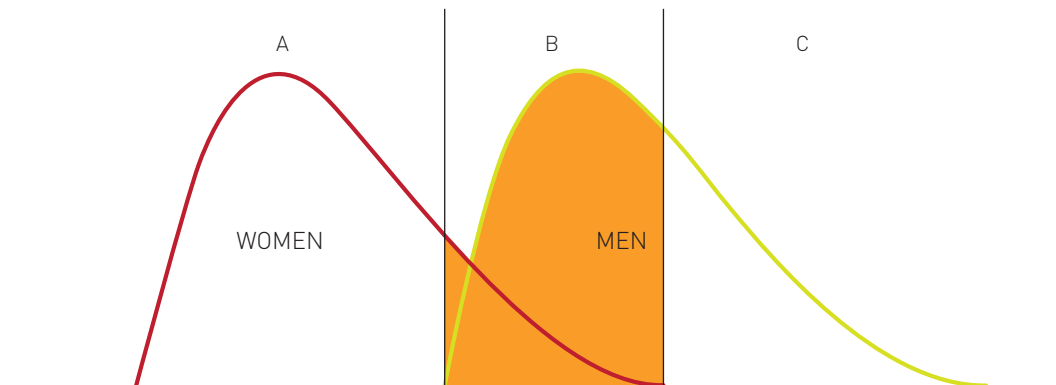
Source: Based on Kaya and Senesen 2010

If the two distributions overlap, which is necessarily the case in our study,[16] taking account of the average solely as a measurement of inequality means ignoring the 'transvariation'[17] of income between sub-populations, in other words the overlap of the two distributions (zone B in Figure 8). This would therefore represent a simplification, leading to an overestimation of inequality (Dagum 1997a, pp.515-516).

Table 14 provides information on the sample and the data necessary to calculate the Gini coefficient. The proportion of women in the sample is 51%, though their share of total net income stands at around 40% only.
The Gini coefficient for the total distribution is 0.36. The intragroup coefficient is higher for women (0.393 compared with 0.303 for men). In other words, women's income distribution is more widely spread than men's.

An initial measurement calculated by Dagum, giving us an idea of income inequality between the two distributions, is the notion of 'relative economic affluence',[18] which in our case has a high value (0.605), thus demonstrating that the disparity between men's and women's income distributions is relatively large.

TABLE 14 • NET INDIVIDUALISED INCOME BY GENDER (TOTAL POPULATION)

	Sample size	Average income	Proportion of total population	Proportion of total net income	Gini coefficient (G)		Relative economic affluence (D)
					Intra group	Inter group	
Women	4,596	13,474.54	0.513	0.397	0.393	0.380	0.605
Men	4,841	21,535.15	0.487	0.603	0.303		
Total	9,437	17,400.22	1.000	1.000	0.360		

Source: SILC Belgium 2006, our calculations

[16] Because despite the fact that women's average income is lower than men's, some women have an income that is equal to or greater than that of some men (which corresponds to the overlap of the two distributions).
[17] The expression 'transvariation' describes income differences due to the intersection zone of the two distributions (Mussard et al. (2003) p.4).
[18] Also known as directional economic distance or relative economic wealth; it lies between 0 and 1, and measures the difference between the income distributions of the two groups studied. The further removed the two distributions are from one another, the closer it comes to 1. It takes the value 0 where the two distributions are identical (see Dagum (1980) pp.1791-1792).

The decomposition of the Gini coefficient by gender is presented in Table 15.
The formula is: $G = G^w + G^{nb} + G^t$.

The first part (G^w) corresponds to the share of income inequality within the total population (which therefore corresponds to the value of the Gini coefficient) which is attributable to inequalities within the groups studied, i.e. inequalities within the group of women and within the group of men contributing to inequality at the level of the total population.
So if G^w is zero, it means that there is a total absence of inequality within the group: all individuals have the same income.

The share attributable to intergroup income inequality is divided into two parts:

- The share of net intergroup inequalities, given by the parameter G^{nb}. This represents disparities between the incomes of the wealthiest population on average (men) and those of the poorest population (women).
- Finally, G^t or the contribution of intergroup income inequalities deriving from the overlap of the distributions. The overlap means that some individuals from the poorest distribution (women) have higher incomes than the poorest persons from the wealthiest distribution (men). Consequently, these are inequalities generated by high incomes among the poorest sub-population.

TABLE 15 • GINI DECOMPOSITION BY GENDER FOR NET INDIVIDUALISED INCOME

	Women	Men	Total
Total inequality (G)	0.393	0.303	0.360
Contribution of intragroup inequalities (G^w)	0.089	0.080	0.169
G^w as a percentage	53%	47%	100%
Gross contribution of intergroup inequalities (G^{gb})	-	-	0.191
Incl.:	-	-	0.513
- net contribution of intergroup inequalities (G^{nb})	-	-	0.116
- transvariation (G^t)	-	-	0.075

Source: SILC Belgium 2006, our calculations

The share of intergroup inequalities (G^w/G) amounts to 47.14%, slightly over half of which (53%) is attributable to disparities within the group of women.

The share of total inequality attributable to inequalities between men and women is given by the sum of $G^{nb} + G^t = 52.86\%$ (Table 16). This shows that inequalities between women's and men's incomes are responsible for more than half of the inequality observed within the total Belgian population in 2006. 60% of these gender inequalities are due to men's annual net incomes being higher than women's.

TABLE 16 • SHARE OF THE GINI INDEX'S DECOMPOSED PARTS TO TOTAL INEQUALITY OF INCOME BY GENDER

	Women	Men	Total
Contribution of intragroup inequalities (G^w)	24.69%	22.25%	47.14%
Gross contribution of intergroup inequalities (G^{gb})	-	-	52.86%
Incl.:	53%	47%	100%
- net contribution of intergroup inequalities (G^{nb})	-	-	31.43%
- transvariation (G^t)	-	-	21.43%

Source: SILC Belgium 2006, our calculations

Based on this decomposition of the Gini coefficient, we propose two inequality indicators:

- Relative economic affluence (D): its value lies between 0 and 1, and the closer it comes to 1, the greater the level of inequality. In Belgium it stands at 0.605.
- The ratio between the share of intergroup inequalities which can be explained by overlapping distributions and the gross intergroup inequalities themselves (G^t/G^{gb}): where the level of inequality is low, this ratio approaches 1. It equates to 0.395 for Belgium in 2006.

1.5 Decomposition of income disparities between men and women using the Oaxaca (1973) and Blinder (1973) method

The decomposition of income disparities is based on the pioneering work of Oaxaca (1973) and Blinder (1973). Decomposition seeks to identify the individual characteristics likely to impact on income, and to develop a technique that separates the effects of these characteristics from the effects of discrimination on income disparities. This decomposition technique is normally applied to pay gaps, but it can also be used to break down income disparities.

1.5.1 Decomposition of income disparities between men and women for the total population

Two income equations were estimated using the Ordinary Least Squares method, one each for men and women, taking as the dependent variable the average net annual income of men and women respectively. The independent variables are detailed below. They include activity status, age, level of educational attainment, region of residence, state of health, household type, nationality and a binary variable indicating whether the person concerned owns or rents his/her home.

The decomposition divides the disparity into two components. The first one represents income disparities associated with the average differences in characteristics between women and men. The second is the share of income disparities which cannot be explained by observed characteristics. It is usually attributed to pure discrimination or to non-observed characteristics.

Presentation of variables:

- Activity status:
The basic variable is 'ACTSTA - Activity status', indicating the person's activity during the reference period. It comprises four categories: workers, the unemployed, retired people and other non-active

people (students, people who stay at home, people who are unfit for work, etc.). The differentiation between full-time and part-time work is based on the number of months worked within each status (variables PL070 and PL072 from SILC Belgium 2006).
Full-time work is the reference category.

- Level of educational attainment:

The various categories of the 'PE040 – Highest ISCED level attained' variable of SILC Belgium 2006 have been reclassified into 4 levels: primary education or less, lower secondary education, upper secondary education (the reference category) and higher education.

- Region:

The 'DB040 – Region' variable corresponds to the NUTS2 nomenclature and comprises Belgium's three regions: Brussels-Capital, Flanders (the reference category) and Wallonia.

- Health status:

Health status is based on the 'PH010 – General health' variable. The number of categories has been reduced for reasons of simplicity and representativeness. The reference category is a good or very good health status.

- Household types:

The 'Household type' variable has been reconstructed to eliminate the 'Other' category. There are now nine categories:

- people living alone
- households consisting of 2 adults aged under 65 with no children
- households with 2 adults, at least one of whom is aged over 65, with no dependent children
- households with more than 2 adults but no dependent children
- lone parents (with 1 or more dependent children)
- households with 2 adults and 1 dependent child
- households with 2 adults and 2 dependent children
- households with 2 adults and 3 or more dependent children
- lastly, households with more than 2 adults and 1 or more dependent child(ren).

The reference category consists of households with 2 adults aged under 65, with no dependent children.

- Nationality:

This variable is based on 'PB220A – Citizenship1' in SILC Belgium 2006, which differentiates between three groups: 'Belgians', 'EU nationals' and 'nationals of non-EU countries'. Belgians form the reference category.

- Home owner/tenant:

The basic variable is 'H12 - home owner – tenant' in SILC Belgium 2006. It comprises several categories that have been grouped together into two categories: home owners and tenants. The home owners' group constitutes the reference category.

Income equations:

TABLE 17 • INCOME EQUATIONS FOR THE TOTAL POPULATION, WOMEN AND MEN

Variables	Women	Men	Total population
Women			-4,920.44
			(-28.56)***
Activity status			
Full-time			
Part-time	-3,850.20	-4,491.85	-4,301.99
	(-11.31)***	(-7.27)***	(-15.23)***
Unemployed	-8,884.80	-10,795.55	-9,614.67
	(-24.87)***	(-25.77)***	(-35.56)***
Pensioners	-7,360.09	-8,135.36	-7,030.64
	(-16.29)***	(-10.71)***	(-18.03)***
Other inactivity	-13,751.96	-12,058.03	-13,690.19
	(-42.11)***	(-23.35)***	(-50.72)***
Age			
‹ 30 years	-2,820.10	-5,000.59	-3,717.76
	(-9.86)***	(-13.72)***	(-16.08)***
30-49 years			
50-59 years	1,771.91	3,899.11	3,055.97
	(4.80)***	(8.56)***	(10.32)***
60-65 years	1,546.67	5,809.08	3,657.62
	(3.35)***	(8.62)***	(8.96)***
› 65 years	486.17	3,459.32	2,211.85
	(0.97)	(4.04)***	(4.87)***
Level of educational attainment			
Primary education or less	-1,336.19	-2,472.11	-1,902.54
	(-4.91)***	(-7.64)***	(-8.80)***
Lower secondary education	-534.64	-917.84	-728.90
	(-2.03)**	(-2.83)***	(-3.42)***
Upper secondary education			
Higher education	4,003.70	4,699.72	4,465.81
	(15.46)***	(14.63)***	(21.39)***
Region			
Flanders			
Brussels-Capital	802.80	472.06	645.07
	(2.05)**	(0.88)	(1.95)*
Wallonia	-309.88	-878.00	-633.28
	(-1.46)	(-3.22)***	(-3.62)***

(continued)

Variables	Women	Men	Total population
State of health			
Very good to good			
Average to very poor	163.56	-659.37	-29.76
	(0.73)	(-2.21)**	(-0.16)
Household types			
Single person	3,120.22	-444.20	922.51
	(8.59)***	(-1.01)	(3.17)***
2 adults (< 65) with no dependent children			
2 adults with no dependent children (at least 1 adult is > 65)	163.56	-659.37	-29.76
	-1,986.32	-271.18	-1,891.34
	(-4.83)***	(-0.49)	(-5.47)***
More than two adults but no children	-993.66	-1,118.33	-1,208.90
	(-2.96)***	(-2.49)**	(-4.23)***
Lone parents	7,995.38	*2,992.32*	7,896.32
	(13.45)***	*(2.20)**	(14.51)***
2 adults, 1 child	354.51	1,143.83	883.95
	(0.94)	(2.33)**	(2.84)***
2 adults, 2 children	1,773.99	3,732.91	2,901.08
	(4.34)***	(6.90)***	(8.51)***
2 adults, 3 or more children	3,139.75	7,213.92	5,347.73
	(4.99)***	(9.38)***	(10.66)***
3 adults or more with child(ren)	-496.31	629.19	113.05
	(-1.06)	(1.04)	(0.29)
Nationality			
Belgian			
EU	1,225.53	2,390.49	1,747.36
	(1.97)**	(2.85)***	(3.31)***
Other	*-3,175.25*	-4,441.65	-4,240.55
	*(-3.95)***	(-4.23)***	(-6.34)***
Home owner/tenant			
Home owner			
Tenant	15.67	-957.78	-360.23
	(0.07)	(-3.18)***	(-1.89)*
Constant	16,764.53	21,517.53	21,471.74
	(45.92)***	(51.72)***	(76.21)***
Observations	4,928	4,593	9,521
R-squared	0.51	0.40	0.50

Note: robust t-statistics shown in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%
Source: SILC Belgium 2006, our calculations

Table 17 presents the results of the income equations estimation using the Ordinary Least Squares method.

The various types of activity status all give rise to a reduction in average income compared with the reference category, which is full-time employment. The effect is most marked in the case of the 'Other non-active' and 'Unemployed' categories.

In terms of the different age categories: persons in the first age group (18-30) have a lower income than the reference group (30-50 year-olds). Income increases with age, but this increase slows as age increases. Nevertheless, this trend is more marked in the case of men than women.

Both for men and for women, a higher level of educational attainment means a higher income. Consequently, all levels below the reference category (upper secondary education) are associated on average with a lower income, and only higher education results in increased income compared with the reference category.

As concerns the 'Region' variable, men living in Wallonia have a lower average income than those living in Flanders, but the women's coefficient is not significant. In the case of Brussels-Capital, only the women's coefficient is significant: it indicates that their income is higher on average than that of women in Flanders.

'Health status' is significant only for men. The coefficient indicates that an average or poor state of health has a negative effect on income compared with the reference category.

As far as the various household types are concerned, all categories 'with 1 or more dependent child(ren)' are associated with increases in income compared with the 'no children' categories, with the exception of single-person households and lone parents. The coefficients estimated for single persons and for childless households with two adults, one of whom is aged over 65, are not significant for men, though they are for women.

The nationality variable has the same effect on men's and women's incomes. On average, nationals of the European Union have a higher net annual income than Belgians, while the opposite applies to nationals of non-EU countries.

Finally, whereas owning their main home seems to impact on men's average income, this variable is not significant for women.

Oaxaca-Blinder decomposition:

Table 18 presents the result of the Oaxaca-Blinder decomposition. One third (32%) of the difference calculated between women's average income and that of men can be explained by differences relating to variables observed as differences in terms of qualifications for example (the 'explained' part); in other words, the effect on women's average income if they had the same characteristics as men. The remaining two thirds may be attributed either to differences in the returns to identical characteristics, which would appear to be pure discrimination, or else to non-observed characteristics. This part measures the effect on women's average income when men's coefficients are applied to women's characteristics.[19]

19 Jann, B. (2008), 'A Stata implementation of the Blinder-Oaxaca decomposition', ETH Zurich Sociology Working Papers, no. 5.

TABLE 18 • RESULTS OF THE OAXACA-BLINDER DECOMPOSITION FOR THE TOTAL POPULATION

		Z test
Number of observations	9,521	
Men's average net annual earnings (a)	20,212.78	(125.13)***
Women's average net annual earnings (b)	12,945.36	(95.34)***
Difference (a-b)	7,267.42	(34.44)***
Decomposition		
Proportion linked to observed characteristics	32.29%	(15.38)***
Proportion linked to discrimination or non-observed characteristics	67.71%	(28.60)***

Source: SILC Belgium 2006, our calculations

1.5.2 Decomposition of the income gap between men and women for the population aged under 65

The same decomposition was carried out for the population aged under 65, using the same explanatory variables.

Income equations:

TABLE 19 • INCOME EQUATIONS FOR THE POPULATION AGED UNDER 65

Variables	Women	Men	Total population
Women			-4,670.49
			(-22.99)***
Activity status			
Full-time			
Part-time	-3,883.37	-4,586.75	-4,477.00
	(-11.35)***	(-7.38)***	(-15.61)***
Unemployed	-8,920.51	-10,844.96	-9,707.18
	(-24.86)***	(-25.59)***	(-35.46)***
Pensioners	-6,377.80	-8,064.37	-7,155.08
	(-10.22)***	(-9.51)***	(-13.54)***
Other inactivity	-14,030.65	-12,323.47	-13,964.58
	(-42.31)***	(-23.89)***	(-50.38)***
Age			
‹ 30 years	-2,828.83	-4,939.10	-3,710.59
	(-9.81)***	(-13.34)***	(-15.88)***
30-49 years			
50-59 years	1,789.68	3,938.58	3,078.97
	(4.83)***	(8.56)***	(10.31)***
60-64 years	858.50	5,904.40	3,524.85
	(1.78)*	(8.42)***	(8.11)***

Variables	Women	Men	Total population
Level of educational attainment			
Primary education or less	-1,230.18	-2,291.99	-1,768.27
	(-3.79)***	(-5.39)***	(-6.46)***
Lower secondary education	-541.58	-977.31	-785.85
	(-1.80)*	(-2.61)***	(-3.21)***
Upper secondary education			
Higher education	3,962.24	4,709.90	4,415.50
	(14.38)***	(13.33)***	(19.46)***
Region			
Flanders			
Brussels-Capital	701.96	285.91	508.70
	(1.59)	(0.48)	(1.36)
Wallonia	-651.21	-1,097.53	-914.57
	(-2.57)**	(-3.43)***	(-4.42)***
State of health			
Very good to good			
Average to very poor	434.48	-451.59	260.79
	(1.60)	(-1.18)	(1.12)
Household types			
Single person	2,498.97	-182.50	755.70
	(6.45)***	(-0.39)	(2.41)**
2 adults (< 65) with no dependent children			
More than two adults with no dependent children	-698.79	-1,045.81	-865.57
	(-2.02)**	(-2.17)**	(-2.87)***
Lone parents	7,856.34	*3,069.93*	7,856.65
	(13.13)***	*(2.25)***	(14.36)***
2 adults, 1 child	389.25	1,274.37	1,012.61
	(1.04)	(2.58)***	(3.25)***
2 adults, 2 children	1,852.49	3,904.95	3,081.40
	(4.58)***	(7.16)***	(9.03)***
2 adults, 3 or more children	3,248.91	7,374.54	5,533.16
	(5.19)***	(9.56)***	(11.01)***
3 adults or more with children	-382.93	884.30	379.51
	(-0.80)	(1.43)	(0.95)
Nationality			
Belgian			
EU	1,465.71	2,305.16	1,868.03
	(2.22)**	(2.59)***	(3.33)***
Other	*-3,120.40*	*-4,433.01*	-4,163.77
	*(-3.78)****	*(-4.13)****	(-6.07)***

(continued)

Variables	Women	Men	Total population
Home owner/tenant			
Home owner			
Tenant	443.97	-826.73	-87.84
	(1.63)	(-2.37)**	(-0.40)
Constant	16,743.83	21,399.29	21,274.56
	(44.91)***	(49.49)***	(72.35)***
Observations	3,994	3,759	7,753
R-squared	0.51	0.39	0.48

Note: robust t-statistics shown in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%
Source: SILC Belgium 2006, our calculations

Pay equations present the same configuration as for the total population, except that health status becomes a non-significant variable for men (Table 19).

Oaxaca-Blinder decomposition:

TABLE 20 • RESULTS OF OAXACA-BLINDER DECOMPOSITION FOR THE POPULATION AGED UNDER

		Z test
Number of observations	7,753	
Men's average net annual earnings (a)	21,132.79	(111.27)***
Women's average net annual earnings (b)	14,032.45	(91.10)***
Difference (a-b)	7,100.34	(29.04)***
Decomposition		
Proportion linked to observed characteristics	34.22%	(13.69)***
Proportion linked to discrimination or non-observed characteristics	65.78%	(22.89)***

Source: SILC Belgium 2006, our calculations

If we take account only of the population aged under 65, the decomposition of average net annual income disparities between women and men gives a result similar to that for the total population (Table 20). Differences relating to observed variables 'explain' 34% of the income gap (compared with 32% for the total population), and the proportion of the gap which remains 'unexplained', and is due to non-observed characteristics or discrimination, is in the region of 66% (compared with 68%).

The proportions therefore remain the same and the decomposition of the income gap between men and women is fairly 'stable' for both populations.

1.5.3 Decomposition of the income gap between men and women for the population of workers

In order to include more explanatory variables related to work, and with a view to increasing the 'explained' share of the income disparity between men and women, we performed an Oaxaca-Blinder decomposition for persons in employment, who correspond to the 'workers' category of the SILC 'ACT-STA – Activity status' variable.

Presentation of variables:

In addition to the variables already examined in connection with the decomposition of the income gap in the total population, six other work-related variables were added. The 'Activity status' variable is no longer used, in order to avoid any correlation with the new variables introduced.

• Type of contract:
This variable comprises two categories: 'Permanent employment contract', which is the reference category and 'fixed-term contract'. It corresponds to the SILC variable 'PL140 – Type of contract'.

• Experience:
SILC Belgium 2006 summarises experience in the labour market by adding up the years spent in paid work since a person's first job, whether as an employee or with self-employed status. This corresponds to the 'PL200 – Number of years spent in paid work' variable, which is defined by the interviewee and is therefore based on the person's own perception of 'working' or 'being in work'. The sum total of these years of work includes temporary absence for reasons of maternity leave, temporary incapacity or redundancy.
We constructed five intervals on the basis of this continuous variable, with '10 to 19 years of experience' as the reference category.

• Sector:
In SILC Belgium 2006, the 'PL110 – NACE' variable gives the sector in which people are working, corresponding to the NACE REV1.1 classification. It includes 12 categories, with 'Extractive industries, Manufacturing industries and Production and distribution of electricity, gas and water' as the reference category.

• Occupation:
This variable refers to the person's main job and is based on the ISCO-88 classification. The 27 categories comprising 'PL050 – Occupation (ISCO-88 (COM))' have been reworked into 11 categories, taking account of each category's coefficient sign, so that there is a sufficient number of observations.
'Office workers' are the reference category.

• Size of firm:
This information is drawn from the 'PL130 – Number of persons working at the local unit' variable in SILC, which refers to the place of work relating to the person's main job. The number of workers includes the interviewee and the employer.
This variable has been reworked into five categories, with the reference category being the one for which we have most observations: organisations with 50 or more workers.

• Working hours:
This variable presents the number of hours normally worked per week in the person's main job. It includes overtime but excludes lunch breaks and travelling time to and from work. This information corresponds to the 'PL060 – Number of hours usually worked per week in main job' variable in SILC, which has been reworked into five intervals, with 'from 30 to 39 hours/week' as the reference category.

Income equations:

TABLE 21 • INCOME EQUATIONS FOR THE POPULATION OF EMPLOYEES, WOMEN AND MEN

Variables	Women	Men	Total population
Women			-3,284.36
			(-12.06)***
Age			
‹ 30 years	-1,065.96	-1,162.06	-1,013.57
	(-1.96)**	(-1.60)	(-2.16)**
30-49 years			
50-59 years	1,363.27	1,573.86	1,517.54
	(1.94)*	(2.32)**	(3.02)***
60-65 years	*1,040.97*	*14,308.76*	*9,217.43*
	(0.65)	*(2.36)***	*(2.42)***
› 65 years	*-2,235.48*	*-4,929.36*	*-2,776.12*
	(-0.79)	*(-1.06)*	*(-0.82)*
Level of educational attainment			
Primary education or less	*-1,659.20*	-2,975.53	-2,722.65
	(-2.57)**	(-4.83)***	(-5.71)***
Lower secondary education	-571.98	-1,811.38	-1,327.53
	(-1.24)	(-3.90)***	(-3.95)***
Upper secondary education			
Higher education	2,767.41	3,227.62	2,997.23
	(7.24)***	(7.54)***	(10.35)***
Region			
Flanders			
Brussels-Capital	2,245.37	1,710.33	2,044.96
	(3.29)***	(1.86)*	(3.57)***
Wallonia	69.21	-682.12	-366.28
	(0.19)	(-1.66)*	(-1.29)
State of health			
Very good to good			
Average to very poor	-620.69	-89.00	-296.05
	(-1.44)	(-0.17)	(-0.84)
Household types			
Single person	663.58	-1,180.04	-650.44
	(1.14)	(-1.83)*	(-1.41)
2 adults (‹ 65) with no dependent children			
2 adults with no dependent children (at least 1 adult is aged 65 or over)	*-487.55*	*-260.02*	*-730.66*
	(-0.37)	*(-0.12)*	*(-0.47)*

Variables	Women	Men	Total population
Household types (continued)			
More than two adults but no dependent children	-151.81	-439.86	-459.00
	(-0.33)	(-0.71)	(-1.13)
Lone parents	5,829.67	*-625.77*	4,705.39
	(8.43)***	*(-0.50)*	(7.40)***
2 adults, 1 child	171.01	467.15	327.48
	(0.42)	(0.84)	(0.93)
2 adults, 2 children	1,733.94	3,708.39	2,789.46
	(3.66)***	(5.79)***	(6.78)***
2 adults, 3 or more children	4,051.58	7,712.65	6,133.59
	(5.55)***	(8.95)***	(10.42)***
3 adults or more with children	831.73	1,664.53	1,165.02
	(1.30)	(2.48)**	(2.42)**
Nationality			
Belgian			
EU	*4,589.78*	5,627.92	5,199.03
	*(3.47)***	(4.45)***	(5.50)***
Other	*328.13*	*-2,172.05*	*-1,887.48*
	(0.18)	*(-1.00)*	*(-1.21)*
Home owner/tenant			
Home owner			
Tenant	746.72	-842.34	-98.31
	(2.04)**	(-1.91)*	(-0.33)
Contract type			
Permanent employment contract			
Fixed-term contract	-700.78	-2,322.89	-1,141.04
	(-1.44)	(-2.50)**	(-2.33)**
Experience			
Less than 10 years	-1,285.58	-2,113.07	-1,719.03
	(-2.49)**	(-2.80)***	(-3.70)***
10 to 19 years			
20 to 29 years	1,745.03	2,566.90	2,358.09
	(3.93)***	(5.12)***	(7.01)***
30 to 39 years	3,033.00	3,350.09	3,430.43
	(4.23)***	(4.92)***	(6.64)***
40 years and over	*2,244.92*	*1,425.68*	2,354.14
	(1.57)	*(0.86)*	(2.07)**
Sector			
Agriculture, forestry and fishing	*1,037.45*	*597.90*	*947.93*
	(0.63)	*(0.50)*	*(1.00)*

(continued)

Variables	Women	Men	Total population
Sector (continued)			
Extractive industries, manufacturing industry, and production and distribution of electricity, gas and water			
Construction	*-633.34*	-1,085.68	-986.24
	(-0.55)	(-1.69)*	(-1.74)*
Wholesale and retail trade: automobile and domestic appliance repairs	658.30	-1,668.37	-820.11
	(0.94)	(-2.50)**	(-1.64)
Hotels and restaurants	*-1,245.67*	*-3,594.47*	*-2,900.68*
	(-0.96)	*(-3.01)***	*(-3.35)***
Transport, warehousing and communication	*248.30*	-905.85	-816.52
	(0.37)	(-1.47)	(-1.59)
Financial activities	2,244.37	3,769.02	2,643.64
	(2.76)***	(2.94)***	(3.34)***
Real estate, rental and corporate services	-22.12	-576.65	-454.58
	(-0.03)	(-0.62)	(-0.72)
Public administration	1,045.98	-425.42	-232.06
	(1.50)	(-0.63)	(-0.47)
Education	-2,062.79	-4,179.33	-3,350.44
	(-3.03)***	(-5.59)***	(-6.64)***
Healthcare and social work	-672.27	-2,123.74	-1,596.15
	(-1.19)	(-2.57)**	(-3.49)***
Municipal, social and personal services, domestic services and extra-territorial bodies	-386.01	-216.88	-539.44
	(-0.59)	(-0.20)	(-0.83)
Occupation			
Armed forces	*-703.56*	*915.72*	*374.96*
	(-0.40)	*(0.96)*	*(0.45)*
Company managers and directors; chief executives, senior managers and members of the executive and legislative bodies	*6,258.37*	9,496.70	8,720.62
	*(5.00)***	(8.61)***	(9.65)***
Specialists in intellectual and scientific professions	2,966.72	4,074.68	3,480.84
	(4.50)***	(5.87)***	(7.35)***
Intermediate professions (intellectual and scientific)	682.54	2,011.15	1,212.62
	(1.32)	(3.19)***	(2.96)***
Office workers			
Receptionists, cashiers, counter clerks and similar	*-2,205.37*	*-1,463.48*	-1,473.68
	*(-4.06)***	*(-0.99)*	(-2.51)**
Personnel providing direct services to the public, and protection and security services	-1,546.85	-1,315.05	-1,415.36
	(-2.80)***	(-1.81)*	(-3.04)***

Variables	Women	Men	Total population
Occupation (continued)			
Models, sales staff and demonstrators	*-1,574.81*	*3,084.74*	832.13
	(-1.67)*	*(2.11)***	(0.97)
Farm, manual and craft workers	*-2,360.75*	-1,274.01	-1,984.37
	(-2.40)**	(-2.27)**	(-4.65)***
Drivers and unskilled labourers (agriculture and fisheries, transport)	-834.87	-1,102.95	-1,631.90
	(-1.38)	(-1.93)*	(-3.75)***
Unskilled workers in services and sales	-2,857.39	*-2,462.06*	-2,373.76
	(-5.82)***	*(-3.18)****	(-5.37)***
Size of firm			
Fewer than 10 persons	-1,749.80	-2,118.14	-2,012.13
	(-4.12)***	(-3.69)***	(-5.76)***
Between 10 and 19 persons	-2,080.69	-3,061.99	-2,625.90
	(-4.29)***	(-5.22)***	(-6.74)***
Between 20 and 49 persons	-1,108.33	-1,978.37	-1,658.32
	(-2.81)***	(-4.55)***	(-5.46)***
50 persons and over			
Don't know, but more than 10 persons	*-1,692.07*	*-505.70*	-1,137.66
	(-2.26)**	*(-0.37)*	(-1.42)
Working hours			
Less than 20 hours	-5,164.39	*84.03*	-4,496.02
	(-10.93)***	*(0.07)*	(-9.53)***
20 to 29 hours	-2,972.82	*-1,905.44*	-2,951.29
	(-6.97)***	*(-1.89)**	(-7.46)***
30 to 39 hours			
40 to 49 hours	1,488.78	2,353.45	2,076.31
	(3.33)***	(6.30)***	(7.21)***
50 hours and over	*5,510.30*	6,613.57	6,348.24
	(4.56)***	(8.93)***	(9.79)***
Constant	16,909.69	20,090.05	20,520.56
	(24.13)***	(26.28)***	(37.20)***
Observations	2,032	2,337	4,369
R-squared	0.43	0.46	0.47

Note: robust t-statistics shown in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%
Source: SILC Belgium 2006, our calculations

Female employees have an average annual income that is €3,200 lower than male employees; this disparity is lower than that observed for the total population (€4,920) (Table 21).
The coefficients of the different variables do not change fundamentally in relation to the income equations estimated for the total population. The exceptions are:

- Concerning the 'age' variable: the under 30s age category is no longer significant for men and the '60 to 65' age group indicates a sharp rise in average income (€14,308) compared with the reference category (30 to 49 year-olds).
- The average differences in income between regions increase for both sexes in favour of 'Brussels-Capital' compared with the income equations of the total population.
- The 'health status' variable is no longer significant for men, probably due to retired people being excluded from the sample.
- The average disparity between nationals of other EU countries and Belgians is growing, whereas the coefficients of nationals of non-EU countries are still not significant.
- Owning or renting their main home becomes statistically significant for women, and appears to indicate an opposite effect as for men, because the average income of (female) tenants is slightly higher than that of home owners. This finding is difficult to interpret, particularly since the variable is not individualised in SILC Belgium 2006.

The variables linked to work present a coherent result:

- Workers on fixed-term contracts have a lower average income than those on permanent employment contracts. This variable is not significant for women.
- Average income increases with experience.
- With the exception of financial activities, all sectors with a significant coefficient have a lower average income than the reference category: 'Extractive industries, manufacturing industry, and production and distribution of electricity, gas and water'.
- As office workers are the reference category, all managerial occupations and specialists in intellectual and scientific professions have a higher average income. On the other hand, farm, manual, craft and unskilled workers have a lower average income.
- Average income increases with the size of the firm.
- Average income increases with the volume of hours worked.

Oaxaca-Blinder decomposition:

TABLE 22 • RESULTS OF THE OAXACA-BLINDER DDECOMPOSITION FOR EMPLOYEES, WOMEN AND MEN

		Z test
Number of observations	4,369	
Men's average net annual earnings (a)	24,808.95	(103.20)***
Women's average net annual earnings (b)	19,075.42	(103.95)***
Difference (a-b)	5,733.53	(18.96)***
Decomposition		
Proportion linked to observed characteristics	42.72%	(9.36)***
Proportion linked to discrimination or non-observed characteristics	57.28%	(12.17)***

Source: SILC Belgium 2006, our calculations

The effect of applying the decomposition of income disparities to employees is to increase to 43% the share of the part 'explained' by the differences relating to observed variables, compared with 32% for the population as a whole (Table 22). The 'unexplained' part still accounts for more than half of the income gap observed (57%).

1.6   Conclusion

Regardless of the incomes considered, women's average incomes are always lower than men's. In 2006, in Belgium, women's net individual income equates to 62% of men's average income.

As far as earned income is concerned, women's income is 28% lower on average; this disparity is greater for the self-employed and is also more marked in respect of all the bonuses making up total remuneration: women receive bonuses less often, and when they do, these bonuses are lower.

In respect of State transfers, the gap is 25% on average, rising to 34% for pensions and 32% for unemployment benefit. This illustrates firstly the long-term negative effects of all forms of flexible working: career breaks, part-time work, etc., and secondly the effects of non-individualisation of social security entitlements.

The effect of age on income is different for men and women: while the disparity is lowest among the youngest people, it is particularly large among the oldest, illustrating the substantial risks of exposure to poverty faced by older women.

Activity status plays a key role: although disparities within the same status still exist between people in work (full-time 20%, part-time 18%), the greatest gap is between retired people and non-active people (33% and 67%).

Women make up the majority in the initial deciles; men in the last deciles. Decile analyses reveal very different age distribution profiles, once again highlighting the risk run by older women. Part-time work represents a risk for women and an opportunity for men, and the differing effects of level of educational attainment on income are also apparent: protection for men but a risk for women.

These findings are confirmed by the decomposition of the income gap between men and women. A third (32%) of the difference between women's and men's average income can be explained by differences relating to observed variables, such as differences in qualifications for example, while the remaining two thirds can be attributed to differences in the returns to identical characteristics. If we take account only of the population aged under 65, the decomposition of average net annual income disparities between women and men gives a result similar to that for the total population. Differences relating to the observed variables 'explain' 34% of the income disparity (compared with 32% for the total population). If we consider people in work only, the explained part increases to 43%. The 'unexplained' part still accounts for more than half of the income gap observed (57%).

2. FINANCIAL DEPENDENCE OR THE INDIVIDUAL RISK OF POVERTY

This section is devoted to the presentation and calculation of indicators seeking to analyse the relative poverty risks run individually by women and by men.

2.1 Financial dependence or individual individual risk of poverty, and proposal of indicators

Based on individual incomes, as presented in Part One, various indicators were developed to try to summarise the income inequalities between women and men. These indicators are based on the notion of 'financial dependence': persons in a situation of financial dependence are those whose individual net income is below 60% of the median individual income. In point of fact, the notion of financial dependence represents the poverty risk run by persons having to meet their needs out of their own income, without help from anyone else. We posit that individuals are protected from the risk of poverty only by the income available to them personally. The financial dependence proposed may be compared with the European at-risk-of-poverty rate, which is defined as the percentage of people belonging to households whose equivalised adult disposable income is below 60% of the equivalised national median income. The main difference is that here we do not regard the household as a sharing unit; instead, we consider each individual separately, irrespective of the household they belong to, and we take each person's individual income into account.

Table 23 presents the financial dependence threshold and financial dependence rates or individual at-risk-of-poverty rates by gender. The proportion of women in the population below the threshold is more than three times greater than that of men.

TABLE 23 • INDICATORS CALCULATED ON THE BASIS OF THE BGIA FINANCIAL DEPENDENCE THRESHOLD

	SILC Belgium 2006	SILC Belgium 2007
Financial dependence threshold (monthly)	**€787**	**€810**
Percentage of population below the dependence threshold	24%	23%
Proportion of women	78%	76%
Proportion of men	22%	24%
Indicator 1: Financial dependence rates or individual at-risk-of-poverty rates		
Women	36%	34%
Men	11%	11%
Total	24%	23%
Indicator 2: Ratio between the financial dependence rates of women and men	**3.3**	**3.1**
Dispersion of dependence rates:		
Median income (monthly) of people below the threshold	€259	€291
Women	€196	€237
Men	€443	€445
Gap between (monthly) median incomes of people below the threshold and the threshold itself	€528	€519
Women	€590	€573
Men	€344	€365
Relative median gap of people below the threshold	67%	64%
Women	75%	71%
Men	44%	45%
Indicator 3: Ratio between the relative median gaps of women and men	**1.7**	**1.6**
Intensity of financial dependence:		
Women	27%	24%
Men	5%	5%
Total population	16%	15%
Indicator 4: Ratio between the intensity of women's and men's financialdependence	**5.6**	**5.0**

Source: SILC Belgium 2006 and 2007, our calculations

Indicator 1 is the financial dependence rate by gender.

Indicator 2 represents the ratio between the proportion of women and that of men below the dependence threshold. This indicator is comparable to the 'gender poverty gap' developed by Casper et al. (1994), which defines the difference in poverty between men and women as the ratio between the percentage of poor women and the percentage of poor men.

Indicator 3 is the ratio between the relative median gaps of women/men. This indicator was proposed by Atkinson et al. (2002). The relative median gap represents the difference between the median individual income of people below the dependence threshold and the dependence threshold itself, expressed as a percentage of the dependence threshold.

Indicator 4 is the ratio between the intensity of the dependence risk faced by women/men. The intensity of the dependence risk is the product of two components: the dependence rate and the relative median gap. This indicator thus combines the number of individuals below the dependence threshold according to gender with the seriousness of this dependence among individuals who are dependent.

Women are more than three times as likely as men to find themselves financially dependent.
The income of financially dependent women is further removed from the dependence threshold than that of men, leading to the conclusion that the situation of women experiencing financial dependence is more difficult than that of men. This is confirmed by Indicator 4, which shows that the intensity of dependence is five times greater among women.

2.2   Effects of state intervention on financial dependence

To highlight the effects of State intervention on financial dependence among women and men, we computed the financial dependence rate based on gross incomes, incomes after State intervention without pensions, and net incomes (Table 24).

TABLE 24 • FINANCIAL DEPENDENCE RATES BEFORE AND AFTER STATE INTERVENTION

	Before intervention (no transfers)	After intervention (other than pensions)	After intervention (including pensions)
Financial dependence threshold (monthly)	**€690.0**	**€680.6**	**€786.5**
Percentage of population below the dependence threshold	**45.35%**	**36.85%**	**23.62%**
Proportion of women	61.07%	63.24%	77.53%
Proportion of men	38.93%	36.76%	22.47%
Financial dependence rates	**45.35%**	**36.85%**	**23.62%**
Women	54.11%	45.53%	35.78%
Men	36.16%	27.75%	10.87%

Source: SILC Belgium 2006, our calculations

Without State intervention the risk of financial dependence would be 45%, but the combined effect of taxes and transfers reduces this rate to 24%. For women the rate falls from 54 to 36%, and for men from 36 to 11%, so the effect is greater for men in both absolute and relative terms, and the redistributive intervention of the State is more beneficial to men than to women.

If pensions are disregarded, the redistributive effect is much less marked: the financial dependence rate declines from 45 to 37%; from 54 to 46% for women and from 36 to 28% for men. Pensions have a more marked effect than any other transfers and taxes for men: the financial dependence rate of men falls by 17 percentage points, whereas for women the reduction is only 10 percentage points.

2.3   Comparison between BGIA indicators and European indicators

The European at-risk-of-poverty rate measures the proportion of people belonging to households whose equivalised disposable income is below the poverty threshold set at 60% of equivalised median disposable income.
For this calculation, Eurostat adds up all household incomes and then divides this total between its members, applying an equivalence scale that assigns a weight of 1 to the first adult, 0.5 to other adults and 0.3 to children aged under 14.[20] This amounts to calculating an equivalised adult income for each household, based on the hypothesis of full sharing of resources among household members, regardless of each person's income.

The financial dependence rate is based on each person's individual income without assuming that their incomes are pooled and shared.

TABLE 25 • INDICATORS CALCULATED ON THE BASIS OF THE BGIA DEPENDENCE THRESHOLD AND THE EUROPEAN AT-RISK-OF-POVERTY THRESHOLD

Tables of indicators	European	BGIA
Thresholds of dependence (monthly)	**€859.6**	**€786.5**
Indicator 1: poverty rate or financial dependence rate		
Women	14.39%	35.78%
Men	11.51%	10.87%
Total	12.98%	23.62%
Proportion of women and men below the poverty threshold		
Women	56.71%	77.53%
Men	43.29%	22.47%
Indicator 2: Ratio between women's and men's dependence rates	**1.25**	**3.30**

Source: SILC Belgium 2006, our calculations

Table 25 affords a comparison between our results and results calculated according to the European hypotheses (equivalised income and equal sharing of household resources) on the same sample (in other words, without taking account of individuals aged under 18 or of 18 to 24 year-olds who are not active in the labour market).
Persons in dependence, according to the European hypotheses, are identified according to the 'POVERTY' variable (the equivalent of the hx080 'poverty indicator' variable in the European SILC), which includes individuals with an equivalised income below 60% of the equivalised median income.

The effect of calculating the poverty risk at individual level is two-fold: firstly the percentage of people at risk is greater when the hypothesis of sharing within the household is rejected, and secondly the risk run by women is far greater if the calculation is made for individuals.

Women's financial dependence rate is 36% when the calculation is based on individual incomes, but just 14% when it is made at household level (Table 26). Indicator 2 is 3.3 in the BGIA calculation, but just 1.25 in the European calculation.

TABLE 26 • COMPARISON BETWEEN THE BGIA FINANCIAL DEPENDENCE RATE AND THE EUROPEAN AT-RISK-OF-POVERTY RATE

	Women	Men	Total
European at-risk-of-poverty rate	14%	12%	13%
Financial dependence rate	36%	11%	24%

Source: SILC Belgium 2006, our calculations

The financial dependence rate is 11 points higher than the at-risk-of-poverty rate. The at-risk-of-poverty rate for men is higher (+1%), but above all it is much lower for women (-22%). This is a perfect illustration of the effect of the hypotheses chosen – globalising data at household level masks the risks of individual poverty faced by women – and is consistent with the findings of Daly and Rake (2002), whose thesis is that to assume equal sharing of incomes within households is to minimise the poverty situation of women.

FIGURE 9 • COMPARISON BETWEEN BGIA DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY GENDER AND AGE GROUP

Women

(continued)

Men
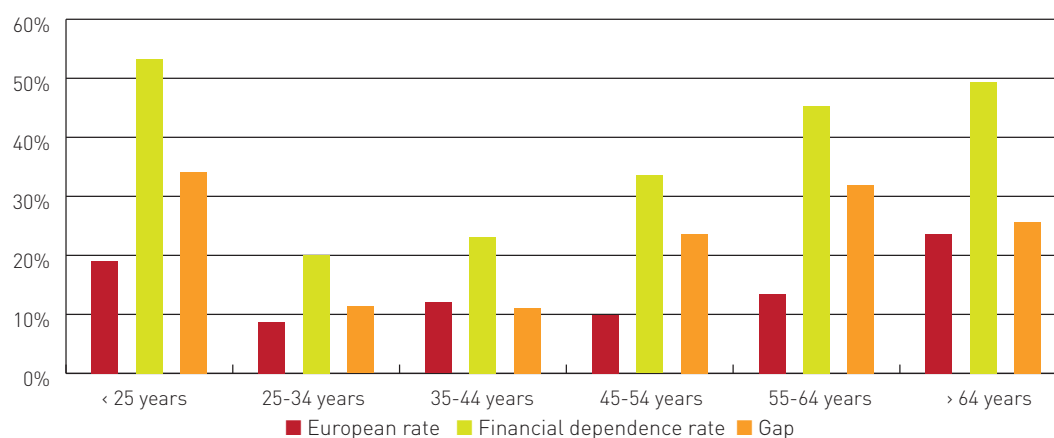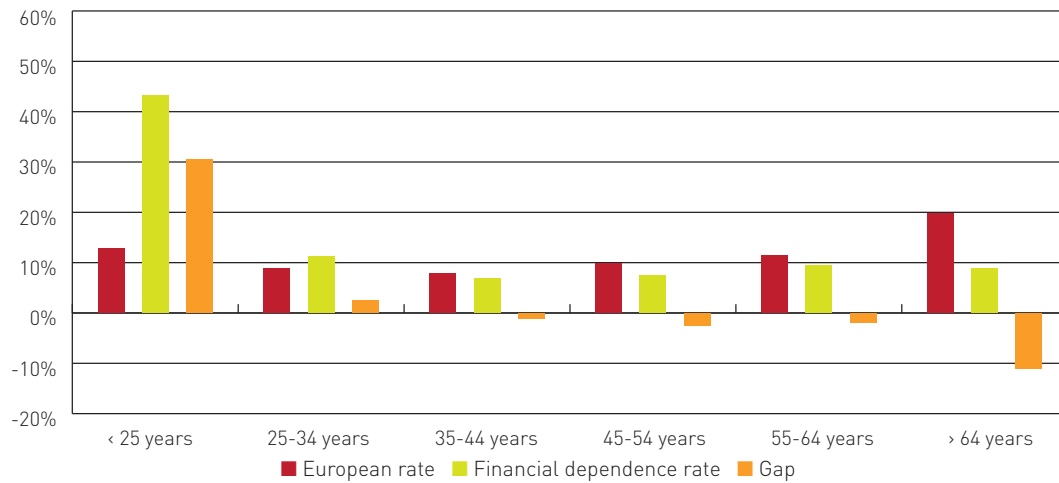
Source: SILC Belgium 2006, our calculations

Comparing financial dependence rates and at-risk-of-poverty rates by age group reveals a systematic underestimation of the poverty risk faced by women for all age groups if the European definition is used (Figure 9). The disparity is greatest among the youngest and the oldest women. As far as men are concerned, with the exception of the youngest age groups (under 34), the opposite is observed: the at-risk-of-poverty rate overestimates the risks run by men (the gap between the financial dependence rate and the European rate is negative).

FIGURE 10 • COMPARISON BETWEEN BGIA DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY GENDER AND OCCUPATIONAL STATUS

Women

Men
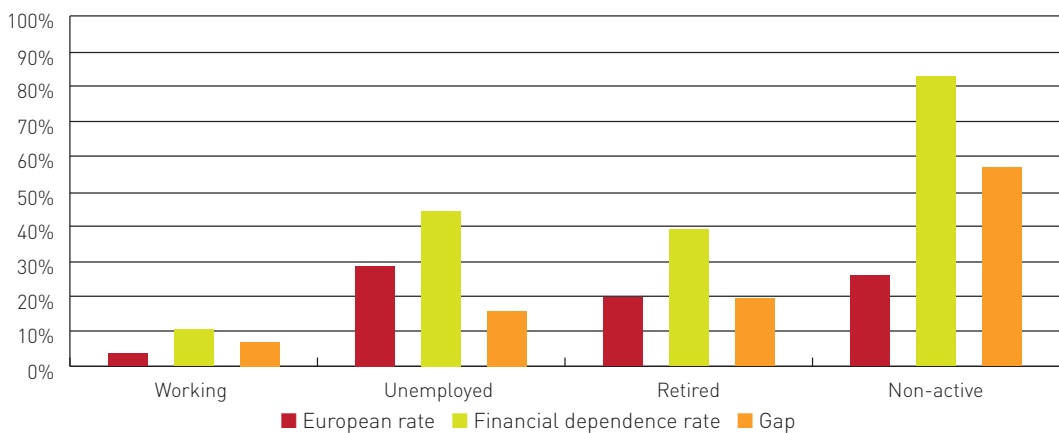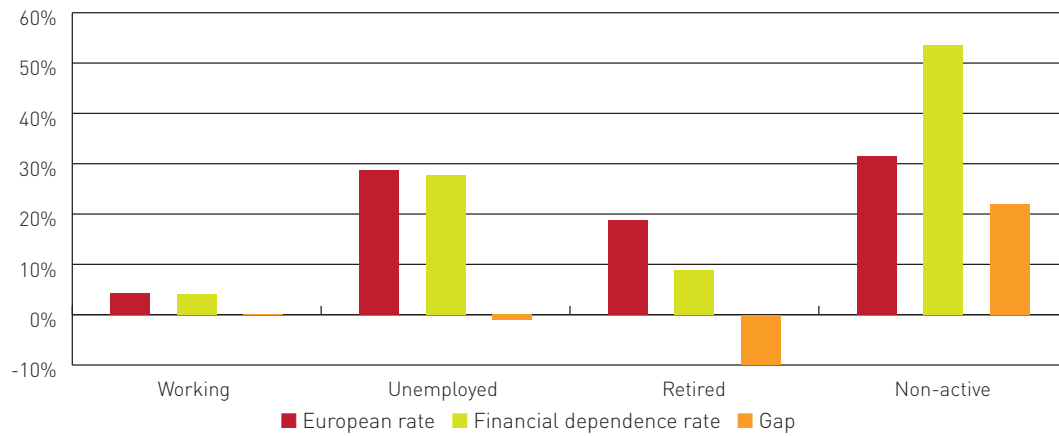
Source: SILC Belgium 2006, our calculations

While the hierarchy by occupational status is identical for both rates in the case of women, the BGIA financial dependence rates, regardless of occupational status, are higher than the at-risk-of-poverty rates, and the disparities are largest for non-active and retired people (Figure 10).

In the case of men, the European at-risk-of-poverty rate is higher for those who are retired, and the two rates are virtually equal for the unemployed.

FIGURE 11 • COMPARISON BETWEEN BGIA DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY GENDER AND LEVEL OF EDUCATIONAL ATTAINMENT

Women

(continued)

Men
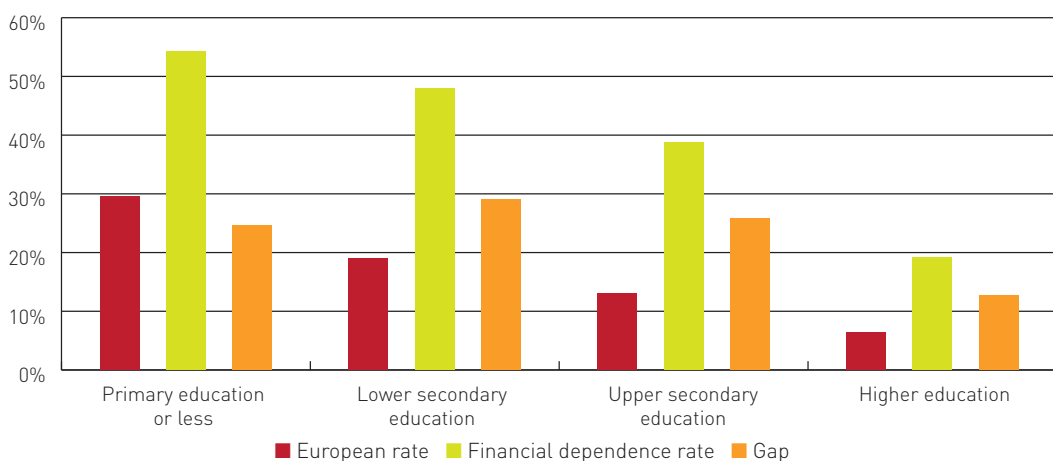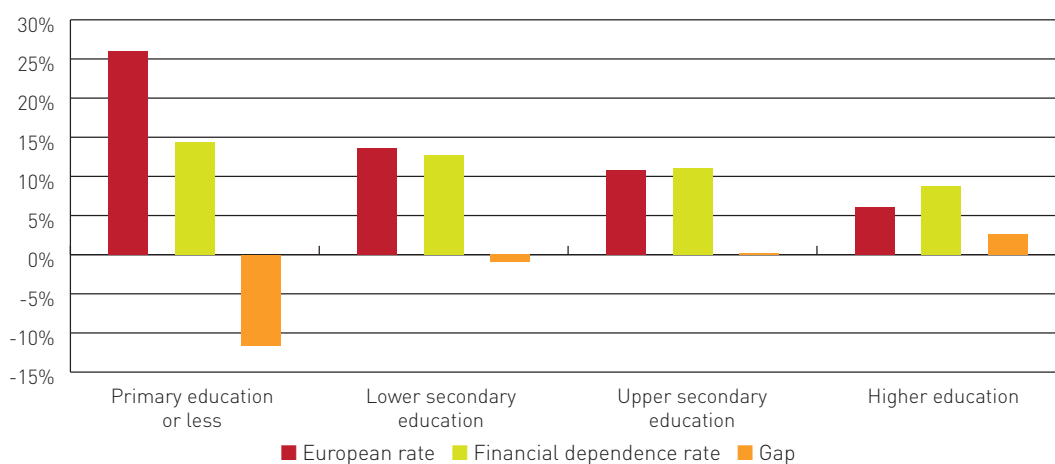
Source: SILC Belgium 2006, our calculations

In the case of women, we once again find this picture of the poverty risk being underestimated according to the European definition, regardless of their level of educational attainment (Figure 11). For men, the European at-risk-of-poverty rates are higher for the lowest educational level; the two rates are virtually equal for both intermediate levels, whereas for higher education the dependence rate is the higher value.

2.4   Effects of using an equivalence scale on financial dependence

The financial dependence rate calculation disregards children who are dependants of individuals, so in order to make up for this shortcoming and to test the robustness of our results, we calculated financial dependence rates by applying an equivalence scale to individual incomes, taking into account dependent children: the adult individual's income is divided by a term of 1 + 0.3 for each child for whom they alone are responsible, and 1+ 0.15 for each child for whom responsibility is shared with another adult.

TABLE 27 • COMPARISON BETWEEN FINANCIAL DEPENDENCE CALCULATED WITH AND WITHOUT AN EQUIVALENCE SCALE

	BGIA	Equivalised BGIA
Financial dependence threshold (monthly amount)	**€786.5**	**€721.7**
Percentage of total population below the threshold	**24%**	**23%**
Proportion of women	78%	79%
Proportion of men	22%	21%
Financial dependence rates	**24%**	**23%**
Women	36%	35%
Men	11%	10%
Ratio between dependence rates of women/men	**3.3**	**3.6**

Source: SILC Belgium 2006, our calculations

The effect of using the equivalence scale is to reduce the financial dependence threshold from €786 to 721 per month (Table 27). The percentage of the population in a situation of financial dependence falls slightly (by 1%) and the proportion of women living in poverty rises slightly, from 78 to 79%. This rise is due to the over-representation of women among lone parents.

TABLE 28 • FINANCIAL DEPENDENCE RATES AND EUROPEAN AT-RISK-OF-POVERTY RATE

Rates of financial dependence	BGIA			Equivalised BGIA			European at-risk-of-poverty rate		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
Single adult with no children	21%	13%	17%	14%	10%	12%	26%	17%	22%
Single adult with child(ren)	3%	1%	3%	13%	4%	12%	30%	12%	27%
2 adults with no children	51%	10%	31%	48%	8%	28%	13%	13%	13%
2 adults with child(ren)	27%	5%	16%	32%	6%	19%	9%	8%	8%
+2 adults and others	47%	19%	32%	46%	18%	31%	7%	9%	8%

Source: SILC Belgium 2006, our calculations

The financial dependence of people belonging to different household types varies significantly where an equivalence scale is used to take account of the presence of children (Table 28). The financial dependence rates of childless people fall, whereas those of people 'with children' increase. The effect is more marked in the case of single mothers.

As far as men are concerned, the BGIA and equivalised BGIA dependence rates are highest for those living in complex households (more than two adults and others). The European at-risk-of-poverty rates are higher for men living alone. This difference is explained by the hypothesis of income sharing in the European at-risk-of-poverty rate calculation, which masks the poverty risk faced by individuals living in complex households.

In the case of women, the BGIA and equivalised BGIA dependence rates are highest for those living in households made up of two adults with no children, and in complex households. The European at-risk-of-poverty rate is highest for single women with or without children. These disparities between financial dependence rates and European at-risk-of-poverty rates are explained by the hypothesis of income sharing adopted at European level.

To explain in more depth the disparities observed concerning single persons, an analysis was performed on the first decile of individualised net income and of equivalised net income resulting from Eurostat's income-sharing hypothesis.
While women make up 84% of the first decile of individualised net income, if we posit that income is shared equally among household members, women then represent just 53% of the first decile.

TABLE 29 • PROPORTION OF INDIVIDUALS CONSTITUTING THE 1ST DECILE OF INDIVIDUALISED NET INCOME BY HOUSEHOLD TYPE

	Women	Men	Total
Single adult with no children	*1% (12)*	*7% (9)*	*2% (21)*
Single adult with child(ren)	*0% (2)*	*0% (0)*	*0% (2)*
2 adults with no children	57% (475)	*28% (46)*	52% (521)
2 adults with child(ren)	16% (146)	*14% (24)*	16% (170)
+2 adults and others	25% (212)	*51% (79)*	29% (291)
Total	100% (847)	100% (158)	100% (1,005)

Source: SILC Belgium 2006, our calculations

TABLE 30 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUAL NET INCOMES ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

	Women	Men	Total
Working	*7% (61)*	*25% (40)*	10% (101)
Unemployed	*3% (23)*	*10% (15)*	*4% (38)*
Pensioners	16% (125)	*5% (9)*	15% (134)
Non-active	74% (638)	*60% (94)*	72% (732)
Total	100% (847)	100% (158)	100% (1,005)

Source: SILC Belgium 2006, our calculations

Most of the individuals making up the first decile live in households with 2 or more adults (Table 29), and are therefore financially dependent on the people with whom they live. These individuals are also more often non-active: 74% for women and 72% for men (Table 30).

If we posit that total income is shared equally among household members, we obtain the following result:

TABLE 31 • PROPORTION OF INDIVIDUALS CONSTITUTING THE 1ST DECILE OF EQUIVALISED NET INCOME BY HOUSEHOLD TYPE

	Women	Men	Total
Single adult with no children	*15% (72)*	*11% (45)*	13% (117)
Single adult with child(ren)	*1% (6)*	*0% (1)*	*1% (7)*
2 adults with no children	49% (253)	51% (238)	50% (491)
2 adults with child(ren)	*14% (88)*	*12% (59)*	13% (147)
+2 adults and others	21% (113)	26% (124)	23% (237)
Total	100% (532)	100% (467)	100% (999)

Source: SILC Belgium 2006, our calculations

TABLE 32 • PROPORTION OF INDIVIDUALS CONSTITUTING THE 1ST DECILE OF EQUIVALISED NET INCOME BY ACTIVITY STATUS

	Women	Men	Total
Working	19% (104)	27% (122)	22% (226)
Unemployed	*12% (68)*	*19% (88)*	15% (156)
Pensioners	23% (111)	37% (170)	30% (281)
Non-active	46% (249)	*18% (87)*	33% (336)
Total	100% (532)	100% (467)	100% (999)

Source: SILC Belgium 2006, our calculations

For both men and women, half of the people making up the first decile of equivalised net income form part of a household made up of two adults with no children (Table 31). Then come complex households made up of more than two adults and single persons, among whom there are relatively more women than men.

Although the first decile of individualised net income comprised mainly non-active people, taking equivalised net income into account reduces the proportion of this category in the first decile, in contrast to pensioners and working people (Table 32). Nevertheless, almost half of women remain non-active.
The proportion of male workers (27%) is explained by a stronger presence of self-employed men than in other deciles (approximately 61% of workers receive earnings from self-employment in the first decile, compared with 42% in the 2nd decile and 38% in the 3rd).

3. ANALYSIS OF FACTORS DETERMINING FINANCIAL DEPENDENCE OR THE INDIVIDUAL AT-RISK-OF-POVERTY RATE

In this section we analyse the influence of different variables on financial dependence rates. Several characteristics are examined: activity status, age, education, household type and nationality. The results are compared with the 'classic' at-risk-of-poverty rates calculated by applying the European definition to our sample. A probit analysis is performed, so as to isolate the effects specific to each variable.

3.1 Effect of activity status

The literature relating to poverty indicates that having a job reduces people's likelihood of finding themselves living in poverty; conversely, unemployment and retirement increase the attendant poverty risk owing to the loss of income attached to such status. The European policy on social inclusion is moreover focused on labour market access as a means of escaping poverty (Bardone and Guio 2005, Defina 2002, Bicakova 2005, Casey and Yamada 2002).
As far as gender disparities are concerned, the pay gap, the lower activity rate among women and the volume of part-time work are all sources of income differentials and explain the heightened poverty risks faced by women (Soerensen 2001, Blau and Kahn 1996, Bardasi and Gornick 2007).

The analysis is based on variables PL070-PL090, ACTSTA and PX050.

Activity status reflects the individual's activity during the reference period. A distinction is made between full-time and part-time workers, the unemployed, pensioners and other non-active people (students, people who stay at home, people who are unfit for work, etc.).

The financial dependence rate varies significantly according to activity status. Nevertheless, regardless of activity status, women have higher financial dependence rates than men (Figure 12).
For women, the financial dependence rate is lowest among those in full-time work (7%), and doubles for women in part-time work (14%); it is 42% for unemployed women, 46% for female pensioners and 79% for other non-active women.
For men, the rates are lower: 4% for those in full-time work, 12% for those in part-time work, 28% for the unemployed, just 9% for pensioners and 53% for other non-active men.
Gender differences indicate that only in the case of women is pensioner status associated with a heightened risk of financial dependence. Incomplete careers, part-time work and career breaks are all pitfalls lying in wait for women, which translate into a high risk of poverty at retirement age.

FIGURE 12 • FINANCIAL DEPENDENCE RATES BY GENDER AND ACTIVITY STATUS
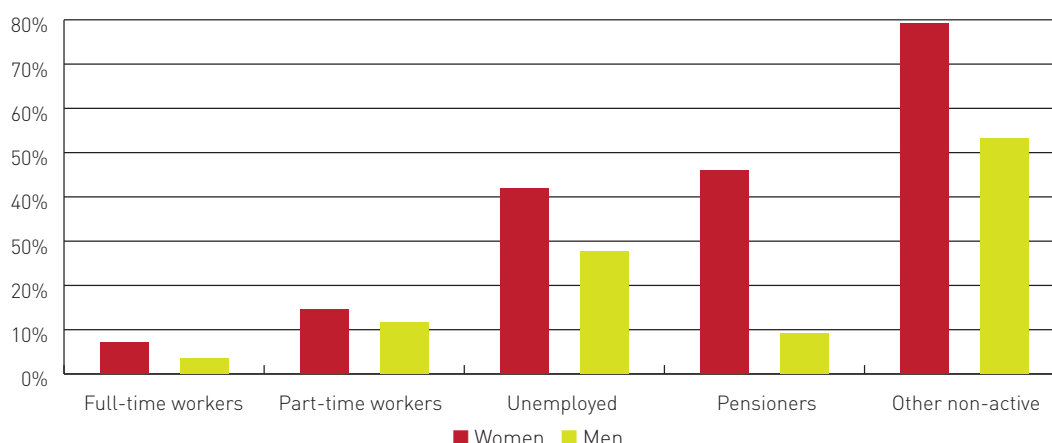
Source: SILC Belgium 2006, our calculations

European at-risk-of-poverty rates are systematically lower than BGIA rates, except for men in full-time work, unemployed men and male pensioners (Table 33). Women's at-risk-of-poverty rates are underestimated if incomes are shared among household members according to the European hypotheses.

TABLE 33 • BGIA FINANCIAL DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY ACTIVITY STATUS

Activity status	BGIA financial dependence rate		European at-risk-of-poverty rate	
	Women	Men	Women	Men
Full-time work	7%	4%	4%	4%
Part-time work	14%	12%	4%	8%
Unemployed	42%	28%	31%	29%
Pensioners	46%	9%	15%	18%
Other non-active	79%	53%	28%	33%

Source: SILC Belgium 2006, our calculations

Probit analysis:

Analysis using the probit method enables us to calculate the marginal effect on financial dependence rates of changing a characteristic, where all others are kept constant. Table 34 and Figure 13 indicate the effect on financial dependence rates of moving from full-time work to another activity status. It is apparent that ceasing to be in full-time work increases the likelihood of financial dependence. For women and men alike, financial dependence increases most in the event of a transition to inactivity and to unemployment.

The marginal effects are greater for women in all cases and the gender gap is substantial as concerns the effects of a transition to pensioner status: the financial dependence rate increases sharply for women, whereas the marginal effect for men is low.

TABLE 34 • MARGINAL EFFECT OF ACTIVITY STATUS ON FINANCIAL DEPENDENCE RATE (REFERENCE = FULL-TIME WORK)

Activity status	Marginal effect		
	Women	Men	Total
Full-time work			
Part-time work	0.160***	0.126***	0.191***
Unemployed	0.486***	0.311***	0.459***
Pensioners	0.437***	0.081***	0.312***
Other non-active	0.759***	0.570***	0.760***

Source: SILC Belgium 2006, our calculations

FIGURE 13 • MARGINAL EFFECT OF ACTIVITY STATUS ON FINANCIAL DEPENDENCE RATE (REFERENCE = FULL-TIME WORK)
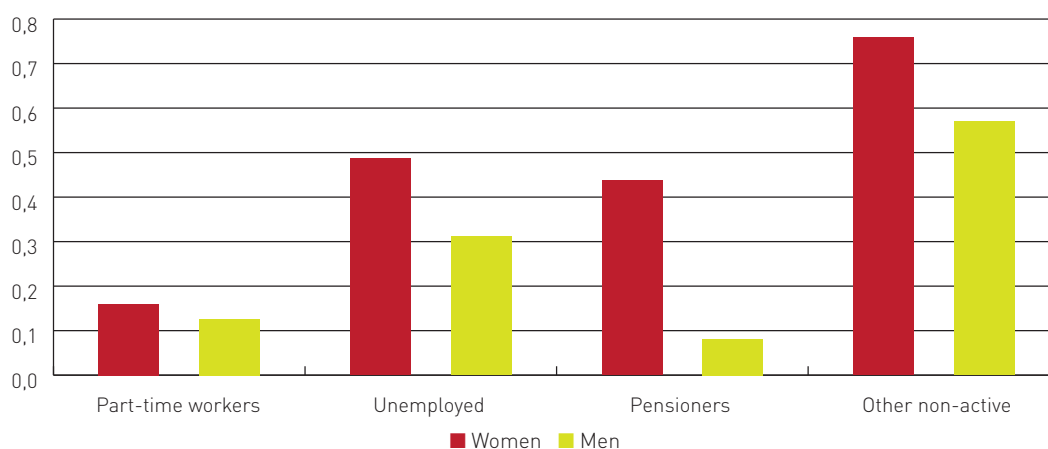
Source: SILC Belgium 2006, our calculations

Taking other explanatory variables into account in the probit analysis changes the effect of activity status on financial dependence rates (Table 35). In point of fact, activity status may incorporate some effects which are due to other characteristics, such as age, education, etc. If we wish to isolate the effect due purely to activity status, we must control for the effect of other characteristics.

Table 35 shows that, by including age, the marginal effect on financial dependence rates of having an activity status other than full-time work increases, with just a few exceptions. This means that age tends to mitigate the effect of activity status on financial dependence rates. The inclusion of age does not change the effect of activity status for unemployed women and non-active women in any way. On the other hand, for women, the effect of being a pensioner rather than working full-time is significantly mitigated by controlling for age. Indeed, their financial dependence rate declines from 43.7% to 31.9%.

Among the variables explaining the financial dependence rate, a combination of activity status and level of educational attainment slightly diminishes the effect on women's financial dependence rate of having an activity status other than full-time work, but it does not alter the effect of activity status in any way for men. This means that for women, the effect of activity status partly reflects an education effect. By maintaining the level of education for women constant, the effect on their financial dependence rate of not working full-time diminishes.

Table 35 shows less interaction between the effects of activity status and of household type on individuals' financial dependence rates. Generally speaking, when controlling for an individual's household type, their financial dependence rate increases slightly if they have an activity status other than full-time work (with the exception of women working part-time, in whose case controlling for household type reduces the financial dependence rate). In other words, household type tends to partially mask the effect on financial dependence rates of not working full-time.

There is no interaction between the variable relating to activity status on the one hand and that specifying nationality on the other.

TABLE 35 • IMPACT OF INCLUSION OF OTHER VARIABLES ON THE MARGINAL EFFECT OF ACTIVITY STATUS ON FINANCIAL DEPENDENCE RATES

	Women	Men	Women	Men	Women	Men	Women	Men
Activity status								
Full-time work								
Part-time work	0.172***	0.142***	0.132***	0.127***	0.149***	0.120***	0.164***	0.116***
Unemployed	0.487***	0.378***	0.440***	0.309***	0.555***	0.309***	0.490***	0.302***
Pensioners	0.319***	0.237***	0.371***	0.081***	0.457***	0.096***	0.445***	0.083***
Other non-active	0.751***	0.585***	0.737***	0.569***	0.765***	0.548***	0.760***	0.562***
Age category								
‹ 30	0.099***	0.102***						
30-49								
50-59	0.003	-0.035***						
60-65	0.062*	-0.059***						
› 65	0.173***	-0.058***						
Level of educational attainment								
Lower secondary education			0.175***	0.004				
Upper secondary education			0.149***	0.011				
Higher education								

(continued)

	Women	Men	Women	Men	Women	Men	Women	Men
Household type								
Single person					-0.208***	0.015		
Two adults (< 65) no children								
Two adults (1 is > 65) no children					0.144***	-0.013		
More than two adults but no children					0.086***	0.049***		
Single parent with children					-0.065**	0.000		
Two adults, 1 child					0.009	-0.002		
Two adults, 2 children					-0.039	-0.020		
Two adults, 3+ children					-0.040	-0.001		
3 adults or more with child(ren)					0.128***	0.109***		
Other					-0.107	0.427***		
Nationality								
Belgians								
Non-EU nationals							0.367***	0.134***
EU nationals							0.006	0.030

Source: SILC Belgium 2006, our calculations

3.2 Effect of age

The link between age and poverty is associated with people's career development: young people entering the labour market have no experience and their earnings are lower, but the process of accumulating work experience translates into higher earnings. This effect is reversed at the moment of retirement, when the pensions received are usually lower than people's previous earnings. A representation of financial dependence as a function of age should therefore be U shaped.
The differences between women and men can once again be explained by disparities in their working lives: career breaks and part-time work affect the advancement of women, who are also victims of pronounced vertical and horizontal segregation where they follow full-time continuous careers.

Regardless of age group, financial dependence is greater among women and the disparity increases with age (Figure 14).
For men the profile of the curve is more L-shaped than U-shaped: retirement does not increase the likelihood of financial dependence. The profile is very different for women: their dependence rate increases sharply beyond the age of 50, and reaches a maximum at the age of 60.

FIGURE 14 • FINANCIAL DEPENDENCE RATES AND AGE
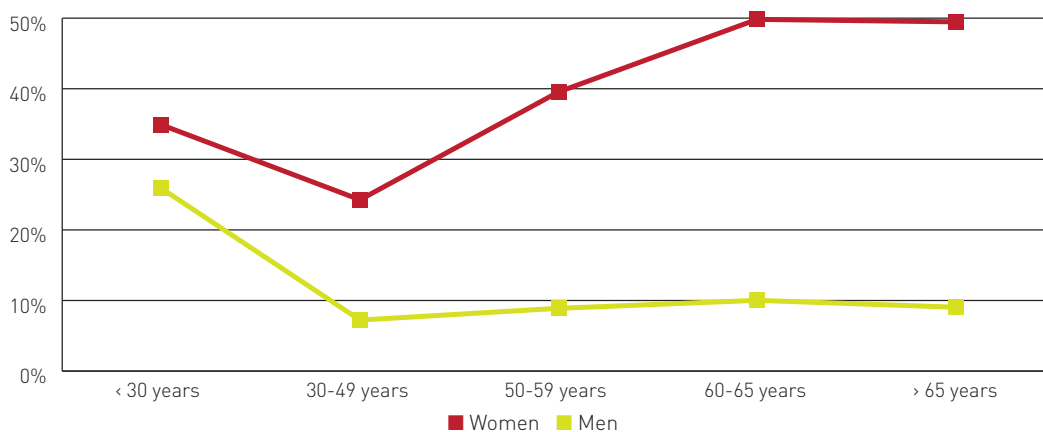
Source: SILC Belgium 2006, our calculations

TABLE 36 • BGIA FINANCIAL DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE ACCORDING TO AGE

Age	BGIA financial dependence rate		European at-risk-of-poverty rate	
	Women	Men	Women	Men
‹ 30 years	35%	26%	12%	11%
30-49 years	24%	7%	11%	8%
50-59 years	40%	9%	12%	10%
60-35 years	50%	10%	15%	15%
› 65 years	49%	9%	24%	20%

Source: SILC Belgium 2006, our calculations

The comparison with the European at-risk-of-poverty rate once again indicates a systematic underestimation of the risks run by women (Table 36).

Probit analysis:

TABLE 37 • MARGINAL EFFECT OF AGE ON FINANCIAL DEPENDENCE RATES (REFERENCE = AGE 30-49)

Age	Marginal effect		
	Women	Men	Total
‹ 30 years	0.118***	0.196***	0.168***
30-49 years			
50-59 years	0.166***	0.020	0.098***
60-35 years	0.269***	0.034*	0.159***
› 65 years	0.262***	0.022	0.182***

Source: SILC Belgium 2006, our calculations

Table 37 and Figure 15 illustrate how financial dependence rates among women and men evolve as a function of their age. Compared with the 30-49 age category, younger men and older women face a heightened risk of financial dependence. The effect is apparently not significant for men aged 50-59 or for the over 65s. Women's financial dependence increases once they reach pensionable age or early retirement age.

FIGURE 15 • MARGINAL EFFECT OF AGE ON FINANCIAL DEPENDENCE RATES (REFERENCE = AGE 30-49)
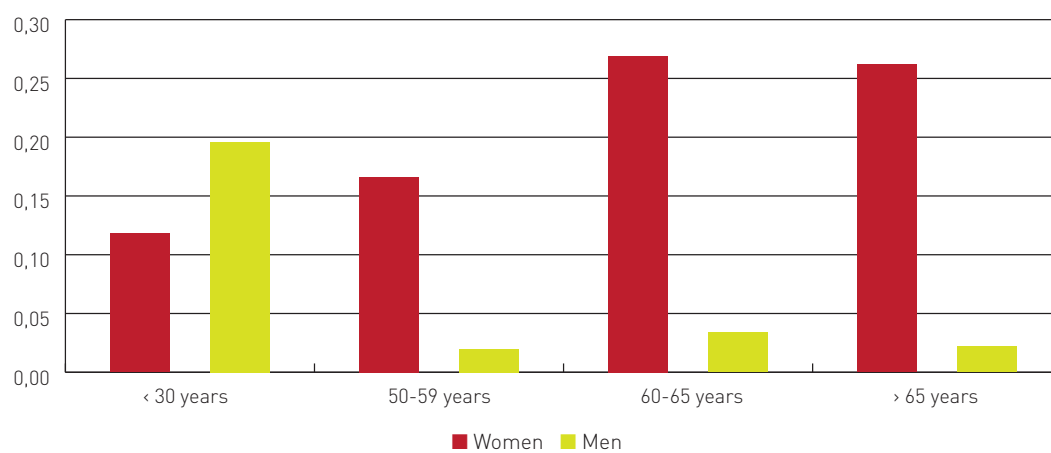
Source: SILC Belgium 2006, our calculations

TABLE 38 • IMPACT OF INCLUSION OF OTHER VARIABLES ON THE MARGINAL EFFECT OF AGE ON FINANCIAL DEPENDENCE RATES

	Women	Men	Women	Men	Women	Men	Women	Men
Age category								
‹ 30 years	0.099***	0.102***	0.162***	0.198***	0.069***	0.139***	0.110***	0.195***
30-49 years								
50-59 years	0.003	-0.035***	0.123***	0.012	0.117***	-0.007	0.171***	0.023*
60-65 years	0.062*	-0.059***	0.204***	0.020	0.194***	0.008	0.277***	0.040**
› 65 years	0.173***	-0.058***	0.160***	0.002	0.231***	0.002	0.275***	0.030**
Activity status								
Full-time work								
Part-time work	0.172***	0.142***						
Unemployed	0.487***	0.378***						
Pensioners	0.319***	0.237***						
Other non-active	0.751***	0.585***						
Level of educational attainment								
Lower secondary education			0.089***	0.039***				
Upper secondary education			0.215***	0.029***				
Higher education								

	Women	Men	Women	Men	Women	Men	Women	Men
Household type								
Single person					-0.242***	0.027*		
Two adults (< 65) no children								
Two adults (1 is > 65) no children					0.148***	-0.009		
More than two adults but no children					0.062**	0.032**		
Single parent with children					-0.330***	-0.080**		
Two adults, 1 child					-0.059**	-0.041**		
Two adults, 2 children					-0.086***	-0.057***		
Two adults, 3+ children					-0.040	-0.037*		
3 adults or more with child(ren)					0.085**	0.074***		
Other					-0.091	0.337**		
Nationality								
Belgians								
Non-EU nationals							0.416***	0.231***
EU nationals							0.090***	0.045**

Source: SILC Belgium 2006, our calculations

Where we take account of activity status, we note significant changes in the marginal effects (Table 38, column 2). For women aged between 50 and 65, the effect diminishes sharply and loses its significance. It is therefore activity status and not age that explains the disparity between the dependence rates of women aged 50-65 and those aged 30-49. In the case of women aged over 65, the age effect remains significant, but if we control for activity status it diminishes from 26.2 percentage points to 17.3.

In the case of men too, significant changes are apparent. For those aged under 30, the effect diminishes from 19.6 to 10.2. For men aged 50 and over, the reduction in the effect is such that the marginal effects become negative and gain in significance. In other words, if we control for activity status, being 50 or over reduces the likelihood of dependence.

The effect of age is not altered by including the level of educational attainment for men (Table 38, column 3). For women, on the other hand, the marginal effect on the likelihood of the under 30s experiencing financial dependence increases from 11.8 to 16.2 percentage points, whereas that of the over 65s diminishes. This means that part of the age effect is due to differences in education.

We also note some changes if we study age and household type in parallel (Table 38, column 4). The likelihood of dependence faced by men aged under 30 diminishes and becomes non-significant. It falls to virtually zero for men aged 50 and over. The likelihood of financial dependence faced by women falls in all age categories, but especially the youngest.

3.3   Effect of education

Through its effect on earnings and careers, education affects the likelihood of people finding them-selves at risk of poverty: the higher their level of educational attainment, the more they earn and the better their career prospects.

Regardless of their level of educational attainment, financial dependence is greater among women than men (Figure 16).

For men, the financial dependence rate varies from 9% to 14%, whereas for women, it is 52% for those who have at most completed lower secondary education, 39% for upper secondary education and 19% for higher education (Table 39).

Profiles are therefore extremely gender-differentiated: men work regardless of their level of educational attainment, whereas for women labour market participation is the prerogative of the most highly educated.

FIGURE 16 • FINANCIAL DEPENDENCE RATE AND EDUCATION
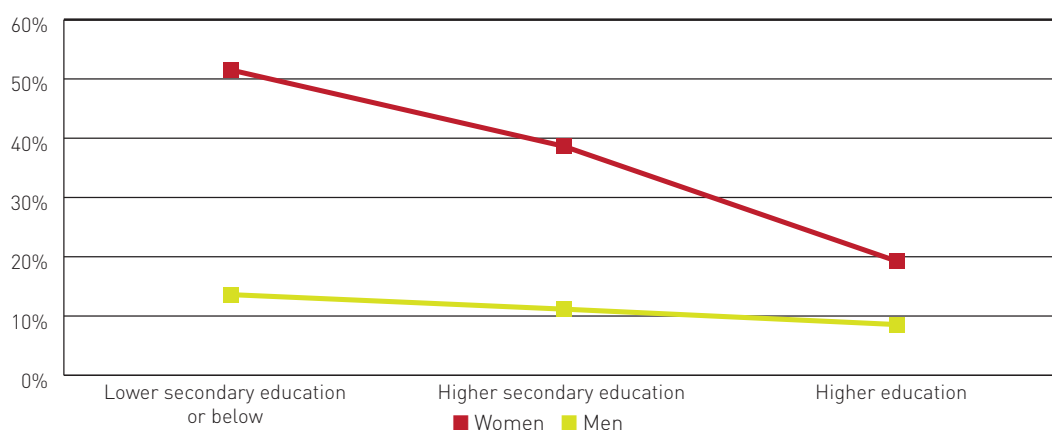
Source: SILC Belgium 2006, our calculations

TABLE 39 • BGIA FINANCIAL DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY LEVEL OF EDUCATIONAL ATTAINMENT

Level of educational attainment	BGIA financial dependence rate		European at-risk-of-poverty rate	
	Women	Men	Women	Men
Lower secondary education or below	52%	14%	24%	20%
Upper secondary education	39%	11%	13%	11%
Higher education	19%	9%	6%	6%

Source: SILC Belgium 2006, our calculations

Probit analysis:

TABLE 40 • MARGINAL EFFECT OF EDUCATION ON FINANCIAL DEPENDENCE (REFERENCE = HIGHER EDUCATION)

Level of educational attainment	Marginal effect		
	Women	Men	Total
Lower secondary education or below	0.339***	0.053***	0.223***
Upper secondary education	0.219***	0.028**	0.124***
Higher education			

Source: SILC Belgium 2006, our calculations

FIGURE 17 • MARGINAL EFFECT OF EDUCATION ON FINANCIAL DEPENDENCE (REFERENCE = HIGHER EDUCATION)
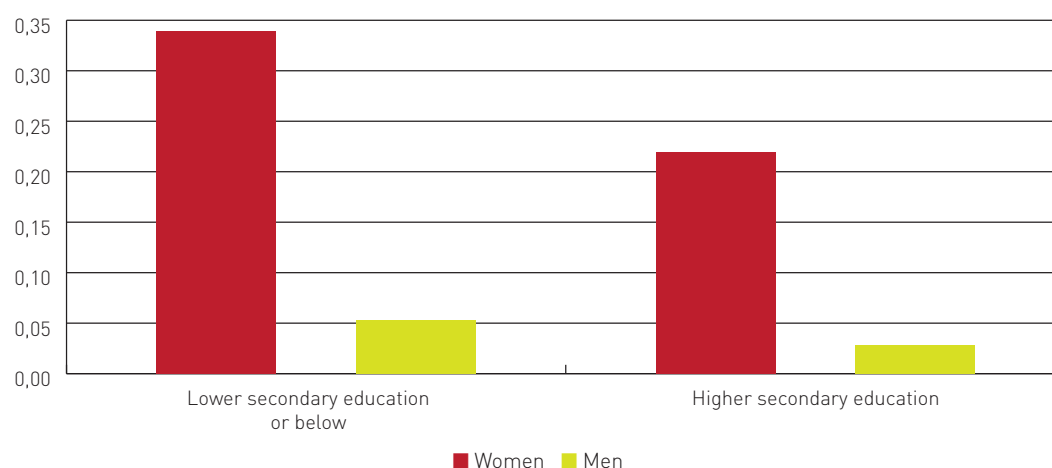
Source: SILC Belgium 2006, our calculations

Having a qualification below higher education level significantly increases the likelihood of financial dependence for both men and women (Table 40 and Figure 17). However, the effect is significantly greater for women than for men.

TABLE 41 • IMPACT OF INCLUSION OF OTHER VARIABLES ON THE MARGINAL EFFECT OF EDUCATION ON FINANCIAL DEPENDENCE RATES

	Women	Men	Women	Men	Women	Men	Women	Men
Level of educational attainment								
Lower secondary education	0.175***	0.000	0.089***	0.039***	0.326***	0.047***	0.348***	0.054***
Upper secondary education	0.149***	0.000	0.215***	0.029***	0.208***	0.024**	0.031***	0.000
Higher education								
Activity status								
Full-time work								
Part-time work	0.132***	0.127***						
Unemployed	0.440***	0.309***						
Pensioners	0.371***	0.081***						
Other non-active	0.737***	0.569***						
Age category								
‹ 30 years			0.162***	0.198***				
30-49 years								
50-59 years			0.123***	0.012				
60-65 years			0.204***	0.020				
› 65 years			0.160***	0.002				
Household type								
Single person					-0.220***	0.016		
Two adults (‹ 65) no children								
Two adults (1 is › 65) no children					0.211***	-0.036**		
More than two adults but no children					0.078***	0.044***		
Single parent with children					-0.337***	-0.088**		
Two adults, 1 child					-0.084***	-0.045***		
Two adults, 2 children					-0.108***	-0.067***		
Two adults, 3+ children					-0.059*	-0.052***		
3 adults or more with child(ren)					0.078**	0.106***		
Other					-0.047	0.282**		
Nationality								
Belgians								
Non-EU nationals							0.415***	0.255***
EU nationals							0.088**	0.036*

Source: SILC Belgium 2006, our calculations

1 Analysis of women's and men's individual incomes and financial dependence in Belgium

The inclusion of other characteristics significantly alters the effect of the level of educational attainment on individuals' financial dependence rates (Table 41). Where we control for activity status, the marginal effect of education on financial dependence rates diminishes considerably for women. Given the same activity status, a woman without a higher education degree will see her likelihood of becoming financially dependent increase by 17.5 percentage points compared with a female graduate. On the other hand, if we disregard activity status, the effect of a person's level of education becomes much more marked. In fact a woman without a higher education degree sees her likelihood of financial dependence increase by 33.9 percentage points compared with a female graduate. There is an equally remarkable effect for men, given that where we control for activity status, having a higher education degree no longer has any effect on financial dependence.

Where we control for age, the effect on the increased likelihood of dependence diminishes significantly for poorly educated women (from 33.9 to 8.9 percentage points). For the other categories, controlling for household type, health or property ownership has little impact on the marginal effect of education on financial dependence.

3.4   Effect of household type

Living as a couple impacts on income. Cooke (2001) writes that living as a couple tends to reduce women's labour market participation, especially if there is a large number of children in the household. Maron and Meulders (2008) have demonstrated the negative effects of motherhood on women's employment. The more children there are in the household, the greater the income inequalities between the parents are likely to be (see also Brandolini and D'Alessio 2001).

The variable used takes the information available in the SILC 'Household type' variable. It is divided into several sub-categories:

• Single person
• Two adults aged under 65, with no dependent children
• Two adults, at least one of whom is aged over 65, with no dependent children
• More than two adults but no children
• Single parent with child(ren)
• Two adults, 1 child
• Two adults, 2 children
• Two adults, 3 or more children
• Three or more adults with child(ren)
• Other

Women have higher financial dependence rates than men in all household types except the 'other' category, which is not representative (Figure 18 and Table 42). The highest dependence rates apply to women living in couples, with or without children, and to women living in households with more than two adults. In the case of men, the likelihood of dependence is greater for individuals belonging to households with more than two adults.

FIGURE 18 • FINANCIAL DEPENDENCE RATES BY GENDER AND HOUSEHOLD TYPE
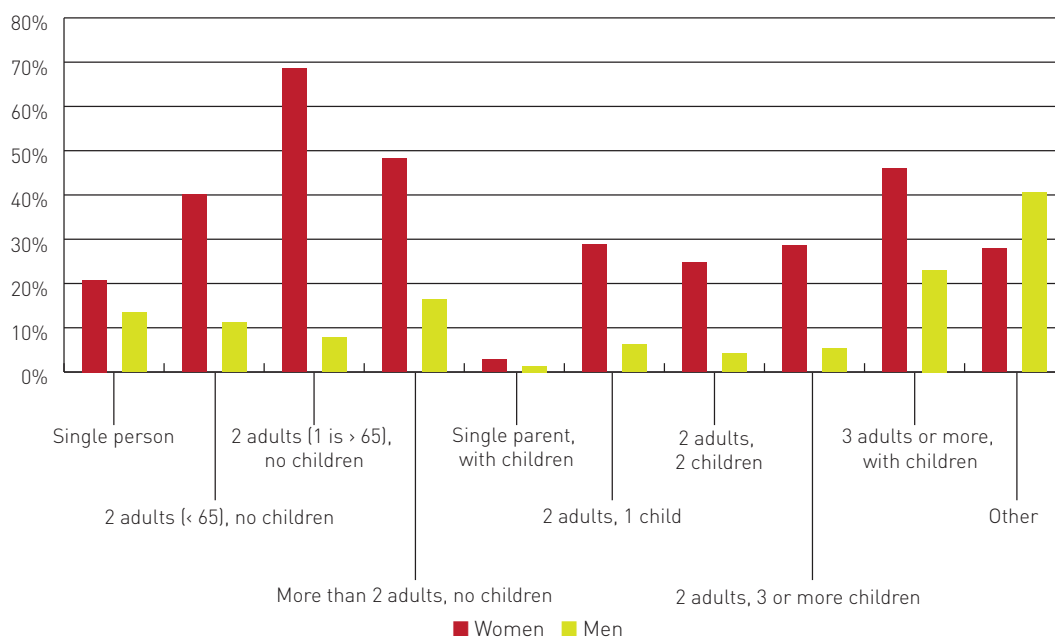
Source: SILC Belgium 2006, our calculations

TABLE 42 • BGIA FINANCIAL DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE BY HOUSEHOLD TYPE

Household type	BGIA financial dependence rate		European at-risk-of-poverty rate	
	Women	Men	Women	Men
Single person	21%	13%	26%	17%
2 adults (< 65) with no children	40%	11%	9%	8%
2 adults (of whom 1 > 65) with no children	69%	8%	20%	21%
More than 2 adults with no children	48%	16%	7%	8%
Lone parent	3%	1%	29%	12%
2 adults, 1 child	29%	6%	8%	7%
2 adults, 2 children	25%	4%	7%	6%
2 adults, 3 or more children	29%	5%	13%	10%
3 adults or more, with child(ren)	46%	23%	8%	10%
Others	28%	40%	32%	29%

Source: SILC Belgium 2006, our calculations

There are substantial differences between dependence rates and at-risk-of-poverty rates. If we assume equal sharing of resources and use the modified OECD equivalence scale, we see that ʿpoor householdʾ types are not the same as if we position ourselves at the level of individuals. The European figures show that persons affected by significant at-risk-of-poverty rates are those who live in single-person households, with and without children, and in households made up of older people, be they

men or women. Conversely, calculating the individual risk of poverty indicates substantial gender differences. Women with high financial dependence rates live in two-person households with no children (mainly households with older people) and in households with three or more adults. Poor men live mainly in atypical households (three or more adults and 'others').

It is also important to note that parents' income is higher where the modified OECD equivalence scale is not used, as we then count additional income (family allowances, birth grants, etc.) without taking account of the costs associated with having children.

Probit analysis:

For women, living alone without children, rather than in a household with two adults and no children, reduces the likelihood of dependence by 18.6 percentage points, whereas for men, the effect is zero and not significant (Table 43 and Figure 19). Living alone with children reduces the likelihood of dependence faced by both women (-34.4 percentage points) and men (-8.9 percentage points).

Living as a couple in an 'elderly household' (a household in which at least one of the two adults is aged over 65) rather than in a 'young household' increases women's likelihood of dependence by 28.1 percentage points and reduces that of men by 3.1 percentage points.

Having a child tends to reduce the likelihood of dependence for both men and women. Having one, two or three children will reduce men's likelihood of dependence by 4.8, 6.9 and 5.5 percentage points respectively, whereas the effect is slightly greater among women: 10.6, 14.4 and 10.7 percentage points.

TABLE 43 • MARGINAL EFFECT OF HOUSEHOLD TYPE ON FINANCIAL DEPENDENCE (REFERENCE = HOUSEHOLDS WITH TWO ADULTS (< 65) AND NO CHILDREN)

Household type	Marginal effect		
	Women	Men	Total
Single person	-0.186***	0.019	-0.079
Two adults (< 65) with no children			
Two adults (of whom 1 > 65) with no children	0.281***	-0.031**	0.114***
More than 2 adults with no children	0.077***	0.045***	0.052***
Lone parent	-0.344***	-0.089**	-0.212***
Two adults, 1 child	-0.106***	-0.048***	-0.076***
Two adults, 2 children	-0.144***	-0.069***	-0.104***
Two adults, 3+ children	-0.107***	-0.055***	-0.081***
3 adults or more with child(ren)	0.055*	0.106***	0.078***
Others	-0.112	0.276**	0.083

Source: SILC Belgium 2006, our calculations

Source: SILC Belgium 2006, our calculations

TABLE 44 • IMPACT OF INCLUSION OF OTHER VARIABLES ON THE MARGINAL EFFECT OF HOUSE-HOLD TYPE ON FINANCIAL DEPENDENCE RATES

	Women	Men	Women	Men	Women	Men	Women	Men
By household type								
Single person	-0.208***	0.020	-0.242***	0.027*	-0.220***	0.016	-0.183***	0.018
Two adults (< 65) no children								
Two adults (1 is > 65) no children	0.144***	-0.010	0.148***	-0.010	0.211***	-0.036**	0.291***	-0.026*
More than two adults but no children	0.086***	0.049***	0.062**	0.032**	0.078***	0.044***	0.085***	0.051***
Single parent with children	-0.065**	0.000	-0.33***	-0.08**	-0.337***	-0.088**	-0.343***	-0.088**
Two adults, 1 child	0.010	0.000	-0.059**	-0.041**	-0.084***	-0.045***	-0.112***	-0.052***
Two adults, 2 children	-0.040	-0.020	-0.086***	-0.057***	-0.108***	-0.067***	-0.145***	-0.067***
Two adults, 3+ children	-0.040	0.000	-0.040	-0.037*	-0.059*	-0.052***	-0.111***	-0.053***
3 adults or more with child(ren)	0.128***	0.109***	0.085**	0.074***	0.078**	0.106***	0.056*	0.108***
Other	-0.110	0.427***	-0.090	0.337**	-0.047	0.282**	-0.114	0.283**

(continued)

	Women	Men	Women	Men	Women	Men	Women	Men
Activity status								
Full-time work								
Part-time work	0.149***	0.120***						
Unemployed	0.555***	0.309***						
Pensioners	0.457***	0.096***						
Other non-active	0.765***	0.548***						
Age category								
‹ 30 years			0.069***	0.139***				
30-49 years			0.000	0.000				
50-59 years			0.117***	-0.007				
60-65 years			0.194***	0.008				
› 65 years			0.231***	0.002				
Level of educational attainment								
Lower secondary education					0.326***	0.047***		
Upper secondary education					0.208***	0.024**		
Higher education								
Nationality								
Belgians								
Non-EU nationals							0.407***	0.266***
EU nationals							0.109***	0.038*

Source: SILC Belgium 2006, our calculations

Controlling for activity status reduces both the marginal effects of household type on financial dependence and their significance (Table 44, column 2). In other words, women's financial dependence is determined by their activity status rather than by the number of dependent children they have. The same reasoning applies to men, but to a lesser extent.

Controlling for age alters only slightly the effect of women's household type on their financial dependence rate (Table 44, column 3). Having three children is no longer significant for women. For men, living in an 'elderly household' rather than a 'young household' no longer has any effect on their financial dependence rate.

The inclusion of education and nationality does not significantly alter the marginal effects linked to household type.

3.5 Effect of nationality

This analysis is based on the PB220A variable, which distinguishes between Belgians, nationals of other EU Member States and nationals of countries outside the EU.

FIGURE 20 • FINANCIAL DEPENDENCE RATES ACCORDING TO NATIONALITY
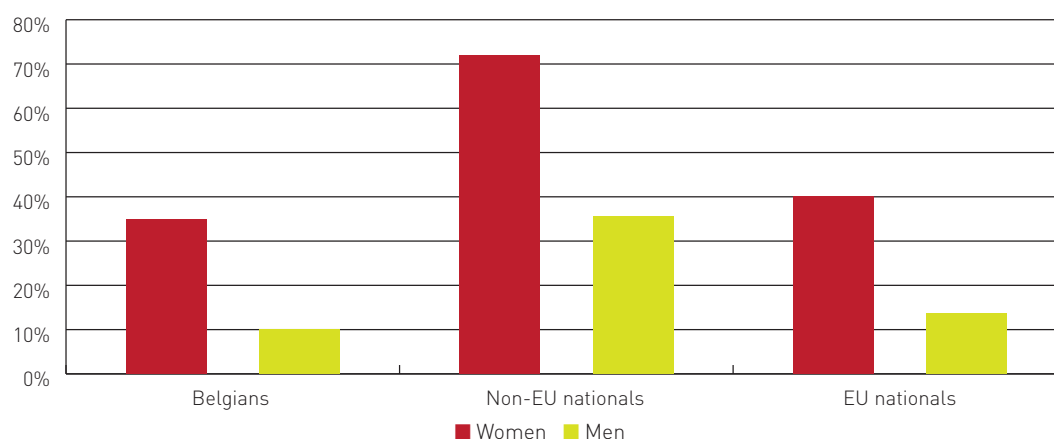
Source: SILC Belgium 2006, our calculations

For both men and women, financial dependence rates are far higher for nationals of non-EU countries (71% vs. 37% for women, 34% vs. 11% for men) (Figure 20). Belgians are less likely to be financially dependent than nationals of other EU Member States, but the disparities are smaller than between EU and non-EU nationals.

According to this characteristic too, women's financial dependence rates exceed men's in all cases. The gender gaps are once again greater than those calculated according to the European method (Table 45).

TABLE 45 • BGIA FINANCIAL DEPENDENCE RATE AND EUROPEAN AT-RISK-OF-POVERTY RATE ACCORDING TO NATIONALITY

Nationality	BGIA financial dependence rate		European at-risk-of-poverty rate	
	Women	Men	Women	Men
Belgians	37%	11%	14%	11%
Non-EU nationals	71%	34%	43%	41%
EU nationals	42%	13%	20%	13%

Source: SILC Belgium 2006, our calculations

Probit analysis:

TABLE 46 • MARGINAL EFFECT OF NATIONALITY ON FINANCIAL DEPENDENCE RATES (REFERENCE = BELGIANS)

Nationality	Marginal effect		
	Women	Men	Total
Belgians			
Non-EU nationals	0.366***	0.253***	0.289***
EU nationals	0.052	0.036*	0.038*

Source: SILC Belgium 2006, our calculations

FIGURE 21 • MARGINAL EFFECT OF NATIONALITY ON FINANCIAL DEPENDENCE RATES (REFERENCE = BELGIANS)
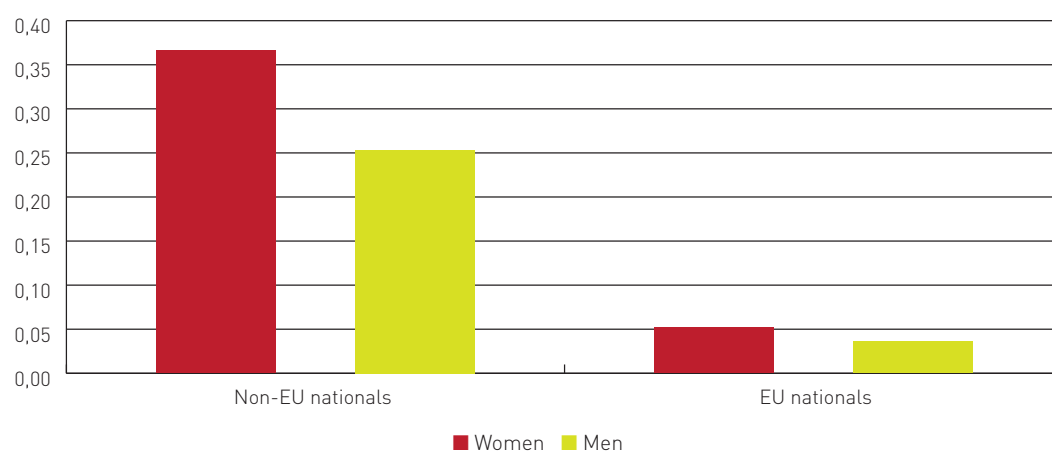
Source: SILC Belgium 2006, our calculations

The effect on the increase in financial dependence is substantial for nationals of non-EU countries, more so for women than men (Table 46 and Figure 21). There is only a modest increase for nationals of other EU Member States.

TABLE 47 • IMPACT OF INCLUSION OF OTHER VARIABLES ON THE MARGINAL EFFECT OF NATIONALITY ON FINANCIAL DEPENDENCE RATES

	Women	Men	Women	Men	Women	Men	Women	Men
Nationality								
Belgians								
Non-EU nationals	0.367***	0.134***	0.416***	0.231***	0.415***	0.255***	0.407***	0.266***
EU nationals	0.010	0.030	0.090***	0.045**	0.088**	0.036*	0.109***	0.038*
Activity status								
Full-time work								
Part-time work	0.164***	0.116***						
Unemployed	0.490***	0.302***						
Pensioners	0.445***	0.083***						
Other non-active	0.760***	0.562***						
Age category								
‹ 30 years			0.069***	0.139***				
30-49 years								
50-59 years			0.117***	-0.010				
60-65 years			0.194***	0.010				
› 65 years			0.231***	0.000				
Level of educational attainment								
Lower secondary education					0.348***	0.054***		
Upper secondary education					0.031***	0.000		
Higher education								
Household type								
Single person							-0.183***	0.018
Two adults (‹ 65) no children								
Two adults (1 is › 65) no children							0.291***	-0.026*
More than two adults but no children							0.085***	0.051***
Single parent with children							-0.343***	-0.088**
Two adults, 1 child							-0.112***	-0.052***
Two adults, 2 children							-0.145***	-0.067***
Two adults, 3+ children							-0.111***	-0.053***
3 adults or more with child(ren)							0.056*	0.108***
Other							-0.114	0.283**

Source: SILC Belgium 2006, our calculations

Controlling for activity status does not alter the disparity between the likelihood of financial dependence faced by Belgian women and women who are nationals of non-EU countries, but it narrows the gap between Belgian men and men who are nationals of non-EU countries (Table 47, column 2). On the other hand, maintaining education as a constant, the effect on the increased likelihood of financial dependence increases, indicating that the negative effect of nationality for women who are nationals of non-EU countries is reduced by their level of educational attainment (Table 47, column 3). The results move in the same direction when we control for age or household type (Table 47, columns 4 and 5).

3.6   Net effect of the various characteristics

TABLE 48 • MARGINAL EFFECT OF GENDER ON FINANCIAL DEPENDENCE RATES (REFERENCE = WOMEN)

Gender	Marginal effect
	Total
Women	
Men	-0.248***
Men (control)	-0.185***

Source: SILC Belgium 2006, our calculations

All other things being equal, i.e. where people have the same activity status, belong to the same age group, have the same level of educational attainment and form part of the same household type, being a man reduces the likelihood of financial dependence by 18.5% (Table 48). On the other hand, if we compare men and women without controlling for the other explanatory variables, being a man reduces the likelihood of financial dependence by 24.8%.

Activity status remains the characteristic with most influence over financial dependence rates (Table 49). It is apparent that full-time work is the best way of avoiding financial dependence.
Part-time working increases the likelihood of dependence by 13.5 percentage points for women and 12.8 for men (all other things being equal). For both women and men, inactivity is associated with the highest financial dependence rates. The effects of unemployment and retirement are much more marked for women than for men with equivalent characteristics, and this is where the effects of non-individualisation of social security entitlements, and of discontinuous careers and part-time work, make themselves felt.

The marginal effects of **age** are removed by controlling for the other characteristics (Table 49). This means that being a pensioner increases a woman's likelihood of financial dependence, regardless of her age. There remains a significant age effect in the case of young people, but it is minimal.

Where all other characteristics are equal, a low level of **educational attainment** results in a significant rise in the risk of financial dependence for women only (Table 49). In other words, women's income is much more sensitive to their educational level, which also influences their activity rate.

As far as the various **household types** are concerned, controlling for the various individual character-istics alters the results significantly (Table 49). Among both men and women, we note a marked fall in the significance of marginal effects. For women, living in a one-person household tends to reduce the financial dependence rate, whereas living in a household of three or more adults tends to increase it. For men, the marginal effects are lower, and household type exerts less of an influence on financial dependence rates.

Finally, analysing the **nationality** of individuals is also an interesting exercise (Table 49). For women, we find that having the nationality of another European Union country does not significantly impact on financial dependence rates in comparison with Belgian women. In the case of men, this has the ef-fect of slightly increasing financial dependence rates. On the other hand, being a national of a country which is not a member of the European Union increases the likelihood of dependence by 11.1 percent-age points for men, and 39.6 percentage points for women. Controlling for the other variables tends to reduce the effect of nationality for men but increases it for women.

TABLE 49 • IMPACT OF THE INCLUSION OF OTHER VARIABLES ON FINANCIAL DEPENDENCE RATES

	Marginal effect controlled for		Marginal effect not controlled for	
	Women	**Men**	**Women**	**Men**
Activity status				
Full-time work				
Part-time work	0.135***	0.128***	0.160***	0.126***
Unemployed	0.530***	0.354***	0.486***	0.311***
Pensioners	0.374***	0.216***	0.437***	0.081***
Other non-active	0.750***	0.552***	0.759***	0.570***
Age category				
‹ 30 years	0.062**	0.073***	0.118***	0.196***
30-49 years				
50-59 years	-0.057**	-0.042***	0.166***	0.020
60-65 years	-0.050	-0.057***	0.269***	0.034*
› 65 years	0.080	-0.054***	0.262***	0.022
Level of educational attainment				
Lower secondary education	0.200***	0.020	0.339***	0.053***
Upper secondary education	0.158***	0.010	0.219***	0.028**
Higher education				
Household type				
Single person	-0.236***	0.000	-0.186***	0.000
Two adults (‹ 65) no children				
Two adults (1 is › 65) no children	0.092**	-0.010	0.281***	-0.031***
More than two adults but no children	0.077**	0.029**	0.077***	0.045***
Single parent with children	-0.320***	-0.064**	-0.344***	-0.089***
Two adults, 1 child	-0.020	-0.020	-0.106***	-0.048***
Two adults, 2 children	-0.050	-0.029**	-0.144***	-0.069***
Two adults, 3+ children	-0.040	-0.010	-0.107***	-0.055***
3 adults or more with child(ren)	0.110***	0.058***	0.055*	0.106***
Other	-0.070	0.479***	0.000	0.276**
Nationality				
Belgians				
Non-EU nationals	0.396***	0.111***	0.366***	0.253***
EU nationals	0.043	0.035*	0.052	0.036*

Source: SILC Belgium 2006, our calculations

Part one of the study, relating to an analysis of individual income disparities between women and men, highlights the marked inequalities characterising income distribution between women and men: on average, women's net individual income is 38% lower than men's in 2006. 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 at the level of basic pay is increased by the various forms of indirect earnings.
- State transfers in no way iron out inequalities, because on average they are 25% lower for women (34% lower for pensions and 31% for unemployment benefit). These inequalities result from the non-individualisation of entitlements, and from women's discontinuous careers and part-time work.

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

- Women make up 83% of the first decile, but just 23% of the tenth decile.
- The effect of age is very different according to gender. While men aged 35 to 65 are to be found mainly in the last deciles, women in the same age group are to be found primarily in the initial deciles. The situation is particularly problematical for the oldest women. Regardless of their activity, women are always to be found in the lower deciles, unlike men, even if they work full-time.
- Finally, the level of educational attainment does not operate in the same way for both sexes. Having only a low or average educational level exposes women more than men to low incomes.

A decomposition of the Gini coefficient reveals that 53% of income inequalities within the total population can be attributed to gender differences in 2006. Three-fifths of these gender inequalities are due to men's annual net incomes being higher than women's. The two inequality indicators stemming from this decomposition, namely relative economic affluence and the ratio between transvariation and gross intergroup inequalities (G^t/G^{gb}) both indicate marked inequality. Relative economic affluence equates to 0.605 in Belgium, showing that there is a relatively wide gap between the income distributions of women and men. The ratio G^t/G^{gb}, which moves in the opposite direction from economic affluence, equates to 0.395. These two indicators show a slight improvement in 2007, at 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 income disparities between women and men. This effect 'explains' 32% of the income gap: the price effect, which is traditionally ascribed either to differences in the returns to identical characteristics or to non-observed characteristics, amounts to 68%. If we take account only of the population aged under 65, the decomposition of the gender gap in average net annual incomes gives a result similar to that for the total population. Differences relating to the observed variables 'explain' 34% of the income disparity (compared with 32% for the total population). If we consider only people in work, the explained part increases to 43%. However, the 'unexplained' part still accounts for more than half of the income gap observed (57%).

In Part two, we propose a definition of gender inequality indicators based on the notion of financial dependence or individual poverty risk: women who are financially dependent or at an individual risk of poverty are those whose individual net income is below 60% of the median individual income. This

notion may be compared with the European at-risk-of-poverty rate, which is defined as the percentage of people belonging to households whose equivalised adult disposable income is below 60% of the equivalised national median income. The main difference is that in this study we do not regard the household as a sharing unit: instead, we consider each individual separately, irrespective of the household he/she belongs to, and we take each person's individual income into account. We do not adopt the hypothesis of equal sharing of all resources among the various household members. The financial dependence rate indicates that 36% of women and 11% of men in Belgium have an individual income below the threshold of 60% of the median individual income.

- Women are three times more likely than men to find themselves financially dependent.
- Women's income in a situation of financial dependence is further removed from the dependence threshold than men's, leading to the conclusion that financially dependent women find themselves in more difficult circumstances than men.
- The intensity of dependence is five times greater among women.
- Without State intervention, the risk of individual poverty would be 46%, but the combined effect of taxes and transfers reduces this rate to 24%. For women the rate falls from 55 to 36%, and for men from 37 to 11%, so the effect is greater for men in both absolute and relative terms, and the redistributive action of the State is more beneficial to men than to women.

The effect of calculating the poverty risk at individual level is two-fold: firstly the percentage of people at risk is greater when the hypothesis of sharing within the household is rejected, and secondly the risk run by women is far greater if the calculation is made for individuals.

- The at-risk-of-poverty rate for women is 36% where the calculation is based on individual incomes, but just 16% when, as in the European calculations, it is made at household level. Indicator 3 stands at 3.16 in the BGIA calculation, but at just 1.23 in the European calculation.

The financial dependence rate or individual at-risk-of-poverty 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 significantly lower for women (-20%). This is a perfect illustration of the effect of the hypotheses chosen:

- Globalising data at household level masks the individual risks of poverty faced by women, which is consistent with the findings of Daly and Rake (2002): they held that the hypothesis of equal income sharing within households minimises the poverty situation of women.

In the second section of this part the probit method is used to estimate the variables that determine financial dependence. The aim is to calculate the net effects of characteristics such as activity status, age, education, household type and nationality, all other things being equal.

Where all other things are equal, i.e. where people have the same activity status, belong to the same age group, have the same level of educational attainment and form part of the same household type, being a man reduces the likelihood of financial dependence by 18.5%. On the other hand, if we compare men and women without controlling for the other explanatory variables, being a man reduces the likelihood of financial dependence by 24.8%.

Activity status remains the most influential characteristic determining financial dependence rates. It is apparent that full-time work is the best way of avoiding financial dependence.

Part-time working increases the likelihood of dependence by 13.5 percentage points for women and 12.8 for men (again, all other things being equal). For both women and men, inactivity is associated with the greatest financial dependence. The effects of unemployment and retirement are much more marked for women than for men with equivalent characteristics, and it is at this level that the effects of non-individualisation of social security entitlements, and of discontinuous careers and part-time work, make themselves felt.

The marginal effects of **age** are removed by controlling for the other characteristics. It is apparent that on average, younger men have a higher financial dependence rate than older men; the same applies to women, though to a lesser extent.

Where all other characteristics are equal, the effect of a low level of **educational attainment** is to produce a significant rise in the risk of financial dependence for women. Women's income is much more sensitive to their educational level, which also influences their activity rate.

Finally, the results of analysing the **nationality** of individuals give 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 39.6 percentage points for women.

This analysis of SILC Belgium 2006 demonstrates the marked gender inequalities that exist in Belgium. The incomes received by women are lower than men's, whatever the nature of these incomes: this applies both to earned income and to State transfers. Only 31% of the gap between women's and men's incomes can be explained by differences in the observed characteristics. Women thus run a far greater individual risk of poverty than men, regardless of their characteristics.

We propose that the following indicators be published and monitored on an annual basis, so as to measure the trend in gender inequalities in Belgium. The calculations performed with a view to testing the stability of the proposed indicators suggest that these indicators are robust, and that there was a slight improvement between 2006 and 2007.

TABLE 50 • TABLE SUMMARISING PROPOSED INDICATORS

Indicators	SILC Belgium 2006	SILC Belgium 2007
Basic indicators: ratios of average incomes for women and men		
Gross income	0.55	0.56
Net income	0.62	0.63
Income from economic activity	0.72	0.71
Employees' earnings	0.72	0.70
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
Earnings from self-employment	0.67	0.68
State transfers	0.75	0.77
Pensions	0.66	0.70
Unemployment	0.68	0.71
Incl.: Unemployment benefit	0.89	0.88
Invalidity benefit	0.83	0.87
Ratio between the percentage of women in the first and last deciles	3.6	3.6
Indicators calculated on the basis of the BGIA financial dependence threshold		
Financial dependence rate or individual at-risk-of-poverty rate		
Women	36%	34%
Men	11%	11%
Total	24%	23%
Ratio between the financial dependence rates of women and men	3.3	3.1
Ratio between the relative median gaps of women and men	1.7	1.6
Ratio between the intensity of the financial dependence of women and men	5.6	5.0
Indicators relating to decomposition of the Gini coefficient		
Relative economic affluence	0.605	0.586
Ratio between transvariation and gross intergroup inequalities	0.393	0.414

Source: SILC Belgium 2006, our calculations

CHAPTER 2

Individual incomes and financial dependence of women and men in nine European countries

In the first chapter we endeavoured to calculate the individual incomes of women and men in Belgium, as well as proposing the calculation of various indicators to measure the income disparities between men and women, and the risk of financial dependence they face.[21] In this chapter we apply the same methodology to nine European countries: Austria, Belgium, Spain, France, Ireland, Luxembourg, Poland, Sweden and the United Kingdom.

The original feature of 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 transfers 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, which is analysed and broken down into its various components, few have covered the gaps between women's and men's gross or net individual incomes. This is partly due to the absence of any reliable statistical data on individual incomes, since 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 strong 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, whatever his or her personal income. 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.
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.'*
Several economists have demonstrated that poverty among women is underestimated if one works on the hypothesis 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.

It is worrying that this key hypothesis – that households fully share their income – is neither discussed nor presented as a strong hypothesis by the authors of studies on poverty. They present their results as universal facts, without indicating to what extent they are sensitive to this initial hypothesis.
The hypothesis of income pooling within households does provide a way of comparing household poverty internationally, for large-scale comparisons uninterested in gender issues. However, when the aim is to determine those individual characteristics that influence poverty, studies based on this

21 Alaoui Amine Z, K. Fredericq Evangelista, D. Meulders, S. O'Dorchai, R. Plasman and F. Rycx (2009) 'Analyse de la répartition des revenus entre les femmes et les hommes et de la dépendance financière en Belgique sur base des données du SILC-Belge 2006', DULBEA Working Paper, Research Report, No.09-09.RR, March.

income pooling hypothesis can produce questionable results. We can assume that a high degree of correlation exists between individuals' personal characteristics and the type of household to which they belong. Findings related to the risk of poverty according to individual characteristics, calculated on the hypothesis that income is pooled and shared, can therefore lead to false interpretations on account of the strong correlation between characteristics and type of household.

The questions we must ask ourselves concern the distribution of resources among 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 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 of resources 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 benefits 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. This method examines the individual financial resources of each person, in order to measure his or her individual risk of poverty, whatever the characteristics of the household in which he or she lives. Thus we can picture the situation that would confront individuals in the event of a household breakdown.
Other attempts to individualise measurements of poverty have focused solely on individuals living alone, or else have considered only individually perceived incomes, ignoring income that is received by the household (Daly and Rake 2002).

This chapter examines the distribution of individual incomes and rates of financial dependence in nine European countries: Austria, Belgium, Spain, France, Ireland, Luxembourg, Poland, Sweden and the United Kingdom.

The first section contains a presentation of the data and methodology used.
The second section reveals the gaps between women's and men's individual incomes and rates of financial dependence, as well as analysing the individual characteristics which may account for these. It compares these rates with the European at-risk-of-poverty rate.
The study continues, in its third section, by estimating a probit-type econometric model, with a view to identifying the most important factors influencing a person's risk of financial dependence. This method enables us to identify the pure marginal effects of individual characteristics.
The fourth section contains a proposal of four indicators.

1.1 Data

The data used for this study are taken from the 2006 EU-SILC[22] (European Statistics on Income and Living Conditions) database. This database covers most of the European Union countries (except for Romania and Bulgaria), as well as some non-EU Member States (currently Norway and Iceland). It is the reference point for comparative statistics on income, poverty and social exclusion, particularly as concerns the European social protection and social inclusion process.[23]

EU-SILC holds information only on individuals living in private households, and excludes those living in communal households or institutions. Some particularly vulnerable groups (such as, for example, the homeless) are not therefore represented. Nevertheless, SILC is the only database containing the information necessary for a European comparison of income and poverty.

Data are provided by the Member States and verified by national statistical institutes according to joint European guidelines, in order to ensure comparability of variables. The sample size varies from country to country but follows strict rules as to the minimum number of observations required.

1.2 The sample used

The total EU-SILC sample for 2006 comprises more than 530,000 individuals, spread over 26 countries.[24] From these individuals we selected those over the age of 24, as well as all individuals between the ages of 18 and 24 who are economically active (working or available on the labour market and actively seeking employment).
To calculate an individual income, it is necessary to calculate the taxes paid by each person. This information was available for only nine countries.
We also had to remove certain individuals from the sample where some important information was lacking (gender, age, education, activity status, type of household etc.).
In the end, the sample analysed consisted of 133,071 individuals, from nine European countries (Table 1): Austria (AT), Belgium (BE), Spain (ES), France (FR), Ireland (IE), Luxembourg (LU), Poland (PL), Sweden (SE) and the United Kingdom (UK).

TABLE 1 • NUMBER OF OBSERVATIONS AND PERCENTAGE OF MEN AND WOMEN IN THE SAMPLE

	AT		BE		ES		FR		IE		LU		PL		SE		UK	
	Obs.	%	Obs.	%	Obs.	%	Obs.	%	Obs.	%	Obs.	%	Obs.	%	Obs.	%	Obs.	%
Women	5,856	53	4,964	52	12,114	52	7,495	52	5,412	52	3,536	50	16,262	54	5,448	51	8,590	54
Men	5,252	47	4,657	48	11,359	48	6,977	48	4,911	48	3,536	50	14,070	46	5,288	49	7,344	46
Total	11,108		9,621		23,473		14,472		10,323		7,072		30,332		10,736		15,934	

Source: EU-SILC 2006, our calculations

22 See http://forum.europa.eu.int/Public/irc/dsis/eusilc/library for further information on EU-SILC.
23 Eurostat, 'Comparative EU Statistics on Income and Living Conditions: Issues and Challenges', Proceedings of the EU-SILC conference (Helsinki, 6-8 November 2006), Eurostat Methodologies and Working Paper (published 2007).
24 For Malta there is no information on incomes.

1.3 Methodology and description of variables

1.3.1 Individual income

For the purposes of the BGIA project, we proposed a method which used the SILC survey as a basis for calculating the individual incomes of all persons above the age of 24, as well as of those between the ages of 18 and 24 who are active on the labour market (working or available for work and actively seeking employment).

Their incomes were calculated using the definition developed by the 'Canberra Expert Group' (2001), with certain modifications concerning State intervention and gross and net amounts. We also followed the recommendations of Atkinson et al. (2007) regarding negative income and imputed rent, as well as those of Van Der Laan (2006).

Assumptions[25] were made concerning the distribution among household members of certain types of non-individualised income such as:

- income from movable and immovable property
- income from financial investments
- inter-household transfers
- allowances relating to the family and children
- taxes

1.3.2 Financial dependence

The rate of financial dependence is the percentage of persons whose individual income is less than 60% of the national median income. It represents the percentage of people who are unable to cover a minimum amount of expenditure out of their own personal income, and who therefore depend on others for their survival.

This rate is comparable with the European at-risk-of-poverty rate, except that the European rate is calculated on the basis of the household, assuming full sharing of resources between all of its members.

1.3.3 Variables studied

This study also seeks to identify characteristics common to people in financial dependence. The following variables are studied:

- **Gender**: the gender variable is a dummy variable, worth 1 if the individual is a woman and 0 if he is a man.

- **Age**: age was broken down into 4 groups: < 30, 30-49, 50-59, and > 60.

- **Activity status**: this variable was divided into 5 categories:
    - full-time worker
    - part-time worker

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25 See technical note annexed to this report.

- unemployed
- pensioner
- non-working

This decomposition is based on an EU-SILC variable verified and used by Eurostat for statistics concerning an individual's professional situation. Data from the EU-SILC calendar were used to control for working time.

- **Education**: the education variable was split into 3 groups:
  - those whose highest qualification is at lower secondary level or below, i.e. having completed pre-primary, primary and/or lower secondary education
  - those who have successfully completed upper secondary education
  - those who have undertaken university or non-university higher education studies.

This classification was taken from the 'International Standard Classification of Education' (ISCED 1997) used in EU-SILC.

- **Household type:** this variable is based on the 'household type' variable used in EU-SILC. There are 10 categories:
  - persons living alone
  - households of 2 adults below the age of 65, without children
  - households of 2 adults, at least one of whom is older than 65, with no dependent children
  - households of more than 2 adults with no dependent children
  - single parents (with at least one dependent child)
  - households of 2 adults with one dependent child
  - households of 2 adults with 2 dependent children
  - households of 2 adults with 3 or more dependent children
  - households of more than 2 adults with a dependent child or children.
  - other types of household

- **Nationality:** this variable is based on 'PB220A – Citizenship1' in EU-SILC, which differentiates between 3 groups: 'nationals', 'citizens from another EU country' and 'citizens from outside the EU'.

2. DISPARITIES BETWEEN WOMEN'S AND MEN'S INDIVIDUAL INCOMES AND FINANCIAL DEPENDENCE

2.1 Disparities between the individual incomes of women and men

In all nine countries studied, and for all major income categories, women's individual incomes are always lower than those of men.

TABLE 2 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUAL INCOMES

Ratio between averages for women and men	AT	BE	ES	FR	IE	LU	PL	SE	UK
Net income	0.61	0.62	0.63	0.70	0.59	0.55	0.75	0.80	0.61
Gap	-39	-38	-37	-30	-41	-45	-35	-20	-39
Income from economic activity	0.63	0.71	0.71	0.72	0.65	0.61	0.84	0.71	0.60
Gap	-37	-29	-29	-28	-35	-39	-16	-29	-40
Individualised State transfers	0.74	0.75	0.65	0.71	0.68	0.59	0.83	0.83	0.64
Gap	-26	-25	-35	-29	-32	-41	-17	-17	-36

Source: EU-SILC 2006, our calculations

FIGURE 1 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUALISED INCOMES
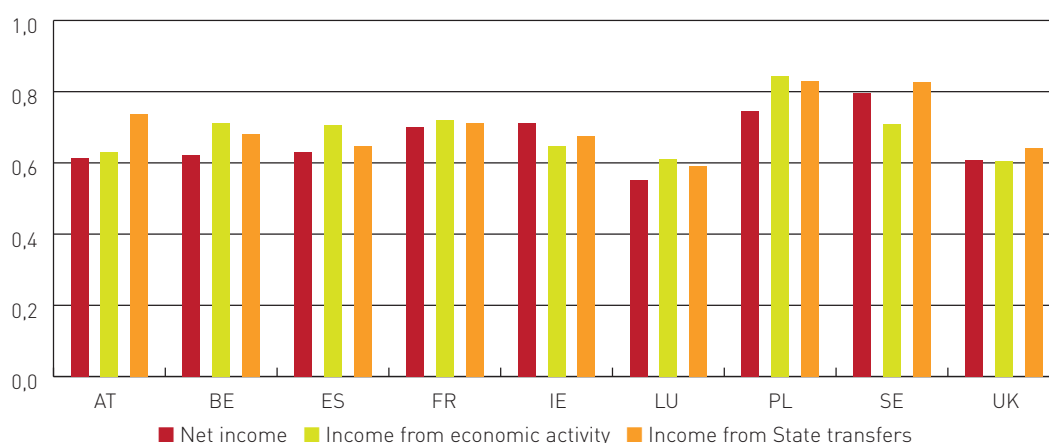
Source: EU-SILC 2006, our calculations

Table 2 and Figure 1 show the ratios between women's and men's average incomes, per recipient and per type of income. The detailed results (number of observations and average amounts) are annexed to this report (see Annex 1, p. 323).

In all nine countries studied, women's net individual incomes are below those of men. The gap varies between 45% in Luxembourg and 20% in Sweden.

Sweden (20%), Poland (25%) and France (30%) have the narrowest gaps, while Luxembourg (45%) and Ireland (41%) are at the opposite end of the scale. Since France, and particularly Sweden, have some of the highest gender pay gaps in Europe, the lesser inequality of income in these countries can be explained by their State transfer systems. The same is true for Poland. Indeed, in his international empirical comparison of incomes, Lydall (1968) demonstrated that Poland and Sweden belong to a group of Western countries characterised by a low level of inequality. Moreover, figures published recently by Eurostat (Wolff 2009) show steep reductions in the at-risk-of-poverty rate in countries such as Sweden and France, to the tune of 62% and 50% respectively, as a result of State transfers. In Poland the gender pay gap is relatively low, and State transfers reduce the at-risk-of-poverty rate by around 37%. Inequalities of income from economic activity are slightly less pronounced in all countries, with the exception of the United Kingdom and Sweden. Women's earnings are, on average, lower than those of men by 40% in the United Kingdom, 39% in Luxembourg, 37% in Austria and 35% in Ireland. The gap is narrowest in Poland (16%), and stands at 29% in the other countries studied.

As for State transfers, severe inequalities still exist between women and men. Women who receive State benefits receive less than men in all countries. The gap is most significant in Luxembourg (40%), the United Kingdom (39%) and Spain (35%). Conversely, the gap is smallest in Sweden and Poland (17%).

Generally speaking, the disparities are smallest (10% to 25%) for the youngest age-groups. They then widen and are greatest between the ages of 50 and 60 (Table 3). Poland and Sweden show quite different trends, with income gaps remaining more constant with age. This confirms the findings of Wolff (2009), who even found a reduction in the at-risk-of-poverty rate for the over 65s in Poland.

The way in which levels of educational attainment affect income disparities differs from country to country. In five countries (Austria, Belgium, Spain, Ireland and Poland) the gender gap narrows as the level of education increases. In two countries (Sweden and the United Kingdom) it remains the same. In France the gap is smallest for people whose highest qualifications were gained at secondary school, whereas in Luxembourg the gap is greatest for this group. These results doubtless reflect differences between the educations systems of the various countries, as well as variations in their labour markets.

TABLE 3 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INCOMES, BY INDIVIDUAL CHARACTERISTICS

Ratio between women's and men's average incomes	AT	BE	ES	FR	IE	LU	PL	SE	UK
Net incomes	0.61	0.62	0.63	0.70	0.59	0.55	0.75	0.80	0.61
Age group									
‹ 30 years	0.75	0.82	0.79	0.88	0.91	0.90	0.75	0.83	0.79
30-49 years	0.60	0.64	0.55	0.67	0.56	0.53	0.71	0.82	0.60
50-59 years	0.58	0.57	0.40	0.70	0.47	0.44	0.79	0.77	0.56
60-65 years	0.56	0.46	0.36	0.64	0.40	0.51	0.76	0.78	0.55
› 65 years	0.62	0.58	0.49	0.70	0.58	0.54	0.73	0.73	0.63
Level of education									
Lower secondary or below	0.62	0.56	0.40	0.67	0.48	0.56	0.84	0.78	0.61
Upper secondary education	0.64	0.61	0.54	0.73	0.58	0.50	0.67	0.79	0.61
Higher education	0.66	0.65	0.69	0.69	0.62	0.66	0.71	0.78	0.63

Source: EU-SILC 2006, our calculations

2.2   Financial dependence and the at-risk-of-poverty rate

The European Union defines the at-risk-of-poverty rate as the percentage of persons belonging to households whose disposable equivalent income is less than 60% of the median equivalent income in their country of residence. The rate of financial dependence represents the proportion of persons with an individual income lower than 60% of the median individual income in their country of residence. The difference between these two indicators is due to the fact that the European figures assume full sharing of resources within households, whereas the BGIA project rejects this hypothesis.

FIGURE 2 • RATE OF RISK OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN, AND THE GAP BETWEEN THESE RATES
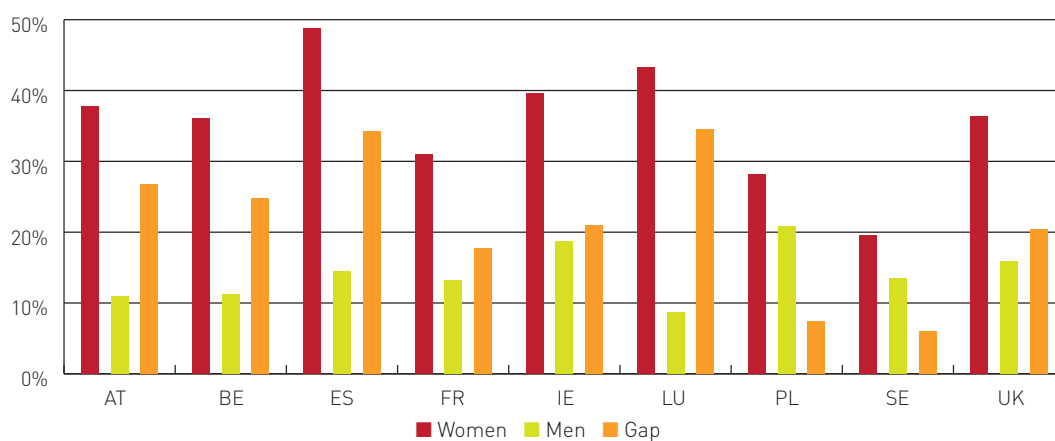
Source: EU-SILC 2006, our calculations

In all nine countries studied, the rate of risk of financial dependence is higher for women than for men (Figure 2). The difference is particularly striking in Luxembourg and Spain (34 percentage points), whereas it is lower in Poland and Sweden (7 percentage points). In absolute terms, the rate of financial dependence among men ranges from 9% in Luxembourg to 21% in Poland, whereas among women it varies between 20% in Sweden and 49% in Spain.

Women

Men

■ Rate of financial dependence ■ At-risk-of-poverty rate ■ Gap
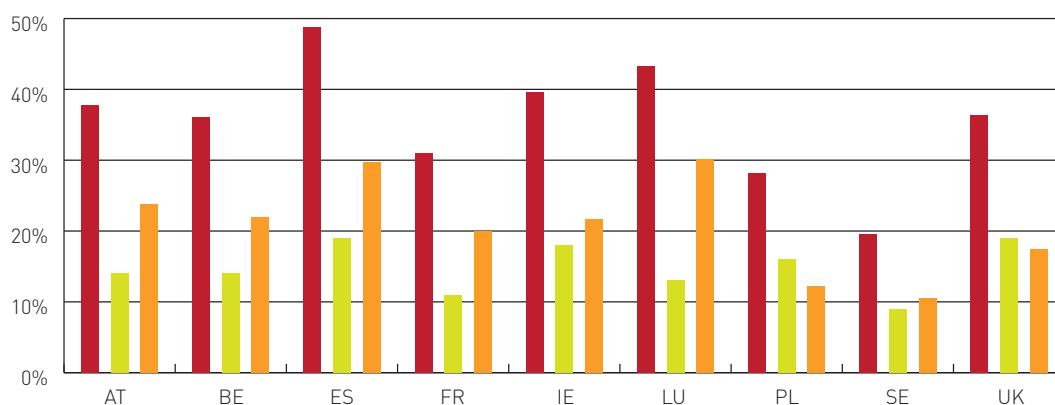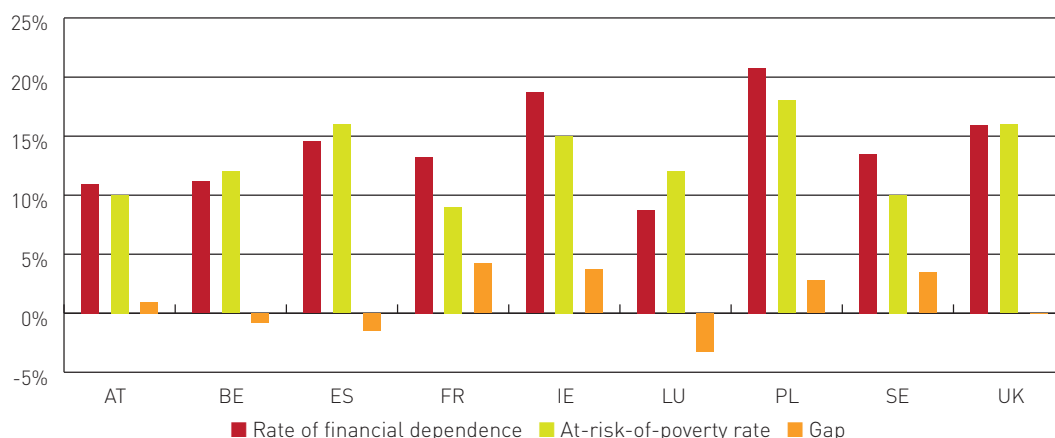
Source: SILC Belgium 2006, our calculations

Figure 3 presents the rates of financial dependence and the European at-risk-of poverty rates, for women and for men. It allows a comparison to be made between the rate of financial dependence, calculated assuming that individual resources are not shared within the household, and the at-risk-of-poverty rate, which is based on an equivalent income for all household members.

For women, the differences are extremely pronounced. The rate of financial dependence is far higher than the at-risk-of poverty rate. For men, however, the rate of financial dependence is relatively close to the at-risk-of poverty rate.

In all of the countries studied, apart from Poland and the United Kingdom, the rate of financial dependence among women is at least twice as high as their at-risk-of-poverty rate. This indicates that many women would find themselves in poverty if they no longer had access to part of the income of another member of the household. These findings confirm 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, annex p.3).

2.3   Financial dependence and individual characteristics

Annex 2 (p. 328) shows rates of financial dependence as a function of various individual characteristics.

Figure 4 focuses on rates of financial dependence for women and for men as a function of their activity status. In all the countries studied, full-time work is linked to the lowest rates of financial dependence, for both men and women. Nevertheless, even among those in full-time employment, there are major differences between men and women: in all these countries, a gender pay gap still exists, even within the restricted category of full-time workers. Part-time work does not offer the same protection against financial dependence. Thus the financial dependence of women working part-time ranges from 15% in Sweden and Belgium to as high as 44% in Spain. For men, it varies between 12% in Belgium and 37% in Poland. These gender differences can be explained by the very different nature of the part-time work carried out by women and men. Whereas men usually resort to working part-time at the end of their career, or combine it with education and training, women caring for their family are often obliged to work part-time. The differences between countries stem from variations in the characteristics of part-time opportunities. In some countries, part-time work involves long hours, whereas in others working hours are short and atypical; in some, little protection is available to part-time workers, more in others; the work may be highly concentrated in certain sectors, or more evenly spread across the economy, etc. In most countries, retired people form a still more vulnerable group. The inadequacy of women's pensions, moreover, is highlighted by the fact that their rate of financial dependence is considerably higher than that of retired men (see also Petrovic 2008). Finally, the groups with the highest rates of financial dependence are the unemployed and non-working people (other than those in retirement). For non-working people, rates of financial dependence for women are as high as 88% in Spain and 76% in Austria (see also 'the poverty site', http://www.poverty.org.uk/).

FIGURE 4 • RATES OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN BY ACTIVITY STATUS
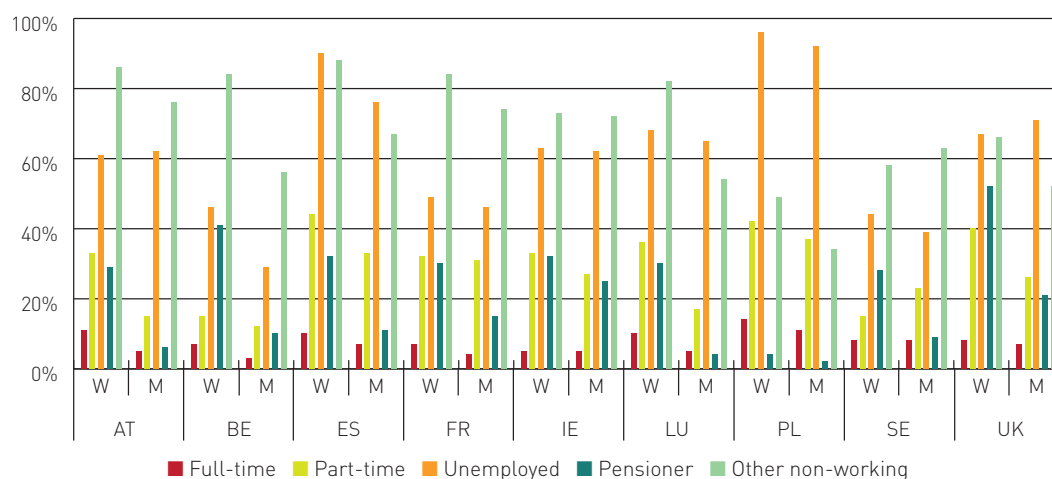
Source: SILC Belgium 2006, our calculations

An analysis of financial dependence rates by age bracket (Figure 5) reveals considerable differences between men and women. Men are more vulnerable when below the age of 30; their rate of financial dependence then drops sharply and remains relatively stable thereafter. The situation for women is very different. The rate of financial dependence for young women is close to that for young men, but it increases as women grow older (with the exception of Poland).

FIGURE 5 • RATES OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN BY AGE BRACKET
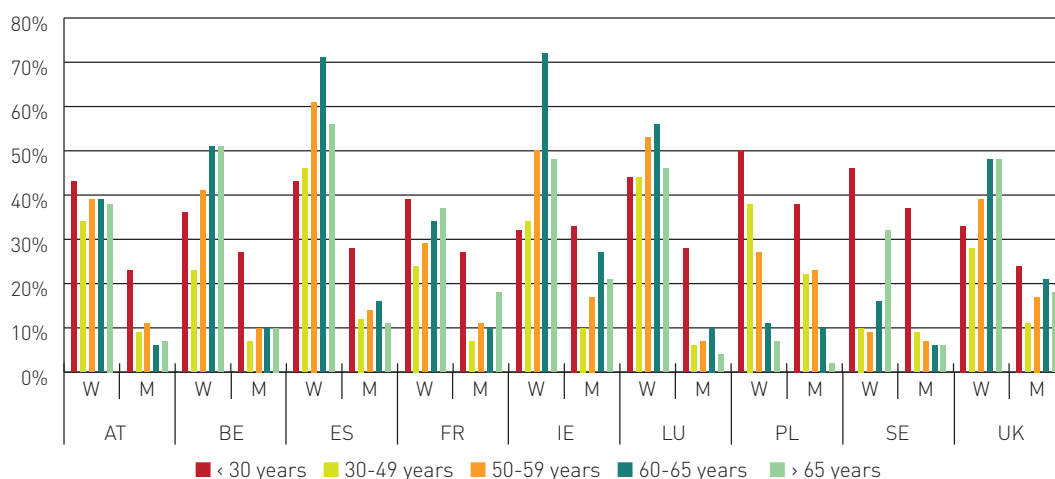
Source: SILC Belgium 2006, our calculations

Financial dependence is also strongly influenced by the type of household to which a person belongs (Figure 6). If the household includes children, financial dependence tends to be lower for both men and women. This can be explained in a number of ways. Firstly, the methodology used. Income is in fact measured in such a way as to include family allowances and other benefits paid to parents, but no account is taken of the additional costs involved in bringing up children. Secondly, as underlined by research on fertility, decisions taken by women in relation to motherhood and work tend to follow a certain pattern; women join the labour market in order to attain a financial situation enabling them to have children (Gustafsson et al. 2002, 2003). This pattern derives from women's aspirations to ensure a financial safety-net for themselves as well as to provide the best conditions for their children.

An individual's cohabiting status influences their rate of financial dependence even more than the presence or absence of children. Financial dependence is systematically greater for couples than for single people. Such an observation contradicts traditional wisdom, whereby single parents are the group most prone to poverty. It must, however, be remembered that research on poverty is based on the conventional hypothesis of income being shared within the household. If this hypothesis is rejected, as is the case in this study, it becomes clear that many individuals living in a couple, mostly women, have higher rates of financial dependence than single people.

FIGURE 6 • RATES OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN BY HOUSEHOLD TYPE

Women

Men

■ Single, no children ■ Single with children ■ Couple, no children ■ Couple with child(ren) ■ Other
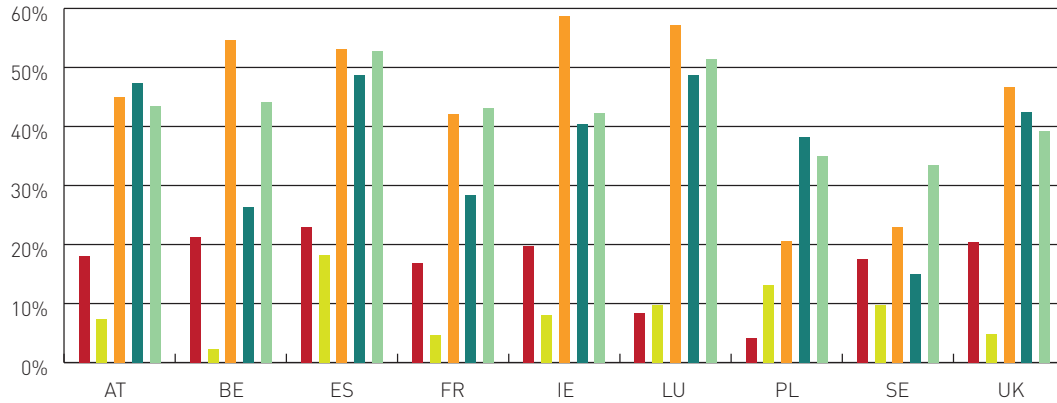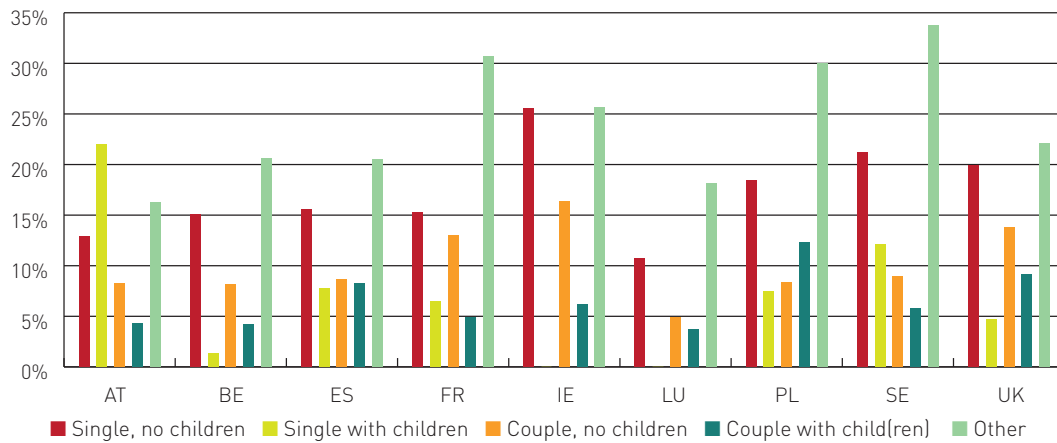
Source: SILC Belgium 2006, our calculations

Schooling is also a decisive variable to reduce financial dependence (figure 7). It can be concluded that financial dependence decreases as education levels rise.

FIGURE 7 • RATES OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN BY LEVEL OF EDUCATION

■ Lower secondary education ■ Upper secondary education ■ Higher education
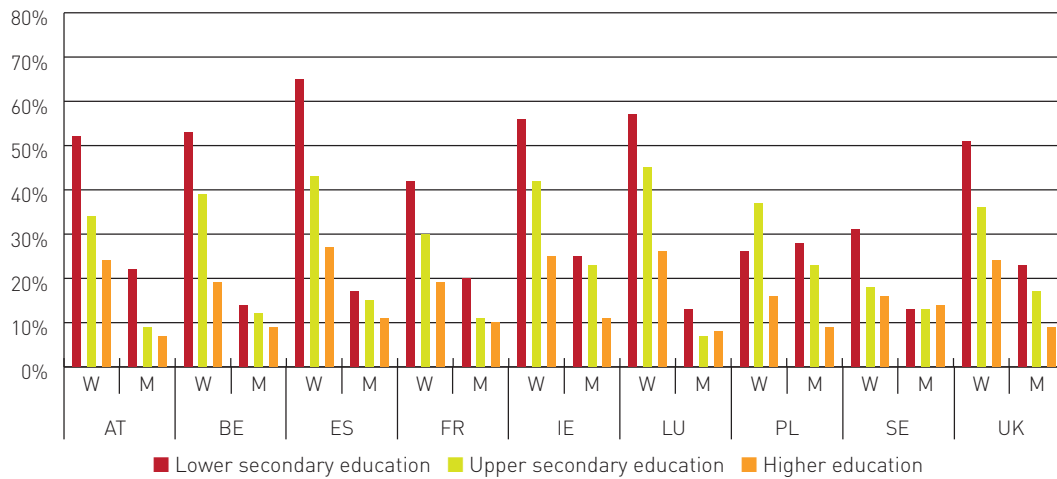
Source: SILC Belgium 2006, our calculations

Finally, nationality seems also to be an important determinant of financial dependence (Figure 8). Nationals tend to have lower rates of financial dependence than non-nationals. Non-European Union citizens, moreover, have higher rates of financial dependence than individuals coming from a European Union country.

FIGURE 8 • RATES OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN BY NATIONALITY

■ National ■ Non-EU ■ EU
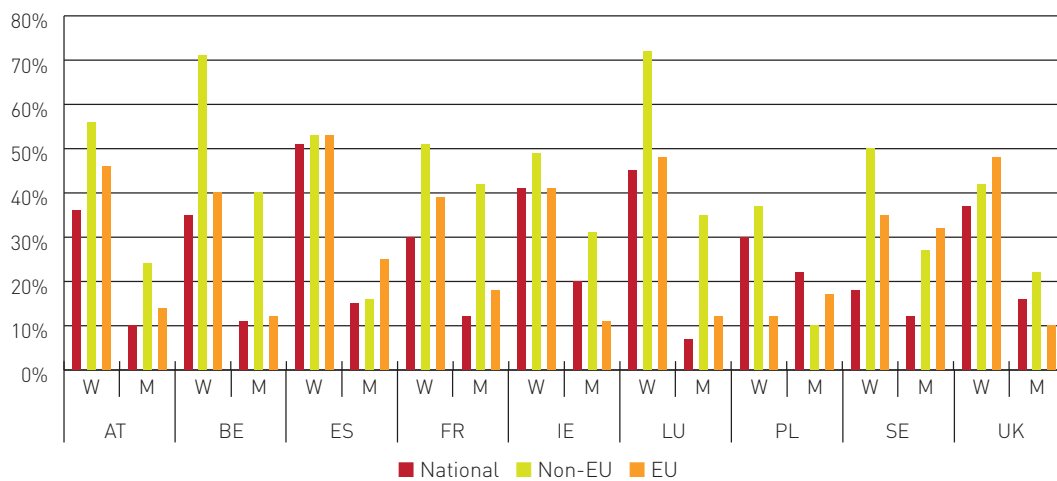
Source: SILC Belgium 2006, our calculations

2.4　Decomposition of the Gini coefficient

Decomposition of the Gini coefficient was addressed in Chapter I. The same methodology is applied here to the various European countries studied. Table 4 shows the initial data used to calculate the Gini coefficient for the nine European countries. Women represent about 51% of the overall population, except in Luxembourg where there is the opposite ratio of men to women. In Luxembourg, Spain, Ireland, Belgium and Austria, women's share of total net income is less than 40%. This figure is slightly higher in the United Kingdom, France, Sweden and Poland.

The Gini index is lowest in Sweden (0.265), followed by Belgium and Austria (0.360 and 0.363 respectively). It is higher in Spain (0.467), Ireland (0.453) and Luxembourg (0.433). When analysing intra-group coefficients, two groups of countries can be identified. The first of these is made up of Spain, Luxembourg, Austria and Belgium, in which the intra-group coefficient for women is far higher than that for men. The other consists of the United Kingdom, Ireland, Poland and France, where the two intra-group coefficients are similar. In Sweden alone there is a greater concentration of income among men than among women (0.264 compared with 0.243).

The 'relative economic distance', which provides an estimate of the distance between the two distributions of income, lies between 0 and 1. It tends towards 1 where the two distributions diverge and is equal to 0 where the two distributions are identical.[26]

According to the data in Table 4, the relative economic distance (D) is high in Austria, Luxembourg and Spain. It is below 0.5 in Sweden and Poland.

26 Dagum (1980), pp.1791-1792.

TABLE 4 • CALCULATION OF THE GINI COEFFICIENT

Country		Sample size	Average income	Proportion of the total population	Share of total net income	Gini coefficient		Relative and directional economic distance (D)
						Intra-group	Inter-group	
BE	Women	4,596	13,474.54	0.513	0.397	0.393	0.380	0.605
	Men	4,841	21,535.15	0.487	0.603	0.303		
	Total	9,437	17,400.22	1.000	1.000	0.360		
AT	Women	5,835	13,090.18	0.527	0.394	0.397	0.392	0.667
	Men	5,247	22,359.55	0.473	0.606	0.288		
	Total	11,082	17,478.95	1.000	1.000	0.363		
ES	Women	11,884	7,422.076	0.513	0.351	0.559	0.505	0.634
	Men	11,286	14,430.38	0.487	0.649	0.352		
	Total	23,170	10,835.79	1.000	1.000	0.467		
FR	Women	7,442	16,239.71	0.517	0.418	0.385	0.390	0.503
	Men	6,965	24,157.48	0.483	0.582	0.344		
	Total	14,407	20,067.52	1.000	1.000	0.376		
IE	Women	5,361	15,176.14	0.522	0.376	0.455	0.476	0.606
	Men	4,901	27,497.71	0.478	0.624	0.412		
	Total	10,262	21,060.76	1.000	1.000	0.453		
LU	Women	3,478	21,290.60	0.497	0.348	0.473	0.466	0.639
	Men	3,526	39,350.63	0.503	0.652	0.362		
	Total	7,004	30,382.5	1.000	1.000	0.433		
PL	Women	15,479	2,769.01	0.533	0.453	0.420	0.432	0.367
	Men	13,553	3,813.63	0.467	0.547	0.411		
	Total	29,032	3,256.67	1.000	1.000	0.424		
SE	Women	5,423	16,634.91	0.508	0.443	0.243	0.275	0.470
	Men	5,249	21,576.96	0.492	0.557	0.264		
	Total	10,672	19,065.65	1.000	1.000	0.265		
UK	Women	8,278	15,935.81	0.535	0.409	0.397	0.427	0.581
	Men	7,200	26,438.82	0.465	0.591	0.376		
	Total	15,478	20,821.56	1.000	1.000	0.406		

Source: EU-SILC 2006, our calculations

Table 5 shows the components of the Gini coefficient. Countries are classified in increasing order of relative economic distance (D).

We find that the share of total inequalities (G) which can be classed as gender inequalities (the gross inter-group inequalities: G^{gb}) is relatively constant from one country to the next. It varies between 51 and 54%.

There are interesting differences between countries as to the decomposition of G^{gb} into net inter-group inequalities (G^{nb}) and transvariation (G^t). In Poland and Sweden, transvariation is higher than the net inter-group inequalities, and the relative economic distance is at its lowest. The G^t/G^{gb} ratio provides another indication of income inequality, since it is located between 0 and 1 and varies inversely with the relative economic distance.

In Table 5, the two indicators (relative economic distance (D) and the ratio of transvariation to gross inter-group inequalities (G^t/G^{gb}) can be seen to evolve in the same direction as the ratio between women's and men's rates of financial dependence.

Poland and Sweden, therefore, have the lowest ratios of dependence rates (1.4), relatively low economic distances (0.367 and 0.470), and the highest G^t/G^{gb} ratios (0.633 and 0.530). On the other hand, Austria, Luxembourg and Spain have high ratios of women's to men's dependence rates, economic distances greater than 0.5 and, in addition, low G^t/G^{gb} ratios (around 0.3).

TABLE 5 • GINI COEFFICIENT AND RATES OF DEPENDENCE

Country	Relative economic distance	Intra-group inequalities (G^w)	Gross inter-group inequalities (G^{gb})		Gini (G)	G^{gb}/G	G^t/G^{gb}	Rates of dependence		Ratio of W/M rates of dependence
			Net inter-group inequalities (G^{nb})	Intensity of transvariation (G^t)				W	M	
PL	0.367	0.207	0.080	0.138	0.424	51.42%	0.633	28	21	1.4
		48.82%	18.87%	32.55%	100.00%					
SE	0.470	0.127	0.065	0.073	0.265	52.08%	0.530	20	13	1.4
		47.92%	24.53%	27.55%	100.00%					
FR	0.503	0.180	0.099	0.097	0.376	52.13%	0.497	31	13	2.3
		47.87%	26.33%	25.80%	100.00%					
UK	0.581	0.190	0.125	0.091	0.406	53.20%	0.419	36	16	2.3
		46.80%	30.79%	22.41%	100.00%					
BE	0.605	0.169	0.116	0.075	0.360	52.86%	0.393	36	11	3.4
		47.14%	31.43%	21.43%	100.00%					
IE	0.606	0.212	0.146	0.095	0.453	53.20%	0.394	40	19	2.1
		46.80%	32.23%	20.97%	100.00%					
ES	0.634	0.212	0.162	0.093	0.467	54.60%	0.366	49	15	3.4
		45.40%	34.69%	19.91%	100.00%					
LU	0.639	0.201	0.149	0.084	0.433	53.81%	0.361	43	9	4.9
		46.42%	34.41%	19.40%	100.00%					
AT	0.667	0.165	0.132	0.066	0.363	54.55%	0.333	38	11	3.2
		45.45%	36.36%	18.18%	100.00%					

Source: EU-SILC 2006, our calculations

3. PROBIT ANALYSIS

In this chapter we make an estimate of a probit-type econometric model, in order to identify the main factors increasing the likelihood of financial dependence. Using this method, we can identify the pure marginal effects of individual characteristics.

The dependent variable is a binary variable, which is equivalent to 1 where an individual's income is below 60% of the median individual income, or 0 otherwise.

The probit model for analysing poverty, using a binary dependent variable, occurs relatively frequently in the literature: see for example Nillson (2005) or Szulc (2006). The independent variables included in the model are also commonly used to analyse poverty and social exclusion (Jenkins and Rigg 2001, Piachaud 2002, Bardone and Guio 2005).

The independent variables were created as 'dummy' variables in order to analyse their marginal effects on financial dependence. The characteristics used as reference points for analysing the results are those which occurred most frequently in the sample. The reference profile used, therefore, is that of an individual between the ages of 30 and 49, living in a household of two adults younger than 65 with no children, having an upper secondary school qualification, working full-time and a citizen of the country in question.

The econometric model used shows the marginal effect of each independent variable on the likelihood of being at risk of financial dependence, where all the other variables remain constant. Such a method allows us to identify the pure effects. The marginal effects should be understood as the increase (or reduction if the effect is negative) in the likelihood of financial dependence when just one characteristic changes. Tables 6 and 7, below, illustrate these marginal effects of the individual variables on the likelihood of dependence, as compared with the reference profile.

Table 6 shows that, in all the countries studied, the fact of being a man considerably lessens one's risk of financial dependence. The gender effect is most significant in Luxembourg and Spain, reducing financial dependence by 35% and 34% respectively. The effect is weakest in Sweden (-6%) and Poland (-7%). We have already highlighted the effect of Sweden's equal opportunities policies and of Poland's communist past. When all other individual characteristics are kept constant, the fact of being a man rather than a woman has less of an impact on the risk of financial dependence, but the marginal effect is always negative. In this case, the reduction in rates of financial dependence varies between 4% in Sweden and 19% in Belgium.

Tables 7a and 7b present the marginal effects of variations in other individual characteristics compared with the reference profile. These marginal effects give a measurement of any change in the likelihood of financial dependence, where the other individual characteristics remain constant.

Active participation in the labour market is still the best way of avoiding financial dependence. In all the countries studied, for both men and women, having an activity status other than that of full-time worker increases the risk of financial dependence (all estimated coefficients are positive). For women, working part-time rather than full-time increases financial dependence by between 9% in Sweden and 50% in Ireland. The increase in the risk of financial dependence for men resulting from part-time employment varies between 10% in Austria and Luxembourg and 32% in France. As explained previously,

these results reflect the different nature of part-time work for men and women, as well as differing conceptions of it in the countries studied. In some of these, working part-time has a greater negative impact than retirement. The effects of retirement also vary greatly by gender. For women, retirement increases the risk of financial dependence more severely than part-time work in all the countries except for Austria, France and above all Poland. Two factors come into play here: the quality of part-time jobs and pension levels for women. In the United Kingdom, Ireland and Luxembourg, rates of financial dependence for retired women are 60% higher than those of women working full-time. Women's retirement pensions are in fact very low in the first two countries, because of their deregulated welfare state. In Luxembourg, where the employment rate for women is very low, they find themselves particularly vulnerable on reaching retirement age. There are only three countries where retirement has a strong impact on the financial dependence of men: the United Kingdom, Ireland and Belgium. The highest rates of financial dependence are to be found among people who are unemployed or non-working (other than pensioners). If we look at the effects of unemployment, we can see that there are no marked gender differences. On average, unemployment increases the rate of financial dependence (compared with full-time work) by more than 55%. For the non-working group, however, there are significant differences between men and women. The increase in the risk of financial dependence for non-working women varies between 42% in Sweden and 84% in Luxembourg, whereas for men it ranges from 24% in Poland to 68% in Austria and Ireland.

Activity status is closely related to age. In general, financial dependence is lower in the middle age ranges, as a result of more active participation on the labour market and a greater accumulation of human capital. It might therefore be supposed that the rate of financial dependence would firstly decline with age and then increase as the individual neared pensionable age. Our results confirm the relatively greater financial dependence of the youngest age groups (compared with groups which are more active on the labour market) in all the countries, for both men and women (except for women in Ireland, where the effect is not significant). However, this increased rate of financial dependence for the youngest age group (compared to the 30-49 year olds) is relatively slight compared with the effects of the other variables: 10% at most (except for Sweden, women in Luxembourg and men in Ireland). Surprisingly, once individuals get beyond the age of 50, the marginal effect on their financial dependence tends to be negative, and remains so after retirement age (except for women in Belgium). In Ireland and the United Kingdom, women between the ages of 50 and 59 have a slightly higher rate of financial dependence than those between 30 and 49, but in most countries the trend is towards a continued reduction in dependence after the age of 50.

Education has a clear impact on financial dependence in all the countries studied. Better education reduces the risk of financial dependence. There are, however, significant gender differences. A lower level of educational attainment affects women far more severely than it does men. Women who have not completed upper secondary education have rates of financial dependence which are 11% higher in Ireland and 32% in Luxembourg than women who have a higher education qualification. For men, this increased risk varies between 2% in Belgium and 21% in Poland. Women who have an upper secondary education qualification are 3% (in Sweden) and 22% (in Luxembourg) more likely to be financially dependent than those with higher education qualifications. For men, these figures are once again lower, ranging from 1% in Sweden, Austria and Luxembourg to 8% in Poland. This shows that on the labour market, women make up for the negative impact of their gender by a relatively higher level of qualifications than that of men.

Having children generally reduces the risk of financial dependence. This is, however, not the case for women in Spain, Poland and the United Kingdom, where mothers have an increased risk of financial dependence. There is a clear connection here with the issue of childcare systems. There are no State-

run childcare facilities in Spain, so mothers are obliged to leave work. In the United Kingdom, access to what are essentially private-sector arrangements is made financially difficult. In Poland, childcare provision for the youngest children is scarce, and, moreover, society is still very conservative. The Polish government adopted gender equality policies to meet the conditions for EU membership, but, at the same time, made severe cuts in social expenditure. Collective childcare facilities have been gradually disappearing since the communist era, and are now available to only 2% of 0-2 year-olds. Women are considered to be responsible for looking after their children. Any trend towards emancipation comes up against the importance of the church and of traditional social views which keep women at home (Heinen and Wator 2006). People living in households of more than two adults, however, are more likely to be financially dependent. The figures also show that, in all of the countries studied, single women without children tend to have higher rates of financial dependence than women living in a couple but without children. The exact opposite is true for men (except in Austria and France). It would also seem that lone parents are less likely to be financially dependent (except for men in Sweden) than adults living in a couple with children. This result can be explained by the method used in the study; the refusal to assume shared resources within a household tends to highlight the situation of many individuals (mainly women) who depend on their partner's income to keep them from poverty. When they become fully reliant on their own personal sources of income, they fall below the threshold for financial dependence. Our analysis also shows that the type of household has a stronger influence on the dependence of women than on that of men. Not only are the coefficients more significant for women, but the marginal effects are also higher.

Nationality plays a decisive role in explaining financial dependence, especially for women. Women who are citizens of another EU country have an increased risk of financial dependence in seven of the nine countries studied, whereas the same is true for men in only two countries (France: +7% and Sweden: +26%). Nationality has a significant impact on women's situations, increasing their dependence by an amount that varies between 12% in Austria and 27% in Spain. Citizens of non-EU countries also have higher rates of financial dependence than nationals. The relative increase in women's dependence varies between 8% in the United Kingdom and 38% in Belgium, whereas for men it lies between 6% in the United Kingdom and 16% in Belgium and France.

In conclusion, the probit analysis highlights the marginal effects of individual characteristics on the likelihood, for men and for women, of being financially dependent. It reveals considerable gender inequality. Where all else is equal, women are systematically more likely to be dependent than men.

TABLE 6 • PROBIT ANALYSIS: MARGINAL EFFECT OF GENDER ON LIKELIHOOD OF FINANCIAL DEPENDENCE, BEFORE AND AFTER CONTROLLING FOR OTHER CHARACTERISTICS

	AT	BE	ES	FR	IE	LU	PL	SE	UK
Gender (ref = Women)									
Men	-0.268***	-0.248***	-0.342***	-0.178***	-0.210***	-0.345***	-0.074***	-0.061***	-0.205***
Men (control)	-0.158***	-0.185***	-0.165***	-0.099***	-0.079***	-0.179***	-0.082***	-0.036***	-0.140***
Observations	11108	9621	23473	14472	10323	7072	30332	10736	15934
Wald Chi² (20)	2202.44	2459.59	6007.17	2817.24	1855	1164.33	6593.61	1391.67	2924.94
Pseudo R²	0.3520	0.3435	0.4176	0.3304	0.3910	0.4357	0.3848	0.2181	0.2477

Source: EU-SILC 2006, our calculations

TABLE 7A • PROBIT ANALYSIS: MARGINAL EFFECTS OF INDIVIDUAL CHARACTERISTICS ON RISK OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN

	AT		BE		ES		FR		IE	
	Women	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**
Activity status (ref = full-time)										
Part-time workers	0.329***	0.102***	0.129***	0.130***	0.375***	0.279***	0.354***	0.323***	0.499***	0.276***
Unemployed	0.573***	0.553***	0.545***	0.368***	0.595***	0.664***	0.551***	0.463***	0.632***	0.64***
Pensioners	0.308***	0.043**	0.389***	0.224***	0.438***	0.087***	0.245***	0.062**	0.630***	0.376***
Other non-working people	0.746***	0.675***	0.761***	0.583***	0.770***	0.589***	0.770***	0.674***	0.796***	0.676***
Age (ref = 30-49 years)										
‹ 30 years	0.072**	0.026**	0.104***	0.086***	0.041*	0.052***	0.068***	0.101***	0.030	0.128***
50-59 years	-0.034	-0.019	-0.024	-0.037***	-0.048*	-0.014	-0.078***	-0.008	0.063*	-0.013
60-65 years	-0.083**	-0.048***	-0.024	-0.056***	-0.125***	-0.021	-0.062*	-0.014	0.079	-0.027
› 65 years	-0.106***	-0.031	0.095*	-0.045**	-0.308***	-0.047**	0.002	0.022	-0.257***	-0.095***
Level of education (ref = higher)										
Lower secondary education	0.290***	0.084***	0.216***	0.019*	0.232***	0.062***	0.241***	0.098***	0.109***	0.072***
Upper secondary education	0.098***	0.006	0.162***	0.019**	0.088***	0.054***	0.11***	0.024**	0.110***	0.058***
Household type (ref = 2 adults (‹ 65) no children)										
Single person	-0.186***	-0.004	-0.226***	0.016	-0.236***	0.044*	-0.188***	-0.016	-0.275***	0.009
2 adults (1 › 65), no children	0.121***	-0.024	0.135***	-0.015	0.180***	0.023	0.074**	0.042**	0.153***	0.044
More than 2 adults, no children	0.083***	0.022	0.119***	0.040***	0.143***	0.040**	0.096***	0.067***	0.021	0.002
Lone parent with child(ren)	-0.335***	-0.027	-0.323***	-0.064**	-0.255***	-0.068	-0.255***	-0.040	-0.365***	0.000
2 adults, 1 child	-0.066*	-0.039***	0.000	-0.025	0.016	-0.004	-0.075***	-0.016	-0.116**	-0.076***
2 adults, 2 children	-0.001	-0.052***	-0.029	-0.020	0.101***	0.027	-0.072***	-0.040***	-0.078*	-0.045
2 adults, 3 or + children	-0.106**	-0.061***	-0.009	-0.021	0.171***	-0.024	-0.060**	-0.058***	-0.138***	-0.089***
3 adults or more with child(ren)	0.012	-0.018	0.133***	0.054***	0.092***	0.038**	-0.003	0.083***	-0.073*	-0.049**
Other			0.176	0.500***			0.064	-0.043		
Nationality (ref = nationals)										
Non-EU citizens	0.045	0.026	0.384***	0.155***	0.159***	0.013	0.083	0.163***	0.248*	-0.001
EU citizens	0.122**	-0.002	0.046	0.018	0.273**	0.041	0.138**	0.066**	0.171***	-0.038
Observations	5856	5252	4964	4657	12114	11359	7495	6977	5412	4882
Wald Chi² (20)	1474.99	534.71	1492.79	710.77	3263.01	1404.44	1661.76	1027.93	1054.37	691.76
Pseudo R²	0.3407	0.3078	0.4022	0.2917	0.4346	0.2735	0.337	0.2996	0.4098	0.3489

Source: EU-SILC 2006, our calculations

TABLE 7B • PROBIT ANALYSIS: MARGINAL EFFECTS OF INDIVIDUAL CHARACTERISTICS ON RISK OF FINANCIAL DEPENDENCE FOR WOMEN AND MEN

	LU		PL		SE		UK	
	Women	Men	Women	Men	Women	Men	Women	Men
Activity status (ref = full-time)								
Part-time workers	0.390***	0.104**	0.332***	0.292***	0.094***	0.156***	0.426***	0.259***
Unemployed	0.556***	0.547***	0.791***	0.756***	0.356***	0.295***	0.657***	0.663***
Pensioners	0.604***	0.009	0.039**	-0.050***	0.234***	0.109***	0.643***	0.305***
Other non-working people	0.838***	0.409***	0.478***	0.240***	0.418***	0.397***	0.675***	0.452***
Age (ref = 30-49 years)								
‹ 30 years	0.137***	0.083***	0.052***	0.058***	0.316***	0.152***	0.053**	0.058***
50-59 years	-0.139***	-0.032**	-0.121***	-0.048***	-0.032	-0.043***	0.062***	0.012
60-65 years	-0.305***	-0.020	-0.156***	-0.110***	0.000	-0.067***	-0.059**	-0.026
› 65 years	-0.423***	-0.017	-0.233***	-0.160***	0.050	-0.076***	-0.107***	-0.099***
Level of education (ref = higher)								
Lower secondary education	0.319***	0.027*	0.231***	0.211***	0.121***	0.031**	0.171***	0.095***
Upper secondary education	0.217***	0.005	0.130***	0.084***	0.029**	0.007	0.106***	0.071***
Household type (ref = 2 adults (‹ 65) no children)								
Single person	-0.389***	0.018	-0.175***	0.017	-0.061***	0.027*	-0.25***	0.019
2 adults (1 › 65), no children	0.303***	0.010	0.105***	0.106***	0.076***	-0.002	0.099***	0.017
More than 2 adults, no children	0.075	0.053**	0.078***	0.075***	0.14***	0.086***	0.051**	0.049***
Lone parent with child(ren)	-0.356***	0.000	-0.172***	-0.122***	-0.034	0.007	-0.33***	-0.106**
2 adults, 1 child	-0.076	-0.024	0.010	-0.047***	0.033*	-0.038**	0.072***	0.018
2 adults, 2 children	-0.054	-0.014	0.064***	-0.048***	0.001	-0.044***	0.043*	-0.031*
2 adults, 3 or + children	-0.060	-0.034	0.167***	-0.013	-0.004	-0.029	0.027	-0.048**
3 adults or more with child(ren)	-0.048	0.048*	0.126***	0.064***	0.088***	0.118***	0.067**	0.084***
Other			0.089**	0.083**	0.395***	0.180*	-0.002	-0.019
Nationality (ref = nationals)								
Non-EU citizens	0.308***	0.094**	0.083	-0.130	0.165***	0.030	0.081**	0.056**
EU citizens	0.140***	0.018	-0.174	-0.128	0.257***	0.255***	0.178**	-0.013
Observations	3536	3520	16262	14070	5448	5288	8590	7344
Wald Chi² (20)	745.87	268.26	3724.5	2763.8	872.56	702.41	1919.98	862.13
Pseudo R²	0.4589	0.3067	0.4218	0.3678	0.242	0.2387	0.2938	0.1948

Source: EU-SILC 2006, our calculations

4. PROPOSAL OF NEW INDICATORS

The European Union uses a set of poverty and social exclusion indicators which are calculated and compared regularly for all Member States. These are known as the 'Laeken indicators'. To conclude this study, we are proposing four new indicators (Table 8) with the potential to improve the measurement of poverty in the European Union.

The first of these is the ratio between women's and men's rates of financial dependence. As shown in Table 6, this indicator varies between 1.4 for Poland and Sweden and 4.9 for Luxembourg. To put it another way, the risk of financial dependence is between 1.4 and 4.9 times higher for women than for men.

The second indicator shows the ratio between women's and men's relative median gaps. The relative median gap represents the difference between the individual median income of persons below the dependence threshold and that threshold itself, expressed as a percentage of the dependence threshold. The latter is set at 60% of the median individual income. As the indicator shows, women who are financially dependent have a far lower individual income than men in the same situation, in all the countries studied. The ratio between the relative median gaps of women and men varies between 1.1 in Poland and the United Kingdom (a figure indicating little gender-related difference between the relative median income gaps of women and men) and 2.3 in Ireland (where the financial dependence of women is thus far greater than that of men).

The third indicator is the ratio between the intensity of the risk of dependence for women and for men. The intensity of the risk of financial dependence has two components: the rate of dependence and the relative median gap. This indicator thus combines the number of individuals below the dependence threshold by gender with the severity of that dependence for individuals in such a situation. The results show that in Luxembourg the intensity of financial dependence among women is ten times higher than among men, whereas in Sweden gender equality has almost been achieved, with an indicator of 1.1.

The fourth indicator looks at income distribution, by comparing the percentage of women in the first decile (lowest income) and the last. In five of the nine countries (Austria, Belgium, Spain, Ireland and Luxembourg) women make up between 80 and 90% of the population in the first decile. Yet they represent no more than 23-30% of the population in the last decile in all the countries but Poland (where they account for 35%). The ratio between the proportion of women in the first and last deciles varies between 1.7 in Poland and 3.8 in Luxembourg. In the latter, the figures reveal that there are nine times more women than men on the lowest incomes, and three times more men than women in the highest-income group.

TABLE 8 • PROPOSED INDICATORS

	AT	BE	ES	FR	IE	LU	PL	SE	UK
1. Basic indicators: average income ratios women/men									
Ratio between women's and men's individual net incomes	0.61	0.62	0.63	0.70	0.59	0.55	0.75	0.80	0.61
2. Indicators of financial dependence									
Rate of financial dependence									
Women	38%	36%	49%	31%	40%	43%	28%	20%	36%
Men	11%	11%	15%	13%	19%	9%	21%	13%	16%
Ratio between women's and men's rates of financial dependence	3.4	3.2	3.4	2.3	2.1	4.9	1.4	1.4	2.3
Financial dependence threshold	€786	€814	€490	€836	€858	€1,256	€130	€890	€826
Median income of persons below the threshold									
Women	€381	€248	€1	€413	€375	€359	€22	€631	€429
Men	€491	€501	€180	€509	€653	€815	€31	€555	€474
Relative median gap of persons below the threshold									
Women	0.5	0.7	1.0	0.5	0.6	0.7	0.8	0.3	0.5
Men	0.4	0.4	0.6	0.4	0.2	0.4	0.8	0.4	0.4
Ratio of relative median gaps W/M	1.4	1.8	1.6	1.3	2.3	2.0	1.1	0.8	1.1
Intensity of poverty risk									
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%
Ratio of intensity of dependence W/M	4.7	5.8	5.3	3.0	5.0	10.1	1.5	1.1	2.6
3. Ratio between the percentage of women in the first and last deciles									
Percentage of women in first and last deciles									
First decile	87.3%	84.7%	84.0%	75.8%	79.5%	90.4%	62.4%	57.9%	72.3%
Last decile	24.3%	24.4%	26.2%	30.1%	22.6%	24.1%	35.8%	25.6%	25.4%
Ratio between percentages of women in first and last deciles	3.4	3.5	3.2	2.5	3.5	3.8	1.7	2.3	2.8
4. Indicators relating to decomposition of the Gini coefficient									
Relative economic distance	0.667	0.605	0.634	0.503	0.606	0.639	0.367	0.470	0.581
Ratio between transvariation and gross inter-group inequalities	0.333	0.393	0.366	0.497	0.394	0.361	0.633	0.530	0.419

Source: EU-SILC 2006, our calculations

In all of the nine countries studied, women's net individual incomes are lower than those of men. The disparity varies between 45% in Luxembourg and 20% in Sweden.

Sweden (20% lower), Poland (25%) and France (30%) have the narrowest gaps, while Luxembourg (45%) and Ireland (41%) are at the other end of the scale. Since France, and particularly Sweden, have some of the highest gender pay gaps in Europe, the lesser inequality of income in these countries can be explained by their systems of State transfers. The same is true for Poland.

There is slightly less inequality of income from economic activity in all the countries, except for the United Kingdom and Sweden. Women's earnings are, on average, 40% lower in the United Kingdom, 39% in Luxembourg, 37% in Austria and 35% in Ireland. The gap is narrowest in Poland (16%), and in the other countries it stands at 29%.

In the area of State transfers, there are still very pronounced inequalities between women and men. Women who receive State benefits receive less than men in all these countries. The difference is greatest in Luxembourg (40% less), the United Kingdom (39%) and Spain (35%). The difference is smallest in Sweden and Poland, at 17% less. Generally speaking, there is less of a gap (10 to 25%) for the youngest age brackets. The differences then increase later on, and are highest between the ages of 50 and 60.

The European Union defines the 'at-risk-of-poverty rate' as the percentage of persons belonging to households whose disposable equivalent income is less than 60% of the median equivalent income in their country of residence. The rate of financial dependence represents the proportion of individuals with an individual income lower than 60% of the median individual income in their country of residence. The difference between these two indicators derives from the hypothesis that resources are fully shared within a household: a hypothesis used by Europe but rejected by the BGIA project.

In all nine countries studied, the rate of risk of financial dependence is higher for women than for men. 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 rate of financial dependence among men ranges from 9% in Luxembourg to 21% in Poland, whereas that among women varies between 20% in Sweden and 49% in Spain.

Women's rate of financial dependence is far higher than their at-risk-of-poverty rate. Conversely, for men the rate of financial dependence is relatively close to their at-risk-of-poverty rate. If we compare the European poverty rate, calculated at household level, with the rate of financial dependence, which measures the individual risk of poverty, we can see the extent to which the assumption of pooling and sharing of household resources conceals the risks run by women. It is thus highly desirable that the European indicators should be supplemented by individual indicators giving a more accurate picture of the individual risk of poverty

CHAPTER 3

Analysis of income distribution within couples in Belgium

The aim of this chapter is to open the black box that the household represents in order to calculate and analyse income inequality between partners within couples. The analysis covers 2,709 households comprising two adults of different sex, with or without children, included in the SILC Belgium 2006 database. The individual incomes of each partner in these couples have been calculated according to the method described in the first chapter and the technical note.[27] The aim is to examine inequality of incomes between partners in couples.[28]

First of all we place the sample of 2,709 couples in the context of the whole of the population studied in SILC 2006, comparing their characteristics and gender inequality indicators for different incomes and their components, as well as in terms of financial dependence.

In the second section we begin by studying the disparities in individual net incomes of partners in couples, using an analysis by decile, and classifying couples into those where the man's income is higher than the woman's, and those where the woman's income exceeds the man's. Then we look at the financial dependence of partners in couples, placing them in four groups: couples where neither partner is financially dependent, couples where only the woman is financially dependent, couples where only the man is dependent, and couples where both partners are financially dependent.

Sections 3 to 6 are dedicated to studying the income disparities and financial dependence in couples according to various characteristics: age, number of dependent children, activity status and level of educational attainment.

The final section is a systematic comparison of married couples and cohabiting couples. With regard to sections 4 to 7, the analysis includes data from SILC 2007 in order to increase the size of the sample and to obtain representative results.

1. CHARACTERISTICS OF COUPLES COMPARED WITH THE WHOLE POPULATION STUDIED USING SILC BELGIUM 2006

The sample is composed of 2,709 couples, where 20% are cohabiting and 80% are married.

The distribution by age of individuals in couples is slightly different from that of the total population: the average age of people in couples is four years lower for women, and one year lower for men; the number of people in the extreme age groups (under 25 and 65 and older) is lower in couples (Table 1). Couples are more likely to have dependent children (Table 2).

In terms of activity status (Table 3), the percentage of full-time workers is higher for men and women in couples, whereas the percentage of unemployed individuals is lower.

The percentage of women working part-time is higher in couples, whereas the percentages for men in both groups are low and similar.

Finally, there are more non-working women and fewer retired women in couples than in the total population. The opposite is true for men in couples: more retired men and fewer non-working men.

The level of educational attainment of persons in couples is slightly higher than the educational level of the population as a whole (Table 4).

27 http://bgia.ulb.ac.be/index.html.
28 Throughout this report, the figures in red and in italics refer to combinations for which the number of observations is insufficient. The threshold we used is that of Eurostat, consisting of 100 observations.

TABLE 1 • DISTRIBUTION OF PERSONS IN COUPLES AND IN THE TOTAL POPULATION BY AGE GROUP

Age group	Couples		Total population	
	Women	Men	Women	Men
‹ 25 years	3.92%	1.93%	6.39%	6.37%
25-34 years	21.81%	18.13%	17.19%	18.21%
35-44 years	25.05%	26.02%	19.87%	21.34%
45-54 years	15.99%	17.19%	18.86%	20.26%
55-64 years	15.71%	16.14%	14.97%	15.68%
› 65 years	17.53%	20.59%	22.71%	18.15%
Average age	44	46	48	47

Source: SILC Belgium 2006, our calculations

TABLE 2 • DISTRIBUTION OF PERSONS IN COUPLES AND IN THE TOTAL POPULATION BY NUMBER OF DEPENDENT CHILDREN

Dependent children	Couples	Total population	
		Women	Men
0	52.89%	62.81%	65.34%
1	17.68%	16.26%	15.05%
2	19.86%	14.25%	13.26%
3 or +	9.57%	6.68%	6.35%
Total	100.00%	100.00%	100.00%

Source: SILC Belgium 2006, our calculations

TABLE 3 • DISTRIBUTION OF PERSONS IN COUPLES AND IN THE TOTAL POPULATION BY ACTIVITY STATUS

Activity status	Couples		Total population	
	Women	Men	Women	Men
Full-time (excluding self-employed)	28.58%	52.46%	26.53%	49.96%
Self-employed	4.29%	9.57%	3.57%	9.15%
Part-time (excluding self-employed)	20.47%	*3.22%*	16.55%	3.85%
Unemployed	7.39%	7.11%	9.16%	8.92%
Retired	15.26%	23.41%	22.43%	20.91%
Non-working	24.02%	4.23%	21.76%	7.22%
Total	100.00%	100.00%	100.00%	100.00%

Source: SILC Belgium 2006, our calculations

TABLE 4 • DISTRIBUTION OF PERSONS IN COUPLES AND IN THE TOTAL POPULATION BY LEVEL OF EDUCATIONAL ATTAINMENT

Level of educational attainment	Couples		Total population	
	Women	Men	Women	Men
Primary or lower	12.99%	12.62%	16.87%	13.72%
Lower secondary	15.93%	13.83%	16.20%	14.43%
Upper secondary	32.00%	33.00%	31.00%	34.00%
Higher education	39.00%	40.00%	36.00%	38.00%
Total	100.00%	100.00%	100.00%	100.00%

Source: SILC Belgium 2006, our calculations

Before studying the inequalities within couples, we summarised the characteristics in terms of inequality and financial dependence of the individuals who form the 2,709 households studied. The income components are detailed by beneficiary.

The comparison is shown in Table 5. The inequality in the net incomes of women and men in the 2,709 couples is higher than that observed for the population as a whole. Net incomes of women in these couples are 46% lower than those of men, whereas the gap is 38% for the population as a whole. The disparity is smaller for income from economic activity (+5 percentage points) but higher for State transfers (+23 percentage points). Among these transfers, the gaps are largest in the case of pensions (50%) and unemployment allowances (47%). This reflects the ups and downs of interrupted careers and part-time working among women, but also the fact that social security entitlements are not individualised, which is particularly detrimental to unemployed women living in couples.[29] As regards the other indicators, they all illustrate that women in couples are at a disadvantage.

Although the rate of financial dependence of people in couples is the same as that for the population as a whole, the percentage of women in couples who are financially dependent is higher than that of financially dependent women in the population as a whole. The intensity of dependence is also higher than in the population as a whole. Women in couples are also more commonly found in the first decile and less commonly in the last decile.

29 See on this subject Meulders, 2009 and Claude, 2006.

TABLE 5 • INDICATORS OF INCOME INEQUALITY AND FINANCIAL DEPENDENCE WITHIN COUPLES*

	Total Population	Individuals in the 2,709 couples
1. Basic indicators: average income ratios women/men		
Income categories		
Gross income	0.55	0.55
Net income	0.62	0.54
1. Income from economic activity	0.72	0.67
1.1 Earnings of employees	0.72	0.66
1.1.1 Pay	0.74	0.68
1.1.2 Irregular work	*0.75*	*0.84*
1.1.3 Bonuses	0.58	0.55
1.2 Non-wage income (company car)	*0.86*	*0.81*
1.3 Income from self-employment	0.67	0.66
4. State transfers	0.75	0.52
4.1 Pensions	0.66	0.50
4.2 Unemployment	0.68	0.53
4.3 Invalidity benefit	0.83	0.78
4.4 Sickness benefit	*0.92*	*0.90*
4.5 Student grant	*0.97*	*1.80*
2. Ratio between the percentage of women in the first and last deciles	3.6	5.2
3. Indicators of financial dependence		
Rate of financial dependence or individual at-risk-of-poverty rate		
Women	36%	41%
Men	11%	6%
Total	24%	24%
Ratio between women's and men's rates of financial dependence	3.3	6.5
Ratio between women's and men's relative median gaps	1.7	2.1
Ratio between women's and men's intensity of financial dependence	5.6	14.1

Note: * Average income by beneficiary
Source: SILC Belgium 2006, our calculations

In order to measure the disparities in income between partners in couples, we firstly divided the couples into three groups:

- equal incomes: when the gap in partners' incomes is less than 5%
- the man's income is higher than the woman's (by more than 5%)
- the woman's income is higher than the man's (by more than 5%)

The distinction between married and cohabiting couples is made by combining the variables PB190 'Marital status' and PB200 'Consensual union' contained in SILC Belgium 2006. Married couples correspond to the categories 'married' couples in PB190 and 'on a legal basis' in PB200. In addition to these, there are 21 further couples where one of the partners fulfils both of these conditions, but the other person responds differently to one or the other variable. The cohabiting couples correspond to the other scenarios and account for 20% of all couples (528 couples).

TABLE 6 • DISTRIBUTION OF COUPLES ACCORDING TO INCOME DISPARITIES BETWEEN PARTNERS

Difference between individual net incomes	Married couples		Cohabiting couples		All couples	
	Number of house-holds	%	Number of house-holds	%	Number of house-holds	%
Equal incomes	104	4.97%	56	10.86%	160	6.11%
Man's income higher than woman's	1,738	80.13%	352	66.53%	2,090	77.49%
Woman's income higher than man's	339	14.90%	120	22.61%	459	16.40%
Total	2,181	100.00%	528	100.00%	2,709	100.00%

Source: EU-SILC 2006, our calculations

In 77% of the couples studied, the man's income is higher than the woman's (Table 6). This percentage is 67% for cohabiting couples and 80% for married couples. Women with a higher income than their partner are more frequently encountered among cohabiting couples (23% compared with 15%). Finally, couples whose partners are considered as having equal income account for 11% of the total number of cohabiting couples and 5% of married couples.

We undertook a more detailed study of income disparities within couples by breaking down both categories of unequal income into five categories:

- gap lower than 25%
- gap between 25% and 50%
- gap between 50% and 75%
- gap between 75% and 100%
- gap higher than 100%

Table 7 presents the distribution of couples into these five categories, distinguishing between married and cohabiting couples.

TABLE 7 • DISTRIBUTION OF COUPLES ACCORDING TO INCOME DISPARITIES BETWEEN PARTNERS

Gap in individual net incomes in couples	Couples where the man's income is higher than the woman's					
	Married		Cohabiting		Total	
	Number of house-holds	%	Number of house-holds	%	Number of house-holds	%
Less than 25%	255	14.91%	97	27.49%	352	17.01%
25%-50%	411	23.47%	107	31.46%	518	24.80%
50%-75%	360	20.55%	68	18.97%	428	20.28%
75%-100%	556	32.38%	64	17.63%	620	29.92%
More than 100%	156	8.69%	16	4.46%	172	7.99%
Total	1,738	100.00%	352	100.00%	2,090	100.00%

Gap in individual net incomes in couples	Couples where the woman's income is higher than the man's					
	Married		Cohabiting		Total	
	Number of house-holds	%	Number of house-holds	%	Number of house-holds	%
Less than 25%	150	44.69%	62	54.14%	212	47.22%
25%-50%	98	29.47%	34	28.10%	132	29.10%
50%-75%	42	12.01%	13	9.91%	55	11.45%
75%-100%	32	8.99%	7	4.63%	39	7.82%
More than 100%	17	4.84%	4	3.22%	21	4.41%
Total	339	100.00%	120	100.00%	459	100.00%

Source: EU-SILC 2006, our calculations

Where the man's income is higher than the woman's, 8% of couples show a gap of more than 100% and 30% of couples present a gap between 75 and 100%. For more than half of these couples, the gap is higher than 50%. The disparity is higher if the partners are married.

As regards couples where the woman's income is higher, for almost half of these couples (47%) the gap is lower than 25%. The disparity is lower if the partners are cohabiting.

2.1 Distribution of couples by decile

Figure 1 presents the average individual net incomes of women and men where the partners belong to different deciles. The couples are classified in increasing order of their total net income, which is equal to the sum of the individualised incomes of both partners.

FIGURE 1 • INDIVIDUALISED NET INCOME OF WOMEN AND MEN IN COUPLES (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)
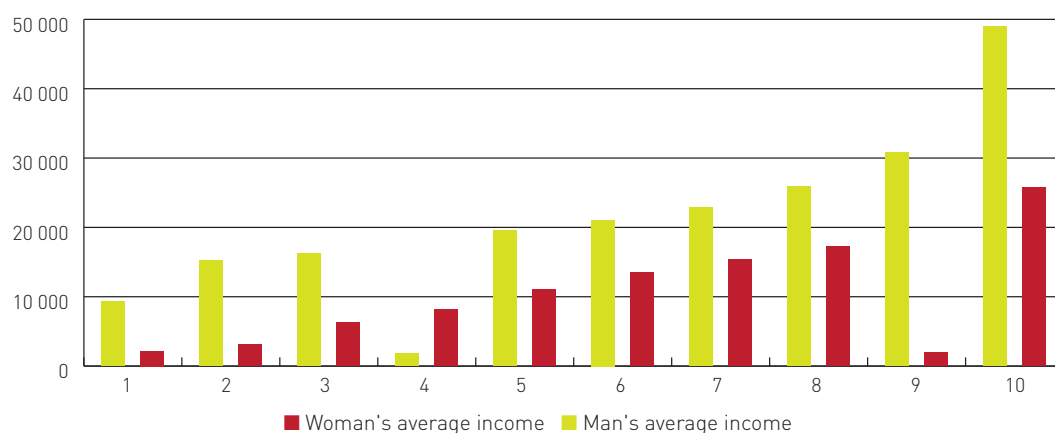
Source: SILC Belgium 2006, our calculations

Among couples in every decile, men's average net income is higher than women's.
The gap between the average net incomes of women and men is very large in the first two deciles; it is smaller in deciles 6 to 9 and increases again in the last decile.

FIGURE 2 • WOMEN'S AND MEN'S SHARE OF TOTAL NET HOUSEHOLD INCOME (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)
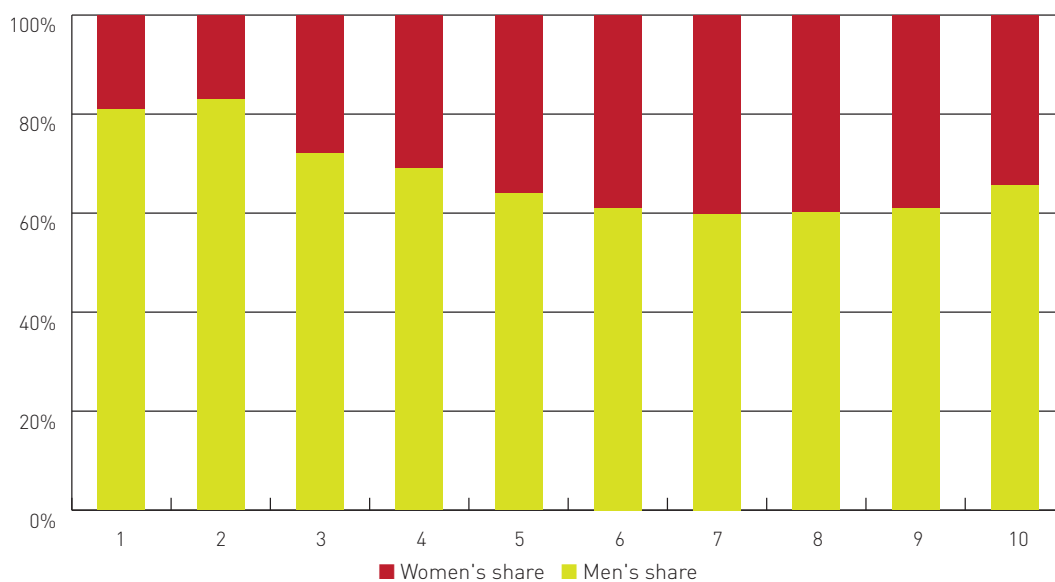
Source: SILC Belgium 2006, our calculations

According to Figure 2 and Table 8, the man's share of income varies from 83% in the second decile to 60% in the seventh and eighth deciles. Women are therefore in a weaker negotiating position in all deciles. The lower the household income, the weaker their position.

TABLE 8 • WOMEN'S AND MEN'S SHARE OF TOTAL NET HOUSEHOLD INCOME (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)

Deciles	Women's share	Men's share
1	19.02%	80.98%
2	17.07%	82.93%
3	27.94%	72.06%
4	30.97%	69.03%
5	36.02%	63.98%
6	38.99%	61.01%
7	40.19%	59.81%
8	39.84%	60.16%
9	39.04%	60.96%
10	34.48%	65.52%
Total	34.89%	65.11%

Source: SILC Belgium 2006, our calculations

FIGURE 3 • PERCENTAGE OF MARRIED AND COHABITING COUPLES WITHIN THE DIFFERENT DECILES

Married couples   Cohabiting couples
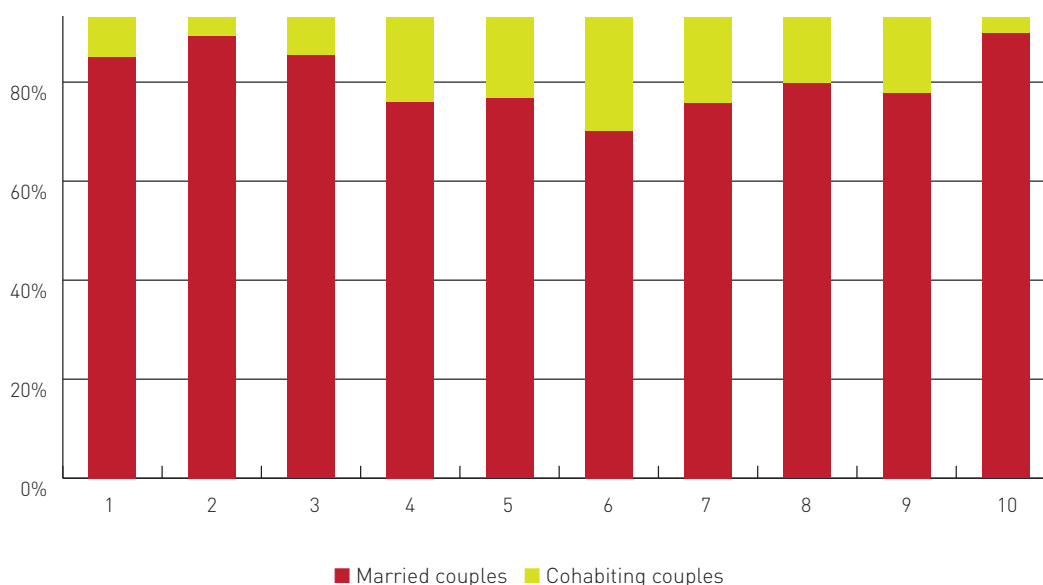
Source: SILC Belgium 2006, our calculations

Figure 3 and Table 9 show the distribution of the couples by decile according to whether the partners are married or cohabiting. The percentage of cohabiting couples varies between 10 and 30%; they are more frequently encountered in the central deciles (from the 4th to the 9th decile).

TABLE 9 • PERCENTAGE OF MARRIED AND COHABITING COUPLES WITHIN THE DIFFERENT DECILES

Deciles	Married couples	Cohabiting couples
1	85.11%	*14.89%*
2	89.28%	*10.72%*
3	85.33%	*14.67%*
4	75.95%	24.05%
5	76.69%	23.31%
6	70.12%	29.88%
7	75.77%	24.23%
8	79.73%	20.27%
9	77.81%	22.19%
10	89.78%	*10.22%*
Total	80.56%	19.44%

Source: SILC Belgium 2006, our calculations

Table 10 shows women's and men's average net incomes by decile of the couple's total net income, in addition to the ratio between women's and men's average income for each decile.
The disparity decreases from the 2nd to the 7th decile and increases again thereafter. The largest gap can be found in the 2nd decile (79%), and the smallest gap is in the 7th decile (33%).

TABLE 10 • INDIVIDUALISED NET INCOME OF MEN AND WOMEN IN COUPLES (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)

Deciles	Woman's average net income	Man's average net income	Ratio between woman's and man's average net income	Gap
1	2,182.14	9,291.58	0.23	77%
2	3,140.40	15,252.79	0.21	79%
3	6,287.97	16,214.25	0.39	61%
4	8,173.28	18,219.93	0.45	55%
5	11,011.58	19,556.03	0.56	44%
6	13,466.38	21,068.31	0.64	36%
7	15,386.38	22,902.29	0.67	33%
8	17,191.24	25,957.21	0.66	34%
9	19,730.07	30,813.75	0.64	36%
10	25,800.87	49,029.05	0.53	47%
Total	12,233	22,824.47	0.54	46%

Source: SILC Belgium 2006, our calculations

Table 11 shows the same calculations after removing the self-employed and their partners from the sample: men's and women's average incomes change little and the income gap figures differ only in the first three deciles. We therefore decided not to continue the analysis without the self-employed.

TABLE 11 • INDIVIDUALISED NET INCOME OF WOMEN AND MEN IN COUPLES (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME EXCLUDING THE SELF-EMPLOYED)

Deciles	Woman's average net income	Man's average net income	Ratio between woman's and man's average net income	Gap
1	1,679.70	10,967.55	0.15	85%
2	3,070.42	15,177.22	0.20	80%
3	5,773.28	16,409.19	0.35	65%
4	8,061.32	17,911.98	0.45	55%
5	10,496.18	19,612.56	0.54	46%
6	13,118.83	21,008.34	0.62	38%
7	14,714.41	23,076.91	0.64	36%
8	16,645.35	25,697.95	0.65	35%
9	19,659.98	29,797.32	0.66	34%
10	25,547.88	44,872.84	0.57	43%
Total	11,869.12	22,442.91	0.53	47%

Source: SILC Belgium 2006, our calculations

Table 12 presents the same data but separated between married and cohabiting couples.

TABLE 12 • INDIVIDUALISED NET INCOME OF WOMEN AND MEN IN COUPLES, DIFFERENTIATING MARRIED/COHABITING COUPLES (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)

Married couples

Deciles	Woman's average net income	Man's average net income	Ratio between woman's and man's average net income	Gap
1	2,022.71	9,353.95	0.22	78%
2	2,817.27	15,603.18	0.18	82%
3	5,976.79	16,460.89	0.36	64%
4	7,468.43	18,895.92	0.40	60%
5	10,676.46	19,847.86	0.54	46%
6	12,678.90	21,852.78	0.58	42%
7	14,739.12	23,543.70	0.63	37%
8	16,795.79	26,408.77	0.64	36%
9	19,023.68	31,517.31	0.60	40%
10	25,639.66	49,178.84	0.52	48%
Total	11,722.6	23,381.2	0.50	50%

(continued)

Cohabiting couples

Deciles	Woman's average net income	Man's average net income	Ratio between woman's and man's average net income	Gap
1	*3,093.72*	*8,934.94*	*0.35*	*65%*
2	*5,832.11*	*12,333.96*	*0.47*	*53%*
3	*8,097.44*	*14,780.03*	0.55	*45%*
4	10,399.30	16,085.06	0.65	35%
5	12,114.10	18,595.94	0.65	35%
6	15,314.77	19,226.99	0.80	20%
7	17,410.77	20,896.20	0.83	17%
8	18,746.38	24,181.41	0.78	22%
9	22,207.40	28,346.33	0.78	22%
10	*27,216.81*	*47,713.45*	*0.57*	*43%*
Total	14,347.8	20,517.8	0.70	30%

Source: SILC Belgium 2006, our calculations

The disparity between women's and men's incomes in cohabiting couples is significantly lower than that calculated for the married couples (30% compared with 50%). Although the disparity profiles by decile are similar, the actual gaps for cohabiting couples are always lower (65% compared with 82% for the greatest gap, and 17% compared with 36% for the smallest gap).

The following tables look separately at couples where the man's income is higher than the woman's and those where the woman's income is higher than the man's.

TABLE 13 • DISTRIBUTION OF COUPLES ACCORDING TO WHETHER THE MAN'S INCOME IS HIGHER OR LOWER THAN THE WOMAN'S

Deciles	Couples where the man's income is higher than the woman's	Couples where the woman's income is higher than the man's
1	10.94%	*7.82%*
2	11.55%	*5.77%*
3	10.11%	*10.18%*
4	10.19%	*10.28%*
5	9.28%	12.48%
6	8.67%	12.82%
7	9.31%	11.49%
8	9.85%	*10.53%*
9	9.57%	11.72%
10	10.55%	*6.90%*
Total	100.00%	100.00%

Source: SILC Belgium 2006, our calculations

Couples where the man's income is higher than the woman's are relatively evenly distributed among the deciles. On the other hand, couples where the woman's income is higher than the man's are more concentrated in the central and higher deciles (deciles 5-9) (Table 13).

TABLE 14 • AVERAGE NET INCOME OF WOMEN AND MEN IN COUPLES CLASSIFIED BY DECILE FOR COUPLES WHERE THE MAN'S INCOME IS HIGHER THAN THE WOMAN'S

Deciles	Woman's average income	Man's average income	Average income ratios
1	400	5,947	0.07
2	1,031	8,169	0.13
3	2,062	9,175	0.22
4	3,090	10,110	0.31
5	4,211	11,084	0.38
6	5,273	11,996	0.44
7	6,568	12,561	0.52
8	7,453	14,098	0.53
9	8,351	16,966	0.49
10	11,495	26,444	0.43

Source: SILC Belgium 2006, our calculations

As regards couples where the man's income is higher than the woman's, the inequality in partners' incomes is very high in the first two deciles (93% and 87%). The inequality is lowest for deciles 6 to 9, where it varies from 47% to 56% (Table 14).

TABLE 15 • INDIVIDUALISED AVERAGE INCOME OF WOMEN AND MEN WITHIN COUPLES CLASSIFIED BY DECILE FOR COUPLES WHERE THE WOMAN'S INCOME IS HIGHER THAN THE MAN'S

| Deciles	Woman's average income	Man's average income	Average income ratio
1	*5,549*	*-3,393*	*-1.64*
2	*6,318*	*2,850*	*2.22*
3	*7,483*	*3,820*	*1.96*
4	*8,110*	*5,108*	*1.59*
5	9,292	5,976	1.55
6	10,346	6,884	1.50
7	11,112	8,116	1.37
8	*12,788*	*8,909*	*1.44*
9	14,853	10,379	1.43
10	*19,914*	*14,368*	*1.39*

Source: SILC Belgium 2006, our calculations

As regards couples where the woman's income is higher than the man's, the inequality in partners' incomes is very high in the first few deciles (Table 15). In the other deciles, the inequality is less than that observed in couples where the man's income is higher than the woman's.

Inequality is more marked in couples where the man's income is higher than the woman's (Figure 4): the share of the man's income in couples where the man's income is higher than the woman's is greater than the woman's share in the couples where the woman has a higher income.
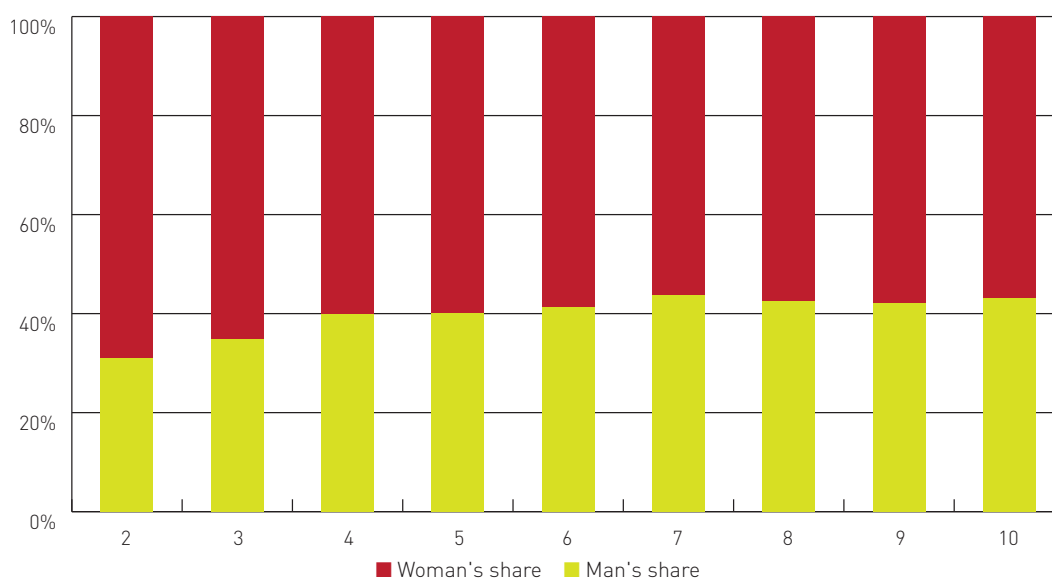
FIGURE 4 • WOMEN'S AND MEN'S SHARE OF TOTAL NET HOUSEHOLD INCOME ACCORDING TO WHETHER THE MAN OR THE WOMAN HAS A HIGHER INCOME (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)

Couples where the man's income is higher than the woman's
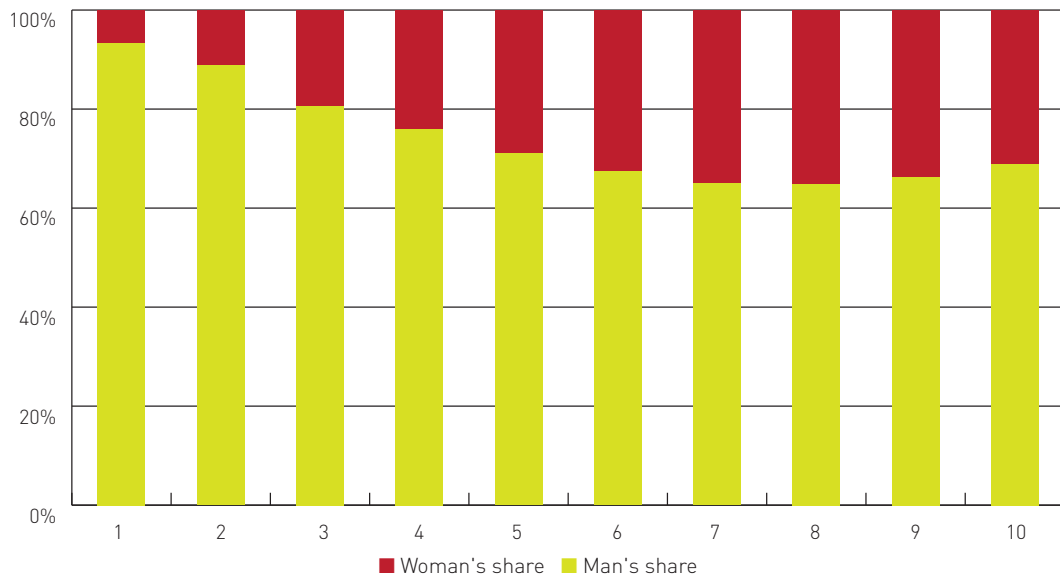
■ Woman's share ■ Man's share

Couples where the woman's income is higher than the man's

2.2   Analysis of financial dependence within couples

Table 16 shows the distribution of the couples according to the number of financially dependent partners.

In 2% of couples, both partners are financially dependent. In 55% of couples, neither partner is financially dependent. Among the remaining 43% of couples, one partner is in a situation of financial dependence, and in 90% of cases it is the woman.
The percentage of couples where both partners are financially dependent is higher among cohabiting couples (3% compared with 2% of married couples). On the other hand, the percentage of couples where only one partner is dependent is significantly lower for cohabiting couples (28% compared with 46%), and in this case the percentage of couples where it is the woman who is dependent is lower (84% compared with 91%).
By correlation, the percentage of couples where neither partner is financially dependent is higher among cohabiting couples (69% compared with 52% for married couples).

TABLE 16 • FINANCIAL DEPENDENCE WITHIN COUPLES

	Married couples	Cohabiting couples	All couples
Couples where both partners are financially dependent	*1.94%*	*2.97%*	2.14%
Couples where only one partner is financially dependent	46.42%	28.13%	42.86%
Dependent woman	91.40%	83.58%	90.40%
Dependent man	*8.60%*	*16.42%*	9.60%
Couples where neither partner is financially dependent	51.64%	68.90%	55.00%
All couples	28.13%	100.00%	100.00%

Income disparities between women and men living in couples increase with the average age of the couple; they are lowest for couples with an average age of under 35, and highest for the over 65s (68%) (Table 17). Needless to say, this reflects the difficulties faced by women in developing a continuous career, as career breaks are often forced on them. The disparities remain lower if we consider the population as a whole, where we also see the gap increase with age (with the exception of the last age group of 65 or older, where the gap is lower than that for the 55-64 age group).

TABLE 17 • AVERAGE INCOMES AND INCOME RATIOS BETWEEN PARTNERS ACCORDING TO THE COUPLE'S AVERAGE AGE (COMPARISON WITH THE TOTAL POPULATION)

Age groups	Couples					Total Population		
	Average income		Average income ratios	Total average income	Percentage of couples	Average income		Average income ratios
	Women	Men				Women	Men	
‹ 25 years	10,296	15,695	0.66	25,987	2.79%	8,463	10,906	0.78
25-34 years	14,653	21,627	0.68	36,280	20.71%	15,161	19,599	0.77
35-44 years	15,961	27,754	0.58	43,715	25.52%	16,275	24,665	0.66
45-54 years	13,977	25,790	0.54	39,767	16.72%	15,065	24,882	0.61
55-64 years	9,452	21,345	0.44	30,797	15.97%	10,776	21,551	0.50
› 65 years	5,419	16,969	0.32	22,388	18.29%	9,254	16,176	0.57

Source: SILC Belgium 2006, our calculations

We also studied the effects of an age difference between partners on the gap in net income; it does not appear to have a significant effect, unless the women is five or more years older than her partner, in which case there is less inequality within the couple (Table 18).

TABLE 18 • DISTRIBUTION OF COUPLES AND INCOME DISPARITIES ACCORDING TO THE AGE DIFFERENCE BETWEEN THE PARTNERS

Age difference (M/W)	Number of couples	%	Average income		Average income ratios
			Women	Men	
Woman 5+ years older	117	4.23%	18,833	12,171	0.65
Woman 1-4 years older	412	15.58%	23,982	12,916	0.54
Same age	302	11.34%	22,941	12,054	0.53
Man 1-4 years older	1264	46.62%	23,466	12,442	0.53
Man 5-9 years older	467	16.83%	21,488	11,496	0.54
Man 10+ years older	147	5.40%	20,991	11,182	0.53

Source: SILC Belgium 2006, our calculations

TABLE 19 • DISTRIBUTION OF COUPLES ACCORDING TO THE AGE DIFFERENCE BETWEEN WOMEN AND MEN BY AGE GROUP

Man's income higher than the woman's

Age difference (M/W)	Number of couples	%	Average income		Average income ratios
			Women	Men	
Woman 5+ years older	74	3.51%	7,603	21,714	0.35
Woman 1-4 years older	319	15.59%	10,502	25,973	0.40
Same age	238	11.68%	9,859	25,015	0.39
Man 1-4 years older	982	46.73%	10,086	25,861	0.39
Man 5-9 years older	367	17.22%	9,085	23,848	0.38
Man 10+ years older	110	5.27%	8,481	23,800	0.36

Woman's income higher than the man's

Age difference (M/W)	Number of couples	%	Average income		Average income ratios
			Women	Men	
Woman 5+ years older	34	7.24%	20,810	12,306	1.69
Woman 1-4 years older	60	13.40%	20,819	14,175	1.47
Same age	48	10.46%	21,929	13,930	1.57
Man 1-4 years older	205	45.87%	21,500	13,851	1.55
Man 5-9 years older	79	15.93%	21,259	10,215	2.08
Man 10+ years older	33	7.10%	19,720	11,470	1.72

Source: SILC Belgium 2006, our calculations

In couples where the man's income is higher than the woman's, income disparities between man and woman seem relatively stable, regardless of age differences (Table 19). On the other hand, in couples where the woman's income is higher than the man's, the older the man the higher the disparity.

Table 20 classifies couples according to the number and gender of financially dependent partners by average age group of the couple.

TABLE 20 • DISTRIBUTION OF HOUSEHOLDS ACCORDING TO FINANCIAL DEPENDENCE WITHIN COUPLES BY AVERAGE AGE GROUP OF THE COUPLE

Age groups	Couples where both partners are financially dependent	Couples where only one partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent
‹ 35 years	23.25%	15.04%	13.77%	26.94%	30.10%
35 - 44 years	17.03%	15.85%	15.54%	18.68%	33.39%
45 - 54 years	15.27%	15.64%	15.35%	18.36%	17.62%
55 - 64 years	19.07%	21.32%	21.34%	21.18%	11.67%
› 65 years	25.39%	32.15%	33.99%	14.84%	7.21%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Age groups	Couples where both partners are financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent	Total
‹ 35 years	2.12%	22.71%	4.72%	70.45%	100.00%
35 - 44 years	1.43%	23.06%	3.01%	71.96%	100.00%
45 - 54 years	1.96%	35.57%	4.52%	57.96%	100.00%
55 - 64 years	2.56%	51.78%	5.46%	40.02%	100.00%
› 65 years	2.97%	72.01%	3.34%	21.68%	100.00%

Age groups	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
‹ 35 years	16.56%	5.34%	1.11%	0.50%	23.50%
35 - 44 years	18.36%	6.02%	0.77%	0.36%	25.52%
45 - 54 years	9.69%	5.95%	0.76%	0.33%	16.72%
55 - 64 years	6.42%	8.27%	0.87%	0.41%	15.97%
› 65 years	3.96%	13.17%	0.61%	0.54%	18.29%
Total	55.00%	38.75%	4.11%	2.14%	100.00%

Source: SILC Belgium 2006, our calculations

Among couples where both partners are financially dependent, 44% have an average age of over 55. This vulnerability to financial dependence in older couples is even more marked for women: 55% of couples where only the woman is financially dependent, compared with 36% of couples where only the man is financially dependent, have an average age of over 55. This is a further illustration of the high level of vulnerability of elderly women, even if they are living in a couple.

4.1 Study based on SILC Belgium 2006

The aim of this section is to test the hypothesis whereby inequalities within couples increase with the number of dependent children. To conduct this analysis we looked first at all couples and then at two age groups in particular: couples whose average age is under 35, and those with an average age between 35 and 50. These groups represent 24% and 35% respectively of the total number of couples (Table 21).

TABLE 21 • DISTRIBUTION OF COUPLES ACCORDING TO THE PARTNERS' AVERAGE AGE

	Number of couples	%
Couples whose average age is ‹ 35	618	23.50%
Couples whose average age is 35 - 50	970	34.88%
Couples whose average age is › 50	1,121	41.62%
Total	2,709	100.00%

Source: SILC Belgium 2006, our calculations

TABLE 22 • DISTRIBUTION OF COUPLES ACCORDING TO THE NUMBER OF DEPENDENT CHILDREN

| Dependent children	‹ 35 years	35-50 years	Total
0	39%	16%	53%
1	29%	25%	18%
2	26%	37%	20%
3 or +	*6%*	22%	10%
Total	100%	100%	100%

Source: SILC Belgium 2006, our calculations

Childless couples account for 53% of all couples: 39% of couples whose average age is under 35, and 16% of couples whose average age is between 35 and 50 (Table 22). The percentage of couples with a dependent child is highest in couples whose average age is under 35: 29% compared with 25% for couples aged 35 to 50, and 18% of couples as a whole. The percentage of couples with two or more children is highest in the 35-50 age group.

Figure 5 shows the couples according to the number of dependent children by decile of the couple's total income. We notice that the number of dependent children increases with the income of the couple for couples as a whole. For the youngest couples, the percentage of couples with children is highest in the last deciles. This is also the case for couples in the middle age group, although for this group the first decile stands out due to a lower percentage of childless couples.

FIGURE 5 • DISTRIBUTION OF COUPLES BY DECILE, ACCORDING TO THE NUMBER OF DEPENDENT CHILDREN AND THE AVERAGE AGE OF THE COUPLE (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)
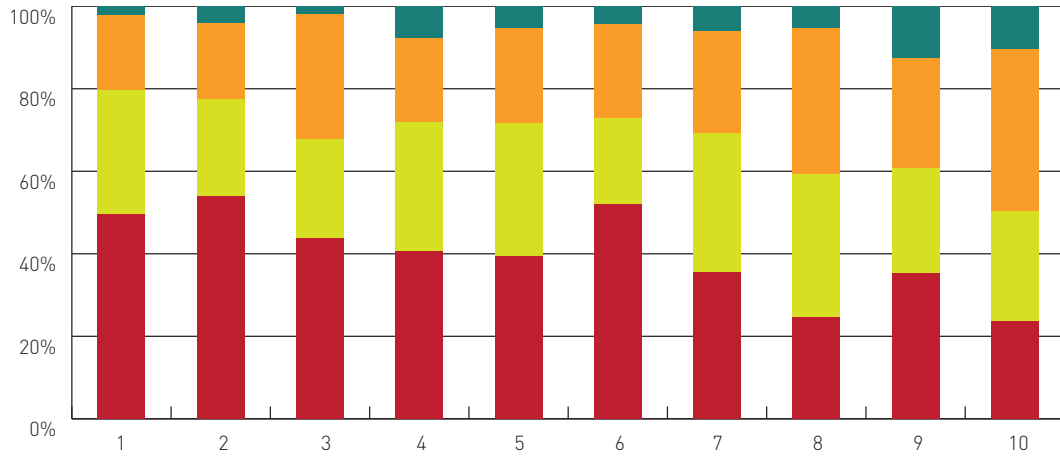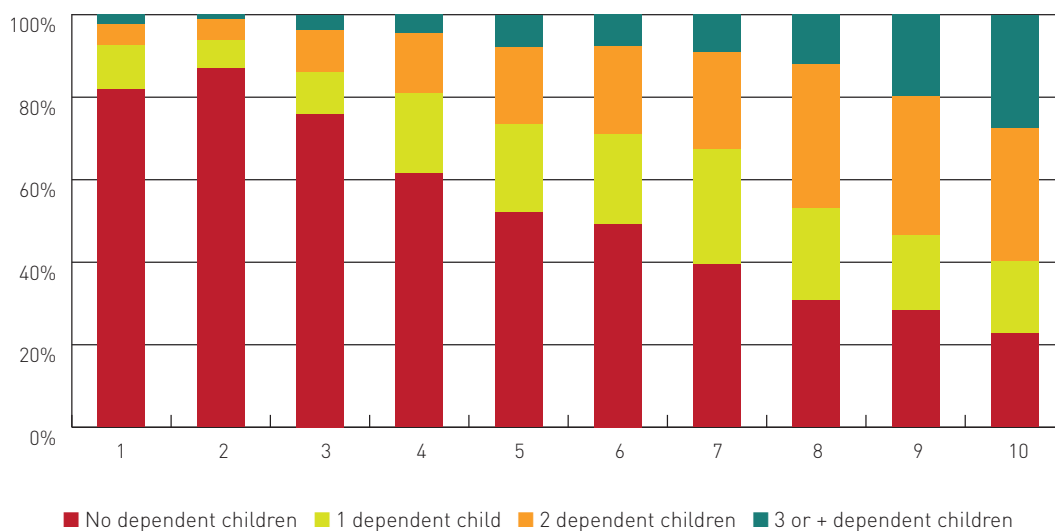
Couple's average age is under 35

Couple's average age is 35-50
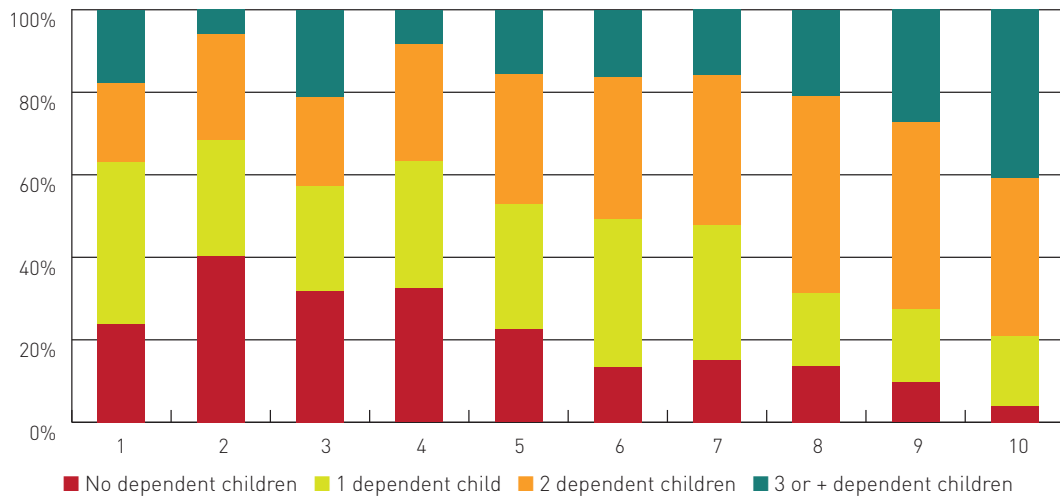
■ No dependent children ■ 1 dependent child ■ 2 dependent children ■ 3 or + dependent children

(continued)

All couples

Source: SILC Belgium 2006, our calculations

Table 23 shows the ratios between women's and men's individual net incomes for all couples and for the two age groups studied, according to the number of dependent children.

TABLE 23 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUAL NET INCOMES WITHIN COUPLES BY NUMBER OF DEPENDENT CHILDREN

Dependent children	‹ 35 years	35-50 years	› 50 years	Total
0	0.76	0.66	0.40	0.49
1	0.69	0.59	0.49	0.61
2	0.61	0.59	*0.45*	0.58
3 or +	*0.48*	0.51	*0.90*	0.52
Total	0.68	0.57	0.41	0.54

Source: SILC Belgium 2006, our calculations

Income disparities between women and men in couples as a whole are higher than among the youngest age groups, regardless of the number of dependent children. For couples as a whole, the greatest disparities are observed in childless couples; they are lowest when the couple has one dependent child, and increase again when there are two, and particularly three dependent children.

As regards the youngest couples, however, inequality increases with the number of dependent children: from 24% without a child to 39% if there are two children. The same profile can be observed in couples in the middle age group, where the disparities are always higher than among the youngest couples.

We may therefore conclude from this analysis that disparities within couples increase with the number of children: the observation of a high degree of inequality within childless couples as a whole bears witness to a generational effect, which is less marked in the case of the younger age brackets.

FIGURE 6 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN AND NUMBER OF FINANCIALLY DEPENDENT PARTNERS
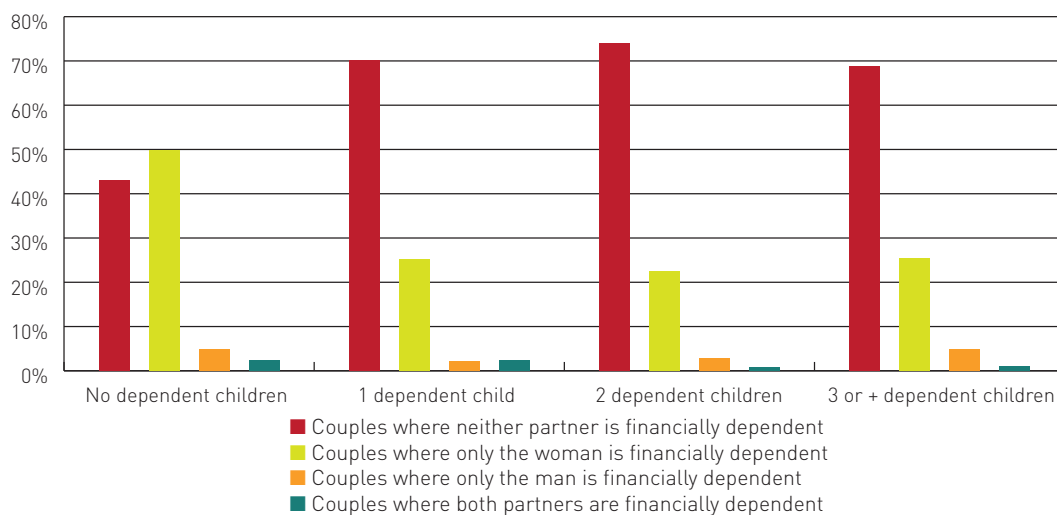
Couples whose average age is under 35
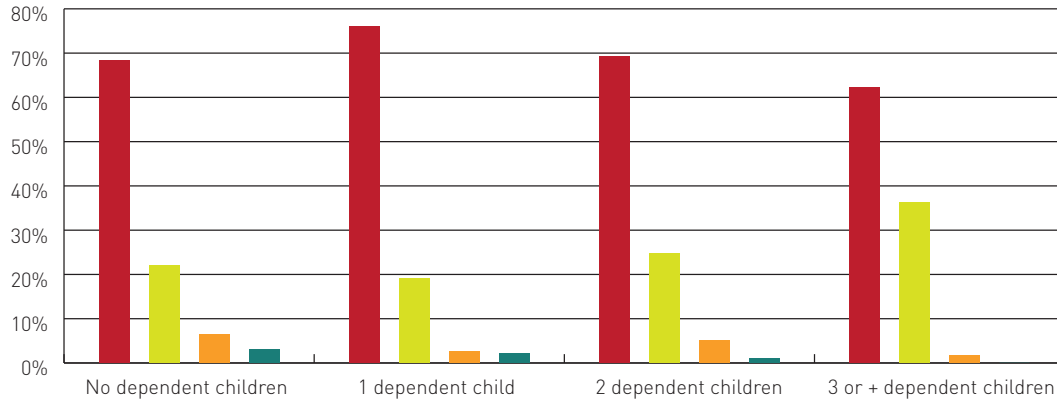
Couples whose average age is between 35 and 50
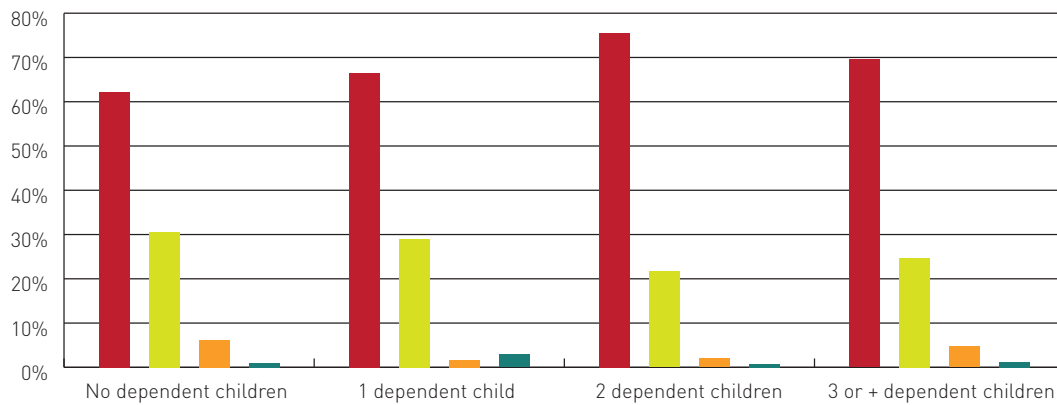
All couples

■ Couples where neither partner is financially dependent
■ Couples where only the woman is financially dependent
■ Couples where only the man is financially dependent
■ Couples where both partners are financially dependent

Source: EU-SILC 2006, our calculations

TABLE 24 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN AND NUMBER OF FINANCIALLY DEPENDENT PARTNER

Couples whose average age is under 35

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	68.41%	*22.03%*	*6.50%*	*3.07%*	100.00%
1 dependent child	76.05%	*19.11%*	*2.67%*	*2.18%*	100.00%
2 dependent children	69.21%	*24.65%*	*5.03%*	*1.10%*	100.00%
3 or more dependent children	*62.24%*	*36.15%*	*1.61%*	*0.00%*	*100.00%*
Total	70.45%	22.71%	*4.72%*	*2.12%*	100.00%

Couples whose average age is between 35 and 50

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	62.19%	*30.55%*	*6.22%*	*1.04%*	100.00%
1 dependent child	66.49%	28.93%	*1.66%*	*2.93%*	100.00%
2 dependent children	75.58%	21.67%	*2.02%*	*0.73%*	100.00%
3 or more dependent children	69.55%	24.64%	*4.69%*	*1.13%*	100.00%
Total	69.82%	25.57%	*3.19%*	*1.42%*	100.00%

All couples

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	42.96%	49.91%	4.80%	2.34%	100.00%
1 dependent child	70.25%	25.26%	2.21%	2.29%	100.00%
2 dependent children	73.90%	22.46%	2.84%	0.81%	100.00%
3 or more dependent children	68.76%	25.42%	4.90%	0.91%	100.00%
Total	55.00%	38.75%	4.11%	2.14%	100.00%

Source: SILC Belgium 2006, our calculations

As regards financial dependence, Figure 6 and Table 24 show the distribution of couples according to financial dependence and the number of dependent children, for the two age groups studied and for couples as a whole.

The percentage of couples where only the woman is financially dependent is 26% for couples whose average age is between 35 and 50, and 23% for younger couples.

The percentage of couples where neither partner is financially dependent at first increases with the number of dependent children, and then decreases when the number of children grows (more than two for the youngest couples, and more than three for couples whose average age is between 35 and 50). This percentage is highest for those under 35 when they have one dependent child, and lowest when there are three or more dependent children (even if the small number of couples in this category calls for a degree of caution when interpreting the data). As regards couples in the middle age group, the percentage of couples where neither partner is financially dependent is highest when there are two dependent children.

The percentage of couples where only the woman is financially dependent decreases with the first child, but then increases from the second child onwards for the under 35s. For couples whose average age is between 35 and 50, the situation is inverted because the share of couples where only the woman is financially dependent decreases with the number of dependent children (excluding the increase when there are three or more dependent children).
The link between financial dependence and dependent children does not therefore seem evident from these data.

4.2   Study based on SILC Belgium 2006 and 2007

Here we revisit the analysis undertaken in section 4.1 regarding the number of dependent children within a couple, basing it this time on the observations of SILC Belgium 2006 and 2007 taken together. The approach in this section was by age group and therefore based on relatively small samples; the advantage of adding together both sets of data is to reduce the share of non-significant data while preserving the representativeness of our sample.

As shown in Table 25, the disaggregation of couples according to the average age of the two partners does not change: the under 35s represent just under a quarter of the total number of couples, and those with an average age between 35 and 50 represent 35%.

TABLE 25 • DISTRIBUTION OF COUPLES BY PARTNERS' AVERAGE AGE

	Number of couples	%
Couples whose average age is ‹ 35	1,257	23.43%
Couples whose average age is 35 - 50	1,979	35.39%
Couples whose average age is › 50	2,260	41.18%
Total	5,496	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

**TABLE 26 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN**

Dependent children	‹ 35 years	35-50 years	Total
0	41.03%	15.59%	52.38%
1	27.97%	24.16%	17.61%
2	24.14%	36.85%	19.65%
3 or +	6.85%	23.40%	10.36%
Total	100.00%	100.00%	100.00%

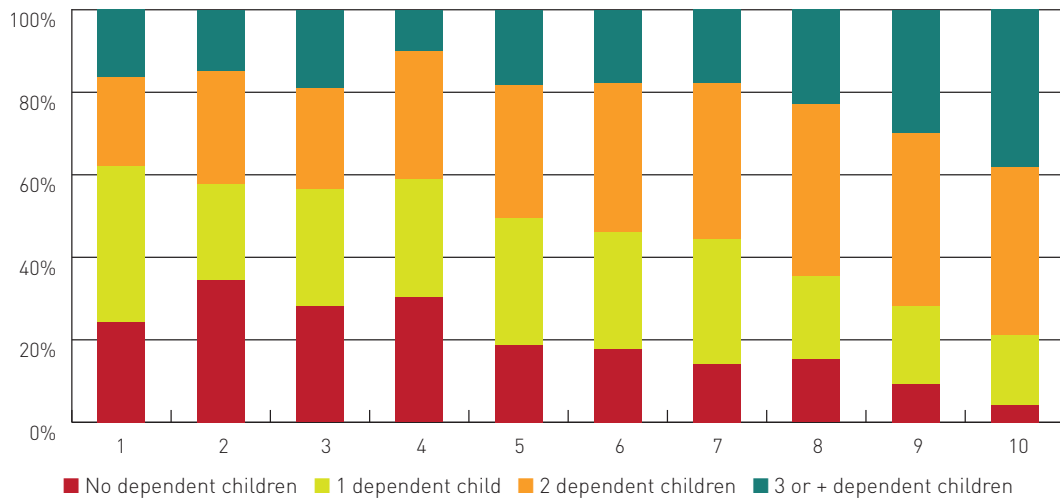Source: SILC Belgium 2006 and 2007, our calculations

The distribution of couples according to the number of dependent children is similar to that observed for SILC Belgium 2006 (Table 26): couples without children represent slightly more than half of all couples. Whereas 41% of couples aged under 35 do not have children, this percentage is only 16% for couples with an average age between 35 and 50. More than 36% of these couples have two children

FIGURE 7 • DISTRIBUTION OF COUPLES BY DECILE, ACCORDING TO THE NUMBER OF DEPENDENT CHILDREN AND THE COUPLE'S AVERAGE AGE (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)
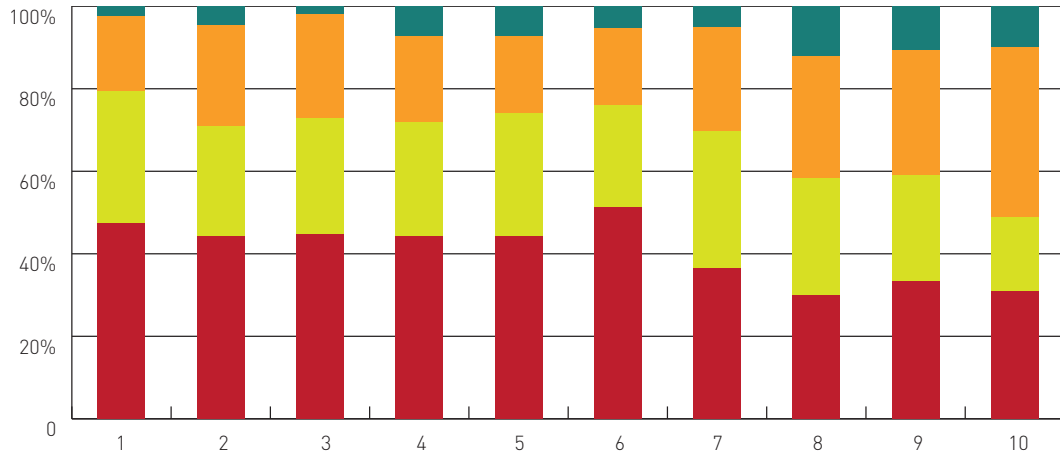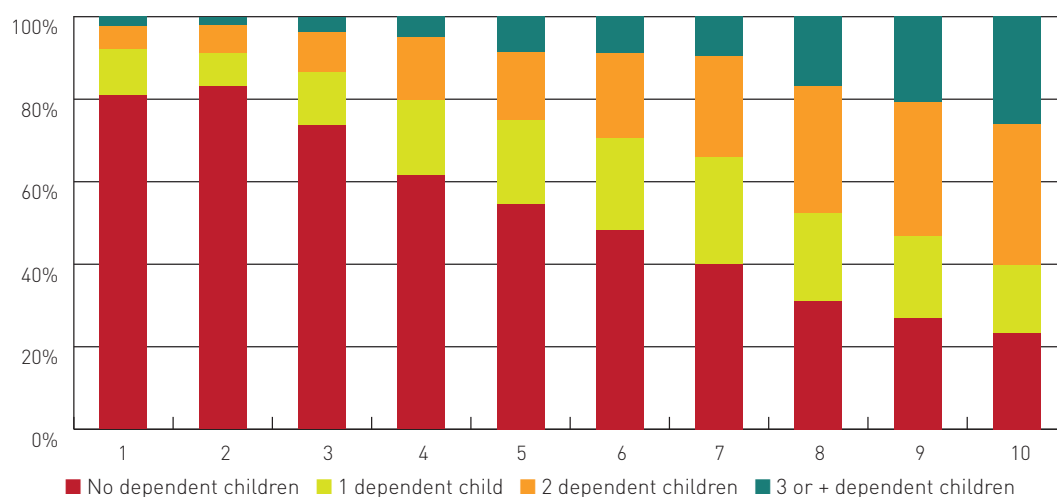
Couple's average age is under 35

Couple's average age is 35-50

■ No dependent children ■ 1 dependent child ■ 2 dependent children ■ 3 or + dependent children

(continued)

All couples

Source: SILC Belgium 2006, our calculations

For couples whose average age is under 50, income disparities between partners increase with the number of dependent children, while the inequality is lower for childless couples (Figure 7 and Table 27). Couples with an average age between 35 and 50, however, show greater disparities than younger couples, regardless of the number of children.

TABLE 27 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUAL NET INCOMES WITHIN COUPLES BY NUMBER OF DEPENDENT CHILDREN

Dependent children	‹ 35 years	35-50 years	› 50 years	Total
0	0.77	0.67	0.41	0.50
1	0.66	0.59	0.50	0.60
2	0.61	0.58	0.46	0.58
3 or +	0.50	0.52	0.65	0.53
Total	0.67	0.58	0.42	0.54

Source: SILC Belgium 2006, our calculations

Concerning financial dependence, Figure 8 and Table 28 show the distribution of couples according to financial dependence and the number of dependent children, for the two age groups studied and for couples as a whole.

The percentage of couples where only the woman is financially dependent is 25% for couples with an average age between 35 and 50, and 23% for the youngest couples.
The percentage of couples where neither partner is financially dependent at first increases with the

number of dependent children, and then decreases when the number of children grows (more than two for the youngest couples, and more than three for couples whose average age is between 35 and 50); the percentage is highest for the under 35s when they have one dependent child, and lowest when there are three or more dependent children. As regards couples in the middle age group, the percentage of couples where neither partner is financially dependent is highest when there are two dependent children. For the under 35s, the percentage of couples where only the woman is financially dependent increases with the number of dependent children. For couples whose average age is between 35 and 50, the percentage of couples where only the woman is financially dependent is highest when there are no children or only one dependent child; it is lowest when there are two dependent children.

The link between financial dependence and dependent children does not therefore seem evident from these data.

FIGURE 8 • DISTRIBUTION OF COUPLES BY THE NUMBER OF DEPENDENT CHILDREN AND THE NUMBER OF FINANCIALLY DEPENDENT PARTNERS

Couples whose average age is under 35
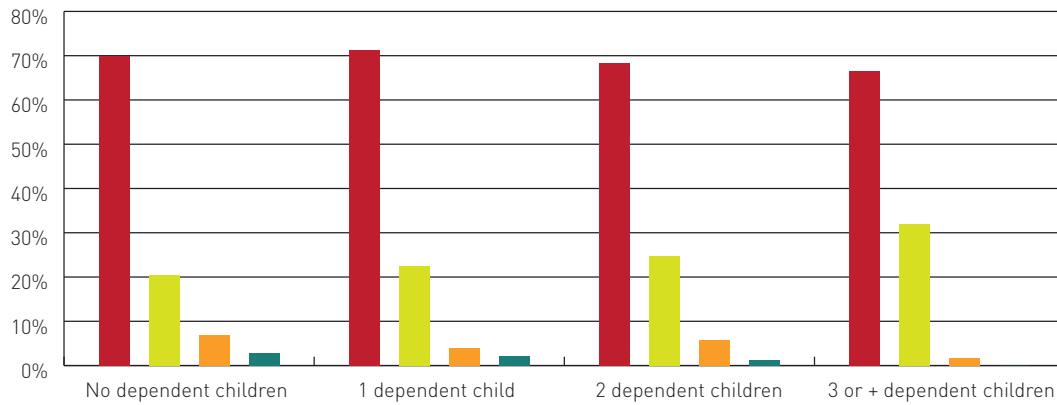
Couples whose average age is 35-50
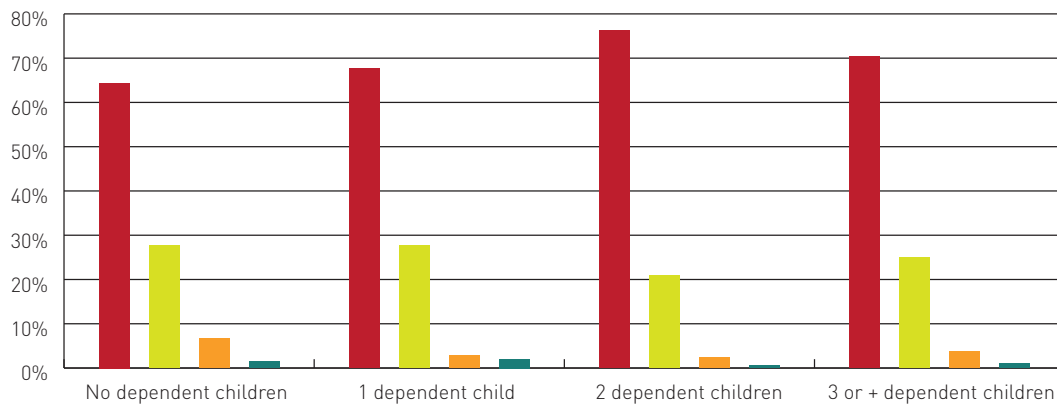
All couples

- Couples where neither partner is financially dependent
- Couples where only the woman is financially dependent
- Couples where only the man is financially dependent
- Couples where both partners are financially dependent

Source: SILC Belgium 2006 and 2007, our calculations

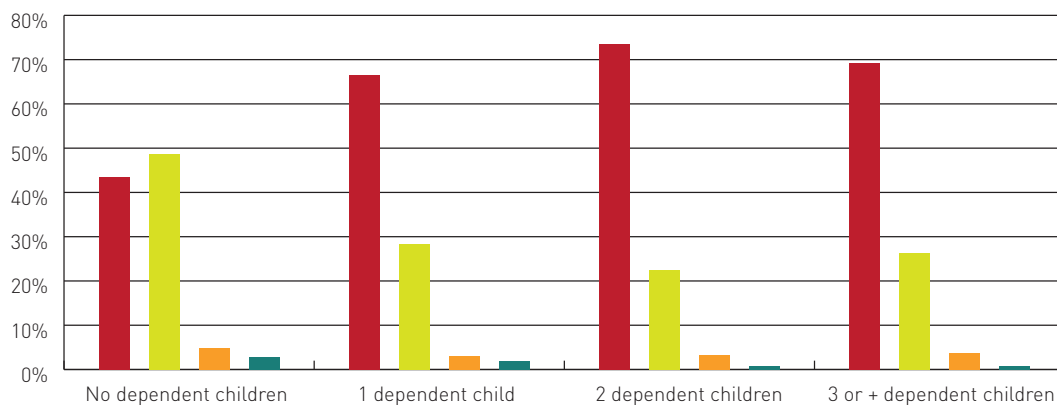**TABLE 28 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN AND NUMBER OF FINANCIALLY DEPENDENT PARTNERS**

Couples whose average age is under 35

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	69.99%	20.42%	6.87%	2.72%	100.00%
1 dependent child	71.37%	22.51%	3.99%	2.13%	100.00%
2 dependent children	68.34%	24.77%	5.71%	1.18%	100.00%
3 or more dependent children	66.48%	31.93%	1.59%	0.00%	100.00%
Total	69.74%	22.84%	5.42%	2.00%	100.00%

Couples whose average age is 35-50

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	64.39%	27.63%	6.57%	1.42%	100.00%
1 dependent child	67.56%	27.63%	2.77%	2.04%	100.00%
2 dependent children	76.23%	20.88%	2.35%	0.55%	100.00%
3 or more dependent children	70.34%	24.90%	3.75%	1.00%	100.00%
Total	70.91%	24.50%	3.44%	1.15%	100.00%

All couples

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	43.54%	48.78%	4.78%	2.89%	100.00%
1 dependent child	66.59%	28.38%	3.05%	1.98%	100.00%
2 dependent children	73.44%	22.52%	3.26%	0.77%	100.00%
3 or more dependent children	69.22%	26.31%	3.66%	0.80%	100.00%
Total	56.14%	37.70%	4.06%	2.10%	100.00%

Source: SILC Belgium 2006, our calculations

The activity status definitions used in this section are those previously set out in our study. The distinction between full- and part-time work is drawn according to the number of months worked during the reference period under one status or another.

FIGURE 9 • DISTRIBUTION OF MEN ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER
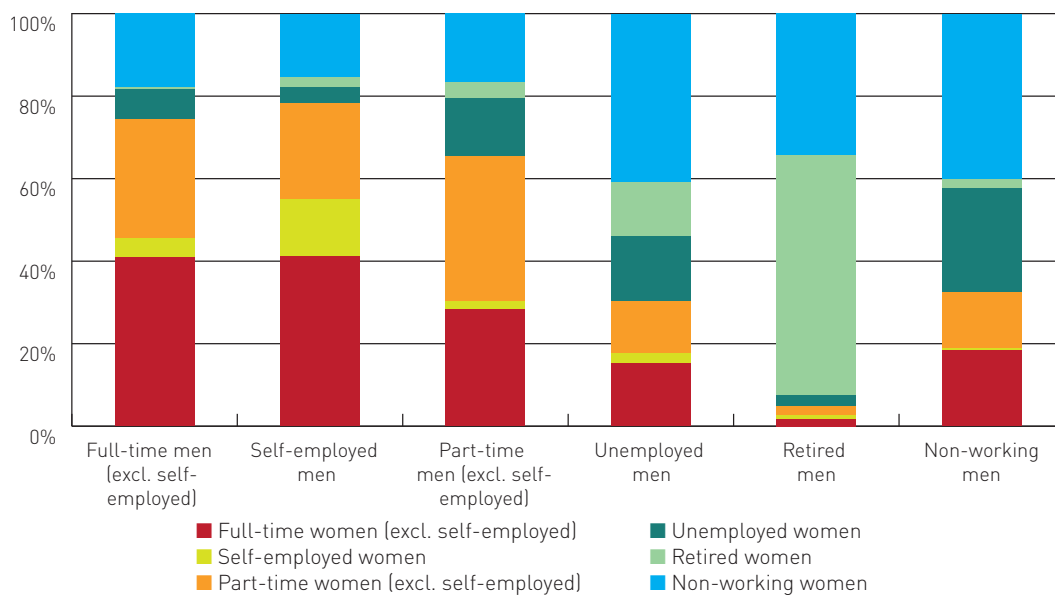
Source: EU-SILC 2006, our calculations

The most frequent combinations (Figure 9 and Table 29) are as follows:

- 21% of couples comprise two full-time workers
- 15% comprise a man working full-time and a woman working part-time
- 14% comprise two retired people
- 9% comprise a man working full-time and a non-working woman
- 8% comprise a retired man and a non-working woman
- 4% comprise a self-employed man and a woman working full-time
- 75% of women working full-time, 74% of women working part-time and 51% of non-working women live with a man working full-time.
- 89% of retired women live with a retired man.

TABLE 29 • DISTRIBUTION OF MEN AND WOMEN ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

		Women						
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	Total
Men	Full-time (excluding self-employed)	40.90%	4.79%	28.74%	7.17%	0.53%	17.87%	100.00%
	Self-employed	41.13%	13.85%	23.24%	3.9%	2.44%	15.43%	100.00%
	Part-time (excluding self employed)	28.24%	2.10%	35.12%	14.07%	3.68%	16.80%	100.00%
	Unemployed	15.20%	2.55%	12.49%	15.83%	12.98%	40.94%	100.00%
	Retired	1.79%	0.76%	2.42%	2.64%	58.16%	34.23%	100.00%
	Non-working	18.36%	0.51%	13.68%	25.01%	2.26%	40.17%	100.00%

		Women					
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unemployed	Retired	Non-working
Men	Full-time (excluding self-employed)	75.08%	58.61%	73.67%	50.90%	1.81%	39.02%
	Self-employed	13.77%	30.91%	10.86%	5.05%	1.53%	6.15%
	Part-time (excluding self-employed)	3.18%	1.58%	5.53%	6.14%	0.78%	2.25%
	Unemployed	3.78%	4.23%	4.34%	15.23%	6.05%	12.12%
	Retired	1.00%	4.17%	2.77%	8.35%	89.21%	33.00%
	Non-working	3.00%	0.51%	2.83%	14.33%	1.00%	7.00%
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

(continued)

		Women						Total
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	
Men	Full-time (excluding self-employed)	21.46%	2.51%	15.08%	3.76%	0.28%	9.37%	52.46%
	Self-employed	3.93%	1.33%	2.22%	0.37%	0.23%	1.48%	9.56%
	Part-time (excluding self-employed)	0.91%	0.07%	1.13%	0.45%	0.12%	0.54%	3.22%
	Unemployed	1.08%	0.18%	0.89%	1.13%	0.92%	2.91%	7.11%
	Retired	0.42%	0.18%	0.57%	0.62%	13.62%	8.02%	23.43%
	Non-working	0.78%	0.02%	0.58%	1.06%	0.10%	1.70%	4.24%
	Total	28.58%	4.29%	20.47%	7.39%	15.27%	24.02%	100.00%

Source: SILC Belgium 2006, our calculations

Table 30 shows the ratios between partners' individual net incomes according to their activity status.
In all cases, men working full-time have a higher average income than their partner. The gap is smallest if the woman also works full-time (18%), and largest if the woman does not work (88%). For all other types of activity status, the man's average income is less than his partner's if she works full-time (except for the self-employed), and if she works part-time where he is unemployed. We can therefore clearly see the extent to which full-time work is the best mechanism to protect women from inequality within the couple.

TABLE 30 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

		Women					
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unemployed	Retired	Non-working
Men	Full-time (excluding self-employed)	0.82	0.43	0.57	0.31	0.24	0.12
	Self-employed	0.77	0.89	0.56	0.61	0.37	0.15
	Part-time (excluding self-employed)	1.11	1.01	0.71	0.50	0.62	0.13
	Unemployed	1.55	2.23	1.07	0.78	0.80	0.17
	Retired	1.17	1.20	0.76	0.64	0.45	0.09
	Non-working	1.65	0.07	0.97	0.92	1.14	0.32

Source: SILC Belgium 2006, our calculations

Like Table 30, looking at couples, Table 31 shows income ratios according to the different combinations of activity status for women and men in the population as a whole.

Whereas the income ratio for men working full-time is the same as for couples (0.81 in the population as a whole, compared with 0.82 in couples), all other income ratios for which there are sufficient observations are lower for couples; this is particularly the case for all types of activity status for women, apart from full-time female workers compared with full-time male workers.

It is important to note that these income ratios, calculated on the basis of the population as a whole, also include couples' incomes. It illustrates, therefore, that by taking into account people not living in couples, the disparities observed within couples are reduced.

TABLE 31 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUALISED NET INCOMES BY ACTIVITY STATUS (TOTAL POPULATION)

		Women						Total
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	
Men	Full-time (excluding self-employed)	0.81	0.66	0.63	0.43	0.44	0.16	0.51
	Self-employed	0.82	0.67	0.65	0.44	0.44	0.16	0.52
	Part-time (excluding self-employed)	1.00	0.82	0.78	0.53	0.54	0.20	0.64
	Unemployed	1.57	1.29	1.23	0.84	0.85	0.31	1.00
	Retired	1.24	1.01	0.97	0.66	0.67	0.24	0.79
	Non-working	2.10	1.71	1.65	1.12	1.13	0.41	1.34
	Total	0.97	0.79	0.76	0.52	0.52	0.19	0.62

Source: SILC Belgium 2006, our calculations

If we distinguish between couples where the man's income is higher than the woman's, and couples where the woman's income is higher than the man's (Table 32), we note that if we compare couples where the man has a higher income than the woman with couples as a whole (Table 30), the man less often lives with a woman working full-time (-8%), more often with a woman working part-time (+2%), and also more often with a non-working woman (+6%). The structure is very different if we look at couples where the woman has a higher income than the man: 29% of these couples are made up of two full-time workers.

TABLE 32 • DISTRIBUTION OF MEN AND WOMEN ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

Couples where the man has a higher income

Men		Women						Total
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	
	Full-time (excluding self-employed)	17.83%	2.68%	17.45%	4.63%	0.32%	11.91%	54.82%
	Self-employed	2.57%	0.88%	2.06%	0.38%	0.26%	1.81%	7.96%
	Part-time (excluding self-employed)	0.41%	0.04%	1.12%	0.54%	0.10%	0.70%	2.91%
	Unemployed	0.34%	0.04%	0.3%	0.87%	0.79%	3.44%	5.78%
	Retired	0.14%	0.09%	0.31%	0.63%	14.26%	10.16%	25.59%
	Non-working	0.15%	0.03%	0.34%	0.61%	0.05%	1.77%	2.95%
	Total	21.44%	3.76%	21.58%	7.66%	15.78%	29.79%	100.00%

Couples where the woman has a higher income

Men		Women						Total
		Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	
	Full-time (excluding self-employed)	28.57%	2.02%	5.74%	0.70%	0.16%	0.58%	37.77%
	Self-employed	10.12%	2.93%	3.00%	0.50%	0.21%	0.21%	16.97%
	Part-time (excluding self-employed)	3.20%	0.20%	1.03%	0.19%	0.00%	0.00%	4.62%
	Unemployed	4.97%	0.71%	3.13%	2.11%	1.22%	1.26%	13.40%
	Retired	1.89%	0.65%	1.30%	0.79%	11.62%	0.89%	17.14%
	Non-working	3.79%	0.00%	1.70%	3.32%	0.36%	0.96%	10.13%
	Total	52.54%	6.51%	15.90%	7.61%	13.57%	3.90%	100.00%

Couples where both partners have equivalent incomes (margin of 5%)

	Women						Total
	Full-time (excluding self-employed)	**Self-employed**	**Part-time (excluding self-employed)**	**Unem-ployed**	**Retired**	**Non-working**	
Full-time (excluding self-employed)	48.37%	1.71%	10.06%	1.03%	0.00%	0.79%	61.96%
Self-employed	4.65%	2.71%	2.17%	0.00%	0.00%	0.60%	10.13%
Part-time (excluding self-employed)	1.09%	0%	1.56%	0.00%	0.00%	0.00%	2.65%
Unemployed	0.00%	0.58%	2.37%	1.66%	1.84%	0.60%	7.05%
Retired	0.00%	0.00%	1.91%	0.00%	10.90%	0.00%	12.81%
Non-working	0.63%	0.00%	0.60%	0.71%	0.00%	2.76%	4.70%
Total	54.74%	5.00%	18.67%	3.40%	12.74%	4.75%	100.00%

(Men — row group label)

Source: SILC Belgium 2006, our calculations

In all cases, the situation in terms of income equality within couples is more favourable to women when they work full-time. It is important to note that the small size of sub-samples of men and women in couples according to their activity status renders a detailed commentary on Table 33 difficult.

TABLE 33 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

Couples where the man's income is higher

		Women					
		Full-time (excluding self-employed)	**Self-employed**	**Part-time (excluding self-employed)**	**Unem-ployed**	**Retired**	**Non-working**
Men	Full-time (excluding self-employed)	0.69	0.32	0.53	0.29	*0.22*	0.11
	Self-employed	0.31	*0.52*	*0.43*	*0.25*	*0.29*	*0.14*
	Part-time (excluding self-employed)	*0.75*	*0.78*	*0.61*	*0.48*	*0.45*	*0.13*
	Unemployed	*0.66*	*0.08*	*0.39*	*0.54*	*0.61*	0.11
	Retired	*0.74*	*0.63*	*0.39*	*0.50*	0.31	0.07
	Non-working	*0.74*	*0.07*	*0.61*	*0.37*	*0.62*	*0.22*

Couples where the woman's income is higher

		Women					
		Full-time (excluding self-employed)	**Self-employed**	**Part-time (excluding self-employed)**	**Unem-ployed**	**Retired**	**Non-working**
Men	Full-time (excluding self-employed)	1.27	*1.78*	*1.27*	*1.44*	*2.26*	*1.39*
	Self-employed	*3.48*	*2.44*	*2.84*	*18.36*	*1.39*	*1.10*
	Part-time (excluding self-employed)	*1.53*	*1.68*	*1.67*	*1.18*	-	-
	Unemployed	*2.16*	*4.27*	*1.82*	*1.55*	*1.38*	*1.75*
	Retired	*1.38*	*1.53*	*1.47*	*1.35*	1.44	*1.63*
	Non-working	*2.16*	-	*1.85*	*2.65*	*1.77*	*4.16*

Source: SILC Belgium 2006, our calculations

Table 34 shows the rates of financial dependence according to the activity status of both partners. Financial dependence rates are lower for full-time workers. Nevertheless, regardless of activity status, financial dependence rates are always lower for men. Non-working men and women are most susceptible to the highest rates of financial dependence.

TABLE 34 • RATES OF FINANCIAL DEPENDENCE BY ACTIVITY STATUS OF BOTH PARTNERS

			Woman's activity status						Total
			Full-time (excluding self-employed)	Self-employed	Part-time (excluding self-employed)	Unem-ployed	Retired	Non-working	
Man's activity status	Full-time (excluding self-employed)	Women	1.97%	36.39%	13.62%	67.83%	44.86%	87.08%	27.12%
		Men	0.46%	3.08%	0.36%	1.11%	9.48%	1.02%	0.75%
	Self-employed	Women	24.90%	24.95%	12.59%	56.82%	36.20%	92.57%	34.01%
		Men	14.15%	28.35%	14.46%	30.08%	0.00%	11.05%	16.01%
	Part-time (excluding self-employed)	Women	4.14%	-	8.99%	51.42%	-	100.00%	29.38%
		Men	16.38%	-	8.40%	13.67%	-	0.00%	10.52%
	Unemployed	Women	7.63%	16.33%	22.32%	45.64%	44.30%	90.45%	54.38%
		Men	28.93%	64.23%	20.57%	23.85%	8.79%	6.82%	16.32%
	Retired	Women	100.00%	16.47%	21.68%	49.13%	64.24%	94.67%	71.72%
		Men	8.19%	22.34%	12.23%	10.27%	7.36%	3.38%	6.51%
	Non-working	Women	0.00%	-	6.65%	29.88%	-	85.23%	42.62%
		Men	39.76%	-	17.03%	41.08%	-	27.28%	30.87%
	Total	Women	5.33%	31.18%	13.65%	55.89%	61.35%	90.52%	40.89%
		Men	4.11%	14.98%	4.25%	13.34%	7.27%	4.96%	6.26%

Source: SILC Belgium 2006, our calculations

Table 35 shows that the proportion of couples where neither partner is financially dependent is highest when both work full-time, or when the man works full-time and the woman part-time. The proportion is very low if the woman does not work, even if the man works full-time (it is important to note that most of the data in Table 36 should be interpreted with caution given the small size of certain sub-samples). The proportion of couples where only the woman is financially dependent is highest when the woman does not work, regardless of her partner's activity status. It is the same for men: the proportion of couples where only the man is financially dependent is highest when the man does not work, regardless of his partner's activity status. Finally, the risk of financial dependence is highest for both partners in a couple if neither of them works. This table illustrates, therefore, the protective effect of economic activity in terms of financial dependence.

TABLE 35 • DISTRIBUTION OF COUPLES BY NUMBER OF FINANCIALLY DEPENDENT PARTNERS IN THE COUPLE AND ACTIVITY STATUS OF BOTH PARTNERS

Man's activity status	Woman's activity status																												
	Full-time (excluding self-employed)				Self-employed				Part-time (excluding self-employed)				Unemployed				Retired				Non-working				Total			
	0	W	M	2	0	W	M	2	0	W	M	2	0	W	M	2	0	W	M	2	0	W	M	2	0	W	M	2
Full-time (excluding self-employed)	97.9%	1.6%	0.1%	0.3%	60.5%	36.4%	3.1%	0.0%	86.2%	13.5%	0.2%	0.2%	31.1%	67.8%	1.1%	0.0%	45.7%	44.9%	9.5%	0.0%	12.9%	86.1%	0.0%	1.0%	72.5%	26.8%	0.4%	0.4%
Self-employed	63.3%	22.6%	11.8%	2.3%	59.4%	12.2%	15.7%	12.7%	74.7%	10.8%	12.7%	1.8%	21.3%	47.9%	21.9%	8.9%	63.8%	36.2%	0.0%	0.0%	7.4%	81.5%	0.0%	11.1%	55.1%	28.9%	10.9%	5.2%
Part-time (excluding self-employed)	79.5%	4.1%	16.4%	0.0%	-	-	-	-	82.6%	9.0%	8.4%	0.0%	41.6%	44.8%	7.0%	6.7%	-	-	-	-	0.0%	100.0%	0.0%	0.0%	62.1%	27.4%	8.6%	2.0%
Unemployed	63.4%	7.6%	28.9%	0.0%	19.4%	16.3%	64.2%	0.0%	63.6%	15.8%	14.1%	6.5%	42.4%	33.8%	12.0%	11.9%	55.7%	35.5%	0.0%	8.8%	7.0%	86.2%	2.6%	4.3%	34.9%	48.8%	10.7%	5.6%
Retired	91.8%	0.0%	8.2%	0.0%	61.2%	16.5%	22.3%	0.0%	58.1%	21.7%	20.2%	0.0%	40.6%	49.1%	10.3%	0.0%	31.7%	61.0%	4.1%	3.3%	4.3%	92.3%	1.0%	2.4%	24.5%	69.0%	3.8%	2.7%
Non-working	60.2%	0.0%	39.8%	0.0%	-	-	-	-	76.3%	6.7%	17.0%	0.0%	29.0%	29.9%	41.1%	0.0%	-	-	-	-	8.7%	64%	6.1%	21.2%	35.0%	34.1%	22.4%	8.5%
Total	90.1%	4.8%	4.5%	0.6%	58.5%	26.5%	10.3%	4.7%	82.7%	13.1%	3.6%	0.6%	33.4%	53.2%	10.7%	2.7%	34.8%	57.9%	3.8%	3.5%	8.4%	86.6%	1.1%	3.9%	55.0%	38.8%	4.1%	2.1%

Note: 0: Couples where neither partner is financially dependent; W: Couples where only the woman is financially dependent; M: Couples where only the man is financially dependent; 2: Couples where both partners are financially dependent.

Source: SILC Belgium 2006, our calculations

**FIGURE 10 • DISTRIBUTION OF MEN ACCORDING TO THEIR LEVEL OF EDUCATIONAL ATTAIN-
MENT AND THAT OF THEIR PARTNER**
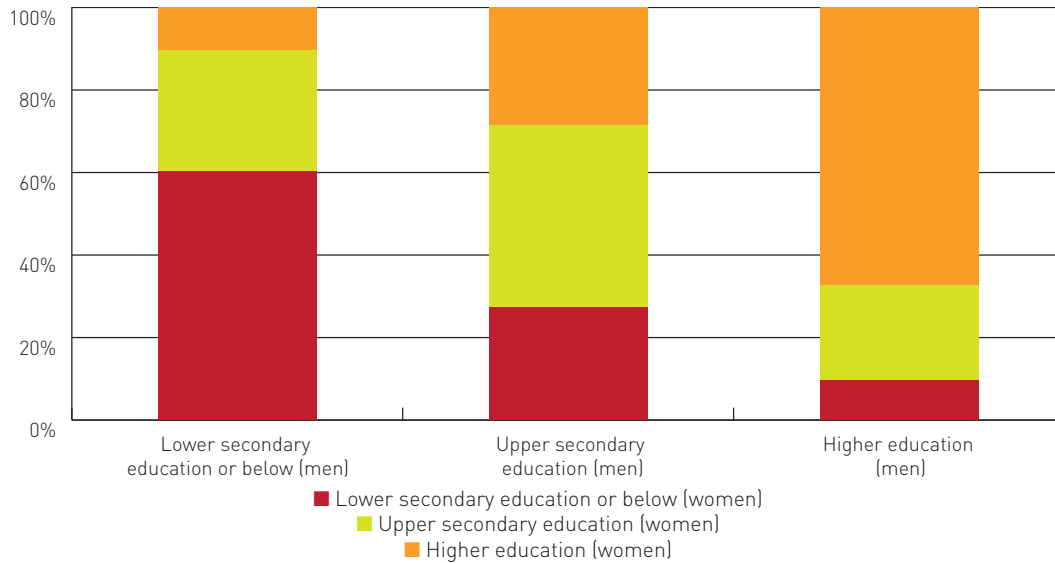
Source: EU-SILC 2006, our calculations

In our sample, women's and men's levels of educational attainment are very similar (40% of men and 39% of women have received higher education; 33% of men and 32% of women are educated to upper secondary level; 26% of men and 29% of women are educated to lower secondary level or below) (Table 36).

58% of couples are made up of members with the same level of educational attainment (higher: 27%; upper secondary: 15%; lower secondary or below: 16%) (Table 36).

67% of men and 69% of women who have received higher education live with someone who has the same level of educational attainment.

TABLE 36 • DISTRIBUTION OF WOMEN AND MEN ACCORDING TO THEIR OWN LEVEL OF EDUCATIONAL ATTAINMENT AND THAT OF THEIR PARTNER

	Woman's educational level			Total
Man's educational level	**Lower secondary education or below**	**Upper secondary education**	**Higher education**	
Lower secondary education or below	60.33%	29.23%	10.44%	100.00%
Upper secondary education	27.19%	44.27%	28.54%	100.00%
Higher education	9.68%	22.89%	67.44%	100.00%

	Woman's educational level		
Man's educational level	**Lower secondary education or below**	**Upper secondary education**	**Higher education**
Lower secondary education or below	55.18%	24.39%	7.02%
Upper secondary education	31.38%	46.61%	24.18%
Higher education	13.44%	29.00%	68.80%
Total	100.00%	100.00%	100.00%

	Woman's educational level			Total
Man's educational level	**Lower secondary education or below**	**Upper secondary education**	**Higher education**	
Lower secondary education or below	15.96%	7.73%	2.76%	26.45%
Upper secondary education	9.07%	14.77%	9.52%	33.36%
Higher education	3.89%	9.19%	27.09%	40.17%
Total	28.92%	31.69%	39.37%	100.00%

Source: SILC Belgium 2006, our calculations

TABLE 37 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN LEVEL OF EDUCATIONAL ATTAINMENT AND THAT OF THEIR PARTNER
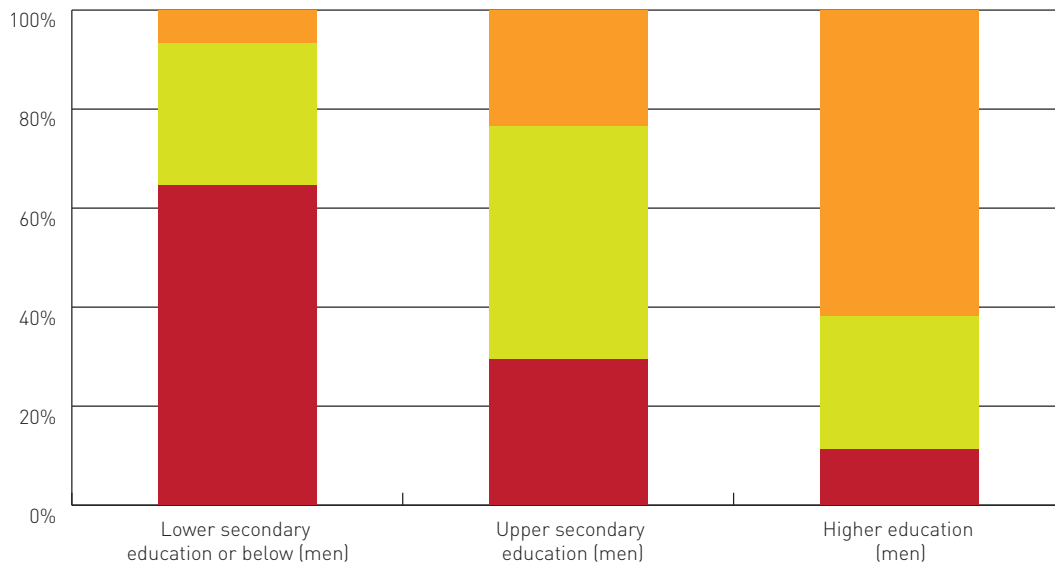
	Individualised average income ratios	Woman's educational level		
		Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	0.37	0.48	0.83
	Upper secondary education	0.39	0.51	0.74
	Higher education	0.29	0.41	0.64

Source: SILC Belgium 2006, our calculations

Income disparities are mainly a function of the woman's educational level: they are highest where the woman's educational level is lowest (61% to 71%), and lowest where her educational level is highest (17% to 36%) (Table 37). Nevertheless, there is a significant gap where the man and the woman have both received higher education (36%).

TABLE 38 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO LEVEL OF EDUCATIONAL ATTAINMENT (TOTAL POPULATION)

		Woman's educational level			Total
		Lower secondary education or below	Upper secondary education	Higher education	
Man's educational level	Lower secondary education or below	0.56	0.73	1.13	0.82
	Upper secondary education	0.46	0.60	0.93	0.67
	Higher education	0.34	0.44	0.69	0.50
	Total	0.42	0.55	0.86	0.62

Source: SILC Belgium 2006, our calculations

Table 38 presents income ratios calculated for the population as a whole according to women's and men's level of educational attainment. The table shows that income disparities are higher at all levels in couples compared with the total population. Comparing tables 37 and 38, it can be seen that the differences are most marked for the lowest levels of education, and they decrease as the level of educational attainment increases (5% when both the man and woman have received higher education).

FIGURE 11 • DISTRIBUTION OF WOMEN ACCORDING TO THEIR OWN LEVEL OF EDUCATIONAL ATTAINMENT AND THAT OF THEIR PARTNER

Couples where the man's income is higher

Couples where the woman's income is higher

■ Lower secondary education or below (women)
■ Upper secondary education (women)
■ Higher education (women)
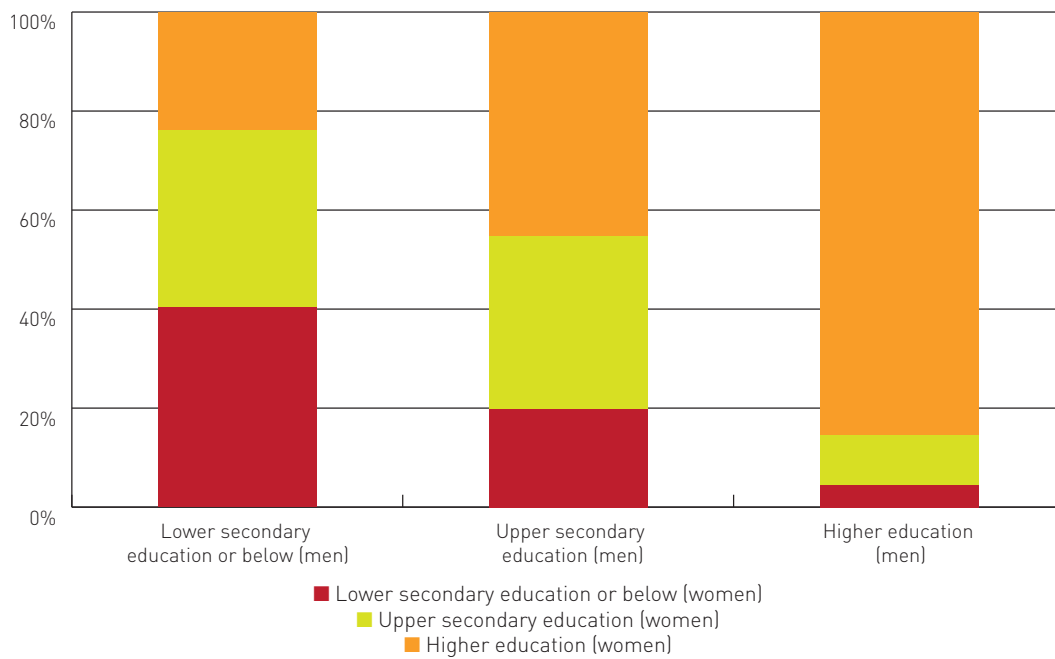
Source: SILC Belgium 2006, our calculations

In couples where the man has the higher income, fewer women have received higher education (34%), whereas in couples where the woman's income is higher, 55% of women have received higher education (Table 39).

TABLE 39 • DISTRIBUTION OF WOMEN ACCORDING TO THEIR OWN LEVEL OF EDUCATIONAL ATTAINMENT AND THAT OF THEIR PARTNER

Couples where the man's income is higher

		Woman's educational level			Total
		Lower secondary education or below	Upper secondary education	Higher education	
Man's educational level	Lower secondary education or below	17.25%	7.64%	*1.81%*	26.70%
	Upper secondary education	9.76%	15.67%	7.73%	33.16%
	Higher education	4.53%	10.78%	24.81%	40.12%
	Total	31.54%	34.09%	34.35%	100.00%

Couples where the woman's income is higher

		Woman's educational level			Total
		Lower secondary education or below	Upper secondary education	Higher education	
Man's educational level	Lower secondary education or below	11.22%	*9.91%*	*6.66%*	27.79%
	Upper secondary education	*6.66%*	11.64%	15.20%	33.50%
	Higher education	*1.73%*	*3.91%*	33.10%	38.74%
	Total	19.61%	25.46%	54.96%	100.00%

Source: SILC Belgium 2006, our calculations

As with couples as a whole (Table 38), income disparities are mainly a function of the woman's educational level in couples where the man's income is higher: they are highest where the woman's educational level is lowest (72% to 77%), and lowest where her educational level is highest (49% to 57%) (Table 40). In these couples, the gap is even larger when both the man and the woman have received higher education than for couples as a whole (52% in couples where the man's income is higher, compared with 36% in all couples). In couples where the woman's income is higher, income disparities do not vary much with the educational level. For combinations with a sufficient number of observations, the income ratio is between 1.57 and 1.68.

TABLE 40 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN LEVEL OF EDUCATION AND THAT OF THEIR PARTNER

Couples where the man's income is higher

		Woman's educational level		
	Individualised average income ratios	Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	0.25	0.30	*0.43*
	Upper secondary education	0.28	0.40	0.51
	Higher education	0.23	0.36	0.48

Couples where the woman's income is higher

		Woman's educational level		
	Individualised average income ratios	Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	1.57	*1.61*	*1.57*
	Upper secondary education	*1.57*	1.65	1.58
	Higher education	*1.50*	*1.64*	1.68

Source: SILC Belgium 2006, our calculations

Table 41 and Figure 12 show rates of financial dependence according to the educational levels of both partners. In all configurations, the financial dependence rates for women are significantly higher than those for men. When the man has a low educational level, his rate of dependence increases with his partner's level of educational attainment. Regardless of their own educational level, women's rates of financial dependence tend to decrease as their partner's level of educational attainment increases. Women's financial dependence rates are highest when they have a low educational level. They decrease significantly with their own level of educational attainment, but fall only slightly as their partner's educational level rises.

TABLE 41 • FINANCIAL DEPENDENCE RATES ACCORDING TO THE LEVEL OF EDUCATIONAL ATTAINMENT OF BOTH PARTNERS

<table>
<tr><td></td><td></td><td></td><td colspan="3">Woman's activity status</td><td rowspan="2">Total</td></tr>
<tr><td></td><td></td><td></td><td>Lower secondary education or below</td><td>Upper secondary education</td><td>Higher education</td></tr>
<tr><td rowspan="8">Man's educational level</td><td rowspan="2">Lower secondary education or below</td><td>Women</td><td>69.78%</td><td>54.19%</td><td>*26.68%*</td><td>60.72%</td></tr>
<tr><td>Men</td><td>7.60%</td><td>9.43%</td><td>*11.31%*</td><td>8.52%</td></tr>
<tr><td rowspan="2">Upper secondary education</td><td>Women</td><td>61.53%</td><td>40.74%</td><td>19.73%</td><td>40.40%</td></tr>
<tr><td>Men</td><td>7.84%</td><td>6.66%</td><td>5.39%</td><td>6.62%</td></tr>
<tr><td rowspan="2">Higher education</td><td>Women</td><td>68.03%</td><td>43.42%</td><td>17.37%</td><td>28.23%</td></tr>
<tr><td>Men</td><td>6.31%</td><td>2.45%</td><td>4.89%</td><td>4.47%</td></tr>
<tr><td rowspan="2">Total</td><td>Women</td><td>66.96%</td><td>44.80%</td><td>18.59%</td><td>40.89%</td></tr>
<tr><td>Men</td><td>7.50%</td><td>6.12%</td><td>5.46%</td><td>6.26%</td></tr>
</table>

Source: SILC Belgium 2006, our calculations

FIGURE 12 • DEPENDENCE RATES OF WOMEN AND MEN IN COUPLES BY LEVEL OF EDUCATIONAL ATTAINMENT

Man has lower secondary educational level or below

Women's level of education
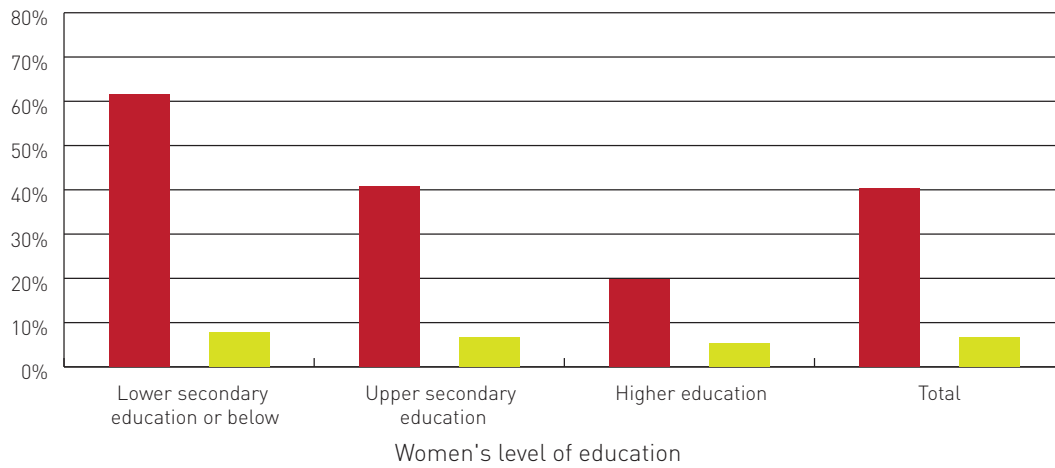
Man has higher secondary educational level

Women's level of education
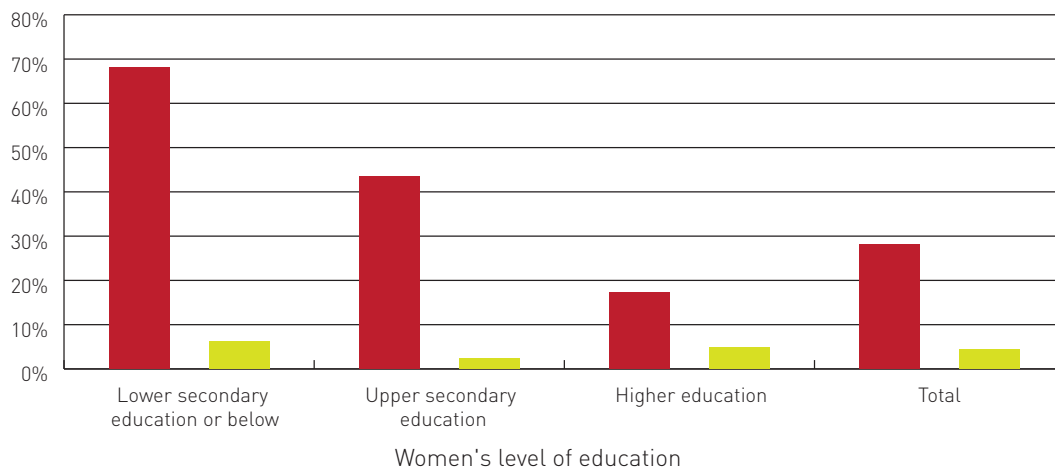
Man has a university educational level

Women's level of education

■ Women ■ Men
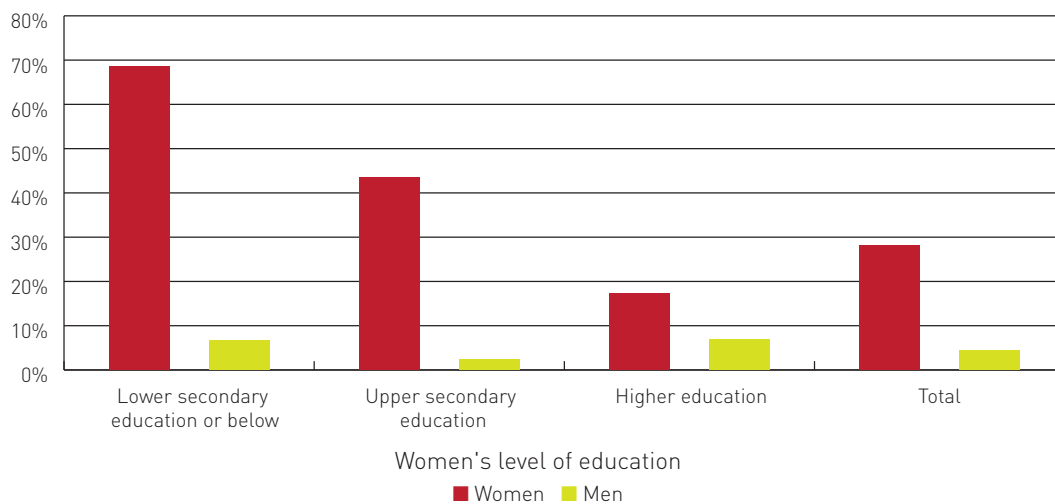
Source: SILC Belgium 2006, our calculations

The proportion of couples where neither partner is financially dependent increases with the man's and the woman's level of educational attainment (Table 42). Nevertheless, whereas for men the difference between upper secondary education and higher education is small, it is very significant for women: if the woman has a university degree, she and her partner are more likely to escape dependence than if she was only educated to upper secondary level. The lower the woman's level of education, as well as that of her partner, the higher the proportion of couples where only the woman is financially dependent (even though the difference between the upper secondary and lower secondary levels is not pronounced). The proportion of couples where only the man is financially dependent tends to increase with his partner's level of educational attainment if the man has a low educational level. Finally, the results are not significant for couples where both partners are financially dependent.

TABLE 42 • DISTRIBUTION OF COUPLES ACCORDING TO NUMBER OF DEPENDENT PARTNERS AND LEVEL OF EDUCATIONAL ATTAINMENT OF BOTH PARTNERS

Man's educational level	Woman's educational level															
	Lower secondary education or below				Upper secondary education				Higher education				Total			
	0	W	M	2	0	W	M	2	0	W	M	2	0	W	M	2
Lower secondary education or below	25.44%	66.96%	4.78%	2.82%	38.68%	51.88%	7.12%	2.31%	66.36%	22.33%	6.96%	4.35%	33.59%	57.89%	5.69%	2.83%
Upper secondary education	34.72%	57.44%	3.75%	4.09%	54.81%	38.53%	4.45%	2.21%	76.63%	17.99%	3.64%	1.74%	55.57%	37.81%	4.03%	2.59%
Higher education	28.97%	64.72%	3.00%	3.30%	54.64%	42.91%	1.94%	0.52%	79.05%	16.06%	3.58%	1.31%	68.62%	26.91%	3.15%	1.32%
Total	28.83%	63.67%	4.22%	3.28%	50.83%	43.06%	4.37%	1.74%	77.58%	16.97%	3.83%	1.63%	55.00%	38.75%	4.11%	2.14%

Note: 0: Couples where neither partner is financially dependent; W: Couples where only the woman is financially dependent; M: Couples where only the man is financially dependent; 2: Couples where both partners are financially dependent.

Source: SILC Belgium 2006, our calculations

7. COMPARISON BETWEEN MARRIED AND COHABITING COUPLES

This section is devoted to a comparison between married and cohabiting couples, looking at the profiles of these two groups as regards the average age of the couple, their level of education, the activity status of both partners and the number of dependent children. We use the SILC Belgium 2006 and 2007 databases taken together. The percentage of married couples (80%) and cohabiting couples (20%) is the same as for SILC Belgium 2006; the results are therefore similar to 2006, but their significance is greater.

7.1 Disaggregation of married and cohabiting couples by age

Table 43 and Figure 13 show the distribution of the couples by age group as well as ratios between women's and men's incomes. In more than 99% of cases, married couples have an average age of over 25 and are relatively evenly distributed between the different age groups over 25. In contrast, 55% of cohabiting couples are aged under 35.

The average income of married men is higher than that of cohabiting men in all age groups, whereas it is the opposite for women.

The ratios between women's and men's incomes are higher for cohabiting couples in all age groups. Income disparities increase with age for both married and cohabiting couples.

FIGURE 13 • DISTRIBUTION OF MARRIED AND COHABITING COUPLES ACCORDING TO THE COUPLE'S AVERAGE AGE
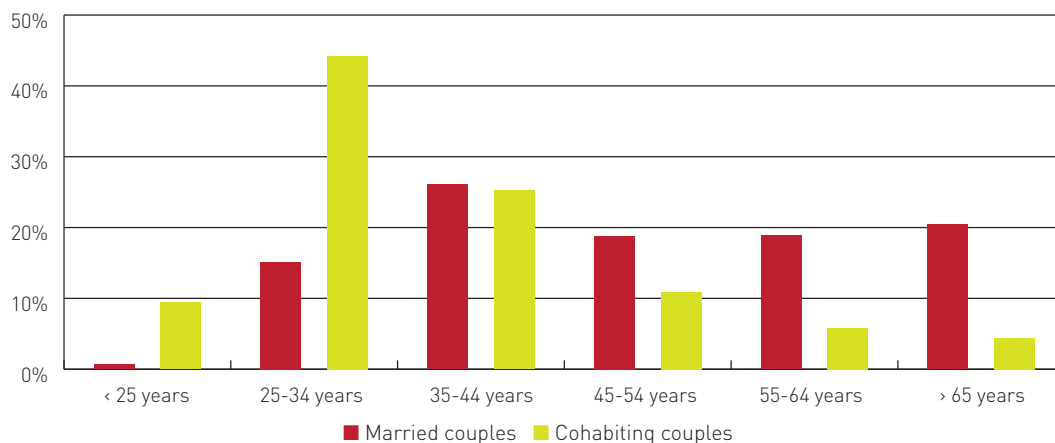
Source: SILC Belgium 2006 and 2007, our calculations

TABLE 43 • AVERAGE INCOMES AND RATIOS BETWEEN PARTNERS' INCOMES BY THE COUPLE'S AVERAGE AGE GROUP (COMPARISON BETWEEN MARRIED AND COHABITING COUPLES)

Age groups	Married couples					Cohabiting couples				
	Average income		Average income ratio	Total average income	Percentage of couples	Average income		Average income ratio	Total average income	Percentage of couples
	Woman	Man				Woman	Man			
‹ 25	*11,179*	*14,414*	*0.78*	*12,796*	*0.67%*	10,721	16,410	0.65	13,566	9.43%
25-34	14,228	22,844	0.62	18,536	15.16%	15,328	20,503	0.75	17,915	44.21%
35-44	16,263	29,233	0.56	22,748	26.08%	16,581	23,617	0.70	20,099	25.19%
45-54	13,975	26,786	0.52	20,380	18.78%	15,627	23,409	0.67	19,518	10.90%
55-64	9,940	21,879	0.45	15,910	18.89%	10,838	20,551	0.53	15,694	5.84%
› 65	5,510	17,476	0.32	11,493	20.41%	7,701	15,344	0.50	11,522	4.42%

Source: SILC Belgium 2006, our calculations

Although an age difference between partners does not seem to have an effect on net income gaps within married couples, an older woman in a cohabiting couple is synonymous with a smaller gap in income, with virtual income equality (gap of 0.01) when the woman is at least five years older than her partner.

TABLE 44 • DISTRIBUTION OF COUPLES AND INCOME DISPARITIES ACCORDING TO THE AGE DIFFERENCE BETWEEN THE PARTNERS (BY AGE GROUP)

Married couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	135	3.12%	10,682	21,140	0.51
Woman 1-4 years older	642	15.14%	12,650	24,614	0.51
Same age	541	12.50%	11,789	24,209	0.49
Man 1-4 years older	2124	48.15%	12,415	24,592	0.50
Man 5-9 years older	738	16.32%	11,348	22,249	0.51
Man 10+ years older	212	4.77%	11,519	21,634	0.53

Cohabiting couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	84	7.24%	16,100	16,328	0.99
Woman 1-4 years older	162	15.04%	16,627	20,485	0.81
Same age	116	10.43%	15,441	21,169	0.73
Man 1-4 years older	452	41.43%	14,558	21,262	0.68
Man 5-9 years older	200	17.98%	13,120	22,919	0.57
Man 10+ years older	90	7.88%	12,366	20,201	0.61

Source: SILC Belgium 2006, our calculations

Where the man has the higher income, the gap is larger if the couple is married rather than cohabiting, regardless of age difference. In contrast, where the woman's income is higher, income disparities seem relatively stable in cohabiting couples, whereas in married couples the older the man the larger the gap.

TABLE 45 • DISTRIBUTION OF COUPLES ACCORDING TO THE AGE DIFFERENCE BETWEEN WOMEN AND MEN BY AGE GROUP (MAN'S INCOME IS HIGHER)

Married couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	98	2.84%	7,553	23,742	0.32
Woman 1-4 years older	527	15.31%	10,312	26,291	0.39
Same age	451	12.97%	9,649	25,790	0.37
Man 1-4 years older	1714	48.09%	10,339	26,850	0.39
Man 5-9 years older	594	16.44%	9,119	24,360	0.37
Man 10+ years older	155	4.36%	7,456	24,098	0,31

Cohabiting couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	41	4.95%	10,648	19,778	0.54
Woman 1-4 years older	95	12.70%	13,324	24,027	0.55
Same age	74	9.68%	13,046	24,478	0.53
Man 1-4 years older	329	43.58%	12,679	23,550	0.54
Man 5-9 years older	155	20.54%	11,314	25,217	0.45
Man 10+ years older	66	8.55%	10,430	22,822	0.46

Source: SILC Belgium 2006, our calculations

TABLE 46 • DISTRIBUTION OF COUPLES ACCORDING TO THE AGE DIFFERENCE BETWEEN WOMEN AND MEN BY AGE GROUP (WOMAN'S INCOME IS HIGHER)

Married couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	30	4.55%	19,292	12,374	1.56
Woman 1-4 years older	83	13.80%	23,052	14,729	1.57
Same age	70	10.84%	23,137	14,163	1.63
Man 1-4 years older	298	46.77%	21,900	13,685	1.60
Man 5-9 years older	115	16.40%	21,598	11,217	1.93
Man 10+ years older	49	7.64%	22,625	13,187	1.72

Cohabiting couples

Age difference (M/W)	Number of couples	%	Average income		Average income ratio
			Women	Men	
Woman 5+ years older	34	13.49%	21,979	12,372	1.78
Woman 1-4 years older	47	19.46%	21,595	13,622	1.59
Same age	29	11.37%	20,485	14,137	1.45
Man 1-4 years older	84	34.31%	20,399	14,266	1.43
Man 5-9 years older	36	13.73%	19,538	13,184	1.48
Man 10+ years older	21	7.63%	18,363	12,070	1.52

Source: SILC Belgium 2006, our calculations

The analysis of couples according to the number and gender of financially dependent partners by average age group shows that the vulnerability of older women observed for couples as a whole is even more pronounced for married couples. In point of fact, in almost 60% of married couples where only the woman is financially dependent, the woman is older than 54 (compared with 55% for all couples). This percentage is less than 20% for cohabiting couples (although the data are less significant as cohabiting couples represent only 20% of all couples). In contrast, the woman seems to be more vulnerable in this group if she is younger than 44.

TABLE 47 • DISTRIBUTION OF HOUSEHOLDS ACCORDING TO FINANCIAL DEPENDENCE WITHIN COUPLES BY COUPLE'S AVERAGE AGE GROUP

Married couples

Age groups	Couples where both partners are financially dependent	Couples where only one partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent
‹ 35 years	*14.79%*	10.36%	9.42%	*20.94%*	20.52%
35-44 years	*9.77%*	15.49%	15.01%	*20.88%*	35.67%
45-54 years	*11.19%*	16.91%	16.28%	*24.08%*	20.65%
55-64 years	*28.87%*	23.72%	23.92%	*21.55%*	14.41%
› 65 years	*35.38%*	33.52%	35.37%	*12.55%*	8.75%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Age groups	Couples where both partners are financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent	Total
‹ 35 years	*1.87%*	24.55%	*4.83%*	68.75%	100.00%
35-44 years	*0.75%*	23.75%	*2.92%*	72.57%	100.00%
45-54 years	*1.19%*	35.77%	*4.68%*	58.35%	100.00%
55-64 years	*3.06%*	52.27%	*4.17%*	40.50%	100.00%
› 65 years	*3.48%*	71.54%	*2.25%*	22.74%	100.00%

Age groups	Couples where both partners are financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent	Total
‹ 35 years	*0.30%*	3.89%	*0.76%*	10.89%	15.84%
35-44 years	*0.20%*	6.20%	*0.76%*	18.93%	26.08%
45-54 years	*0.22%*	6.72%	*0.88%*	10.96%	18.78%
55-64 years	*0.58%*	9.87%	*0.79%*	7.65%	18.89%
› 65 years	*0.71%*	14.60%	*0.46%*	4.64%	20.41%
Total	2.00%	41.28%	3.65%	53.07%	100.00%

(continued)

Cohabiting couples

Age groups	Couples where both partners are financially dependent	Couples where only one partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent
‹ 35 years	46.48%	49.59%	47.61%	57.77%	55.64%
35-44 years	23.03%	20.04%	21.34%	14.66%	27.46%
45-54 years	19.56%	12.27%	11.52%	15.36%	10.00%
55-64 years	6.14%	8.68%	8.69%	8.64%	4.62%
› 65 years	4.79%	9.42%	10.84%	3.57%	2.28%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Age groups	Couples where both partners are financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent	Total
‹ 35 years	2.15%	20.83%	6.12%	70.90%	100.00%
35-44 years	2.27%	19.89%	3.31%	74.54%	100.00%
45-54 years	4.45%	24.81%	8.00%	62.73%	100.00%
55-64 years	2.61%	34.93%	8.41%	54.05%	100.00%
› 65 years	2.68%	57.50%	4.59%	35.23%	100.00%

Age groups	Couples where both partners are financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where neither partner is financially dependent	Total
‹ 35 years	1.15%	11.18%	3.28%	38.04%	53.65%
35-44 years	0.57%	5.01%	0.83%	18.78%	25.19%
45-54 years	0.49%	2.70%	0.87%	6.84%	10.90%
55-64 years	0.15%	2.04%	0.49%	3.16%	5.84%
› 65 years	0.12%	2.54%	0.20%	1.56%	4.42%
Total	2.48%	23.48%	5.68%	68.37%	100.00%

Source: SILC Belgium 2006, our calculations

7.2   Disaggregation of married and cohabiting couples by number of dependent children

As with couples as a whole, we conduct the analysis according to the number of dependent children for just two age groups: couples with an average age of under 35, and couples with an average age between 35 and 50. The first group includes more than half of the cohabiting couples (54%), but only 16% of married couples.

TABLE 48 • DISTRIBUTION OF COUPLES BY THE PARTNERS' AVERAGE AGE

	Married couples		Cohabiting couples		All couples	
	Number of couples	%	Number of couples	%	Number of couples	%
Couples whose average age is ‹ 35	691	15.84%	566	53.65%	1,257	23.43%
Couples whose average age is 35 - 50	1,620	36.46%	359	31.16%	1,979	35.39%
Couples whose average age is › 50	2,081	47.71%	179	15.19%	2,260	41.18%
Total	4,392	100.00%	1,104	100.00%	5,496	100.00%

Source: SILC Belgium 2006, our calculations

The percentage of childless couples is the same for both cohabiting and married couples (slightly over 50%). However, the differences between the two age groups are more noticeable for cohabiting couples, where there are more childless couples whose average age is under 35 (60% compared with 26% of married couples).

TABLE 49 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN

Married couples

Dependent children	‹ 35 years	35-50 years	Total
0	25.70%	13.21%	52.06%
1	29.23%	23.69%	16.20%
2	35.37%	38.19%	20.60%
3 or +	9.70%	24.91%	11.14%
Total	100.00%	100.00%	100.00%

Cohabiting couples

Dependent children	‹ 35 years	35-50 years	Total
0	59.05%	26.65%	53.67%
1	26.49%	26.34%	23.21%
2	10.95%	30.60%	15.84%
3 or +	*3.51%*	16.41%	7.27%
Total	100.00%	100.00%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

FIGURE 14 • DISTRIBUTION OF MARRIED AND COHABITING COUPLES PER DECILE, ACCORDING TO THE NUMBER OF DEPENDENT CHILDREN (DECILES FORMED ON THE BASIS OF COUPLES' TOTAL INCOME)

Married couples

Couple's average age is under 35
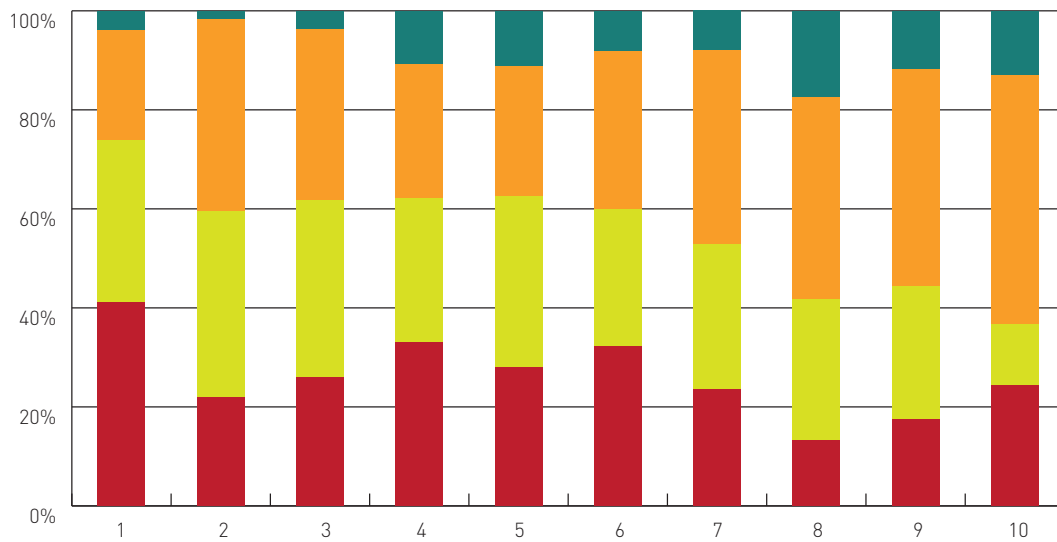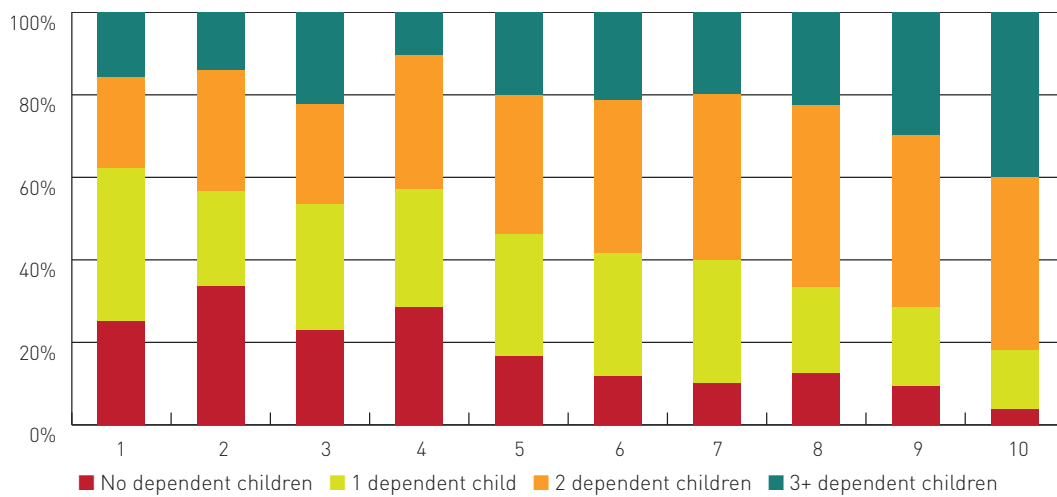
Couple's average age is 35-50

No dependent children 1 dependent child 2 dependent children 3+ dependent children

(continued)

Cohabiting couples

Couple's average age is under 35
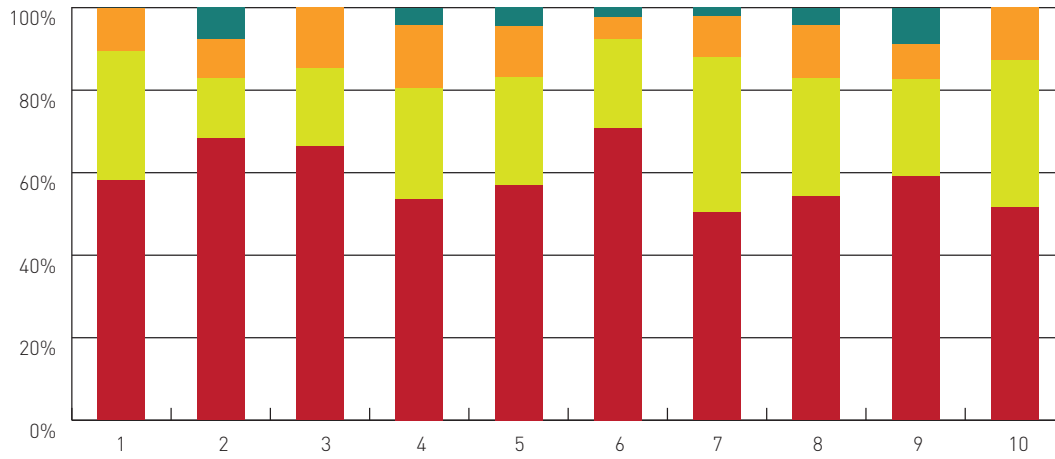
Couple's average age is 35-50

■ No dependent children ■ 1 dependent child ■ 2 dependent children ■ 3+ dependent children
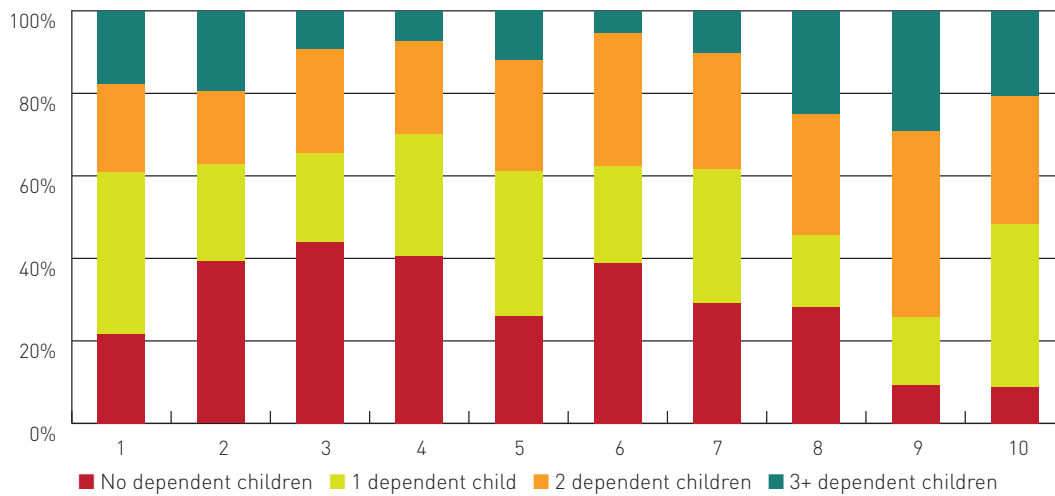
Source: SILC Belgium 2006 and 2007, our calculations

As regards couples whose average age is under 35, the disparities between women's and men's incomes increase with the number of dependent children, and in all cases they are higher in married couples than cohabiting couples. For couples whose average age is between 35 and 50, the income disparities between partners in married couples are higher than those in younger couples, except for those with three or more dependent children. The gap also increases with the number of dependent children. The situation is different for cohabiting couples. For this group, the income disparities between partners are not systematically higher than in younger couples, and the inequality does not systematically increase with the number of dependent children. In particular, when there are three or more dependent children, the situation is the same as when there are no dependent children.

As concerns married couples whose average age is over 50, the profile is the opposite: income inequalities between partners decrease with the number of dependent children. They are lowest for married couples with three or more dependent children. By contrast, among cohabiting couples whose average age is over 50, income inequalities increase with the number of dependent children but decrease again once there are three or more dependent children.

TABLE 50 • RATIO BETWEEN WOMEN'S AND MEN'S INDIVIDUALISED NET INCOMES WITHIN COUPLES BY NUMBER OF DEPENDENT CHILDREN

Married couples

Dependent children	‹ 35 years	35-50 years	› 50 years	Total
0	0.72	0.64	0.39	0.44
1	0.66	0.57	0.50	0.58
2	0.60	0.57	0.49	0.57
3 or +	0.48	0.50	0.65	0.50
Total	0.63	0.55	0.41	0.51

Cohabiting couples

Dependent children	‹ 35 years	35-50 years	› 50 years	Total
0	0.79	0.75	0.57	0.73
1	0.67	0.69	0.53	0.68
2	0.66	0.67	0.20	0.64
3 or +	*0.59*	0.74	0.61	0.70
Total	0.73	0.71	0.55	0.70

Source: SILC Belgium 2006 and 2007, our calculations

FIGURE 15 • DISTRIBUTION OF COUPLES BY THE NUMBER OF DEPENDENT CHILDREN AND THE NUMBER OF FINANCIALLY DEPENDENT PARTNERS

Married couples

Couple's whose average age is under 35

Couples whose average age is 35-50

■ Couples where neither partner is financially dependent
■ Couples where only the woman is financially dependent
■ Couples where only the man is financially dependent
■ Couples where both partners are financially dependent

Cohabiting couples

Couple's whose average age is under 35

Couples whose average age is 35-50

■ Couples where neither partner is financially dependent
■ Couples where only the woman is financially dependent
■ Couples where only the man is financially dependent
■ Couples where both partners are financially dependent
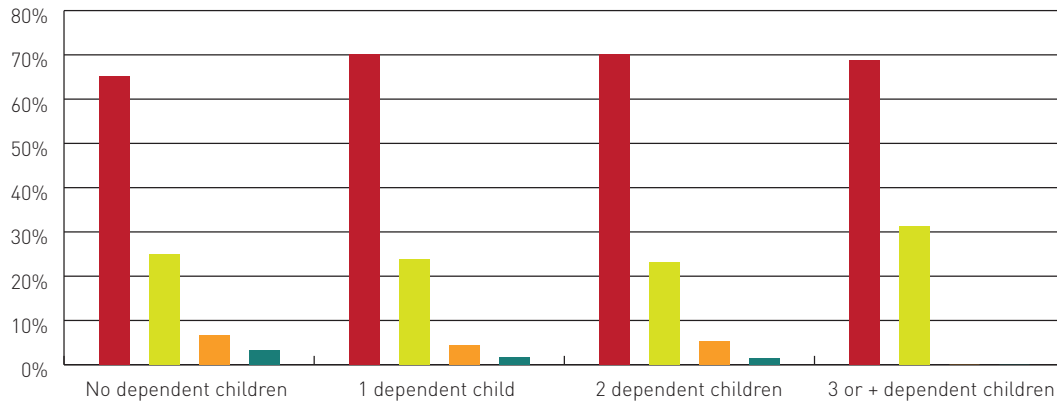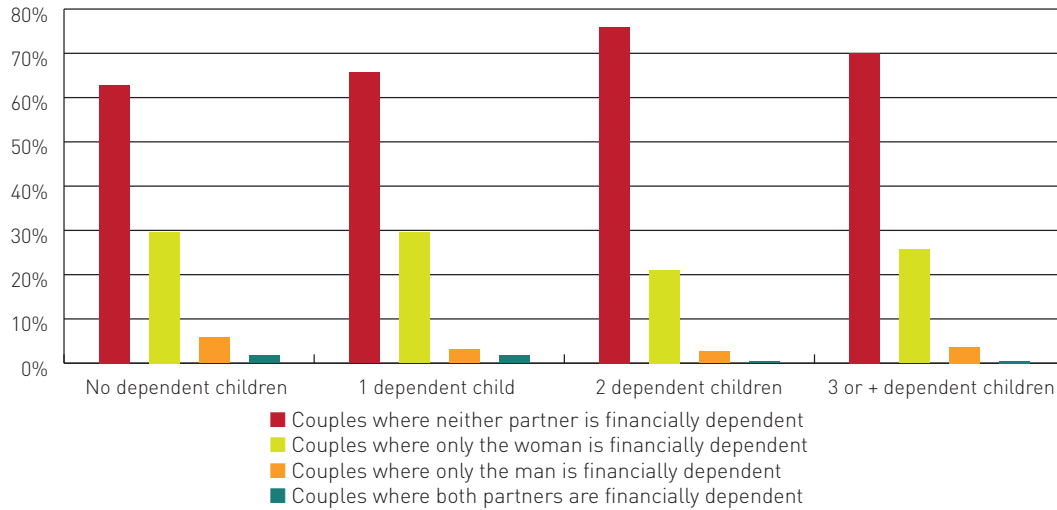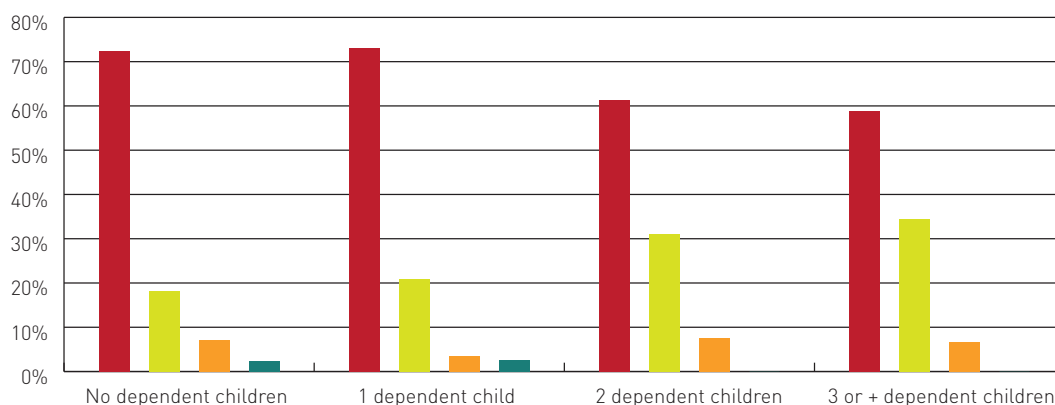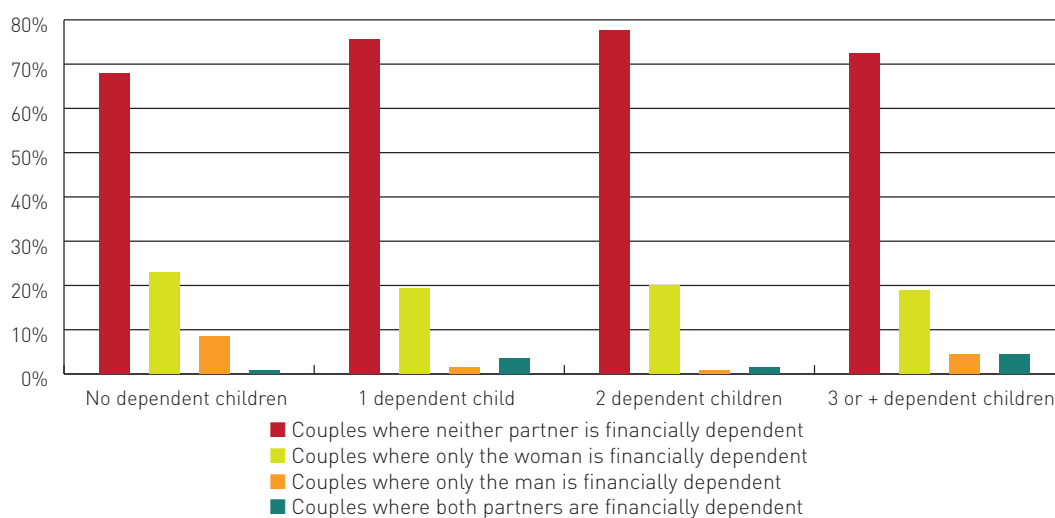
Source: SILC Belgium 2006 and 2007, our calculations

The percentage of couples where neither partner is financially dependent is higher for cohabiting couples than for married couples. The percentage of couples where only the woman is financially dependent is twice as high for married couples as for cohabiting couples (41% compared with 23%). Except for this, Table 51 does not show any difference in the trend for married and cohabiting couples according to the number of dependent children from that observed for couples as a whole.

TABLE 51 • DISTRIBUTION OF COUPLES BY NUMBER OF DEPENDENT CHILDREN AND NUMBER OF FINANCIALLY DEPENDENT PARTNERS

Married couples

Couple's whose average age is under 35

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	65.22%	24.95%	*6.60%*	*3.22%*	100.00%
1 dependent child	70.11%	*23.72%*	*4.41%*	*1.76%*	100.00%
2 dependent children	70.16%	23.13%	5.21%	1.50%	100.00%
3 or more dependent children	*68.81%*	*31.19%*	*0.00%*	*0.00%*	100.00%
Total	68.75%	24.55%	*4.83%*	*1.87%*	100.00%

Couples whose average age is 35-50

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	62.88%	29.63%	*5.79%*	*1.70%*	100.00%
1 dependent child	65.65%	29.59%	*3.08%*	*1.68%*	100.00%
2 dependent children	75.98%	21.02%	*2.63%*	*0.38%*	100.00%
3 or more dependent children	70.06%	25.75%	*3.67%*	*0.52%*	100.00%
Total	70.33%	25.36%	3.41%	*0.90%*	100.00%

All married couples

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	37.74%	55.22%	4.04%	3.00%	100.00%
1 dependent child	64.31%	31.15%	*3.03%*	*1.51%*	100.00%
2 dependent children	74.03%	21.96%	*3.26%*	*0.74%*	100.00%
3 or more dependent children	69.53%	26.57%	*3.48%*	*0.43%*	100.00%
Total	53.07%	41.28%	3.65%	2.00%	100.00%

Cohabiting couples

Couples whose average age is under 35

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	72.43%	18.10%	7.01%	2.47%	100.00%
1 dependent child	73.00%	20.95%	3.44%	2.60%	100.00%
2 dependent children	61.43%	31.00%	7.57%	0.00%	100.00%
3 or more dependent children	58.91%	34.34%	6.75%	0.00%	100.00%
Total	70.90%	20.83%	6.12%	2.15%	100.00%

Couples whose average age is 35-50

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	67.85%	23.01%	8.36%	0.77%	100.00%
1 dependent child	75.55%	19.42%	1.45%	3.57%	100.00%
2 dependent children	77.67%	20.05%	0.71%	1.56%	100.00%
3 or more dependent children	72.30%	18.95%	4.35%	4.39%	100.00%
Total	73.62%	20.50%	3.54%	2.34%	100.00%

All cohabiting couples

	Couples where neither partner is financially dependent	Couples where only the woman is financially dependent	Couples where only the man is financially dependent	Couples where both partners are financially dependent	Total
No dependent children	65.93%	23.94%	7.64%	2.50%	100.00%
1 dependent child	72.94%	20.68%	3.10%	3.29%	100.00%
2 dependent children	70.40%	25.43%	3.23%	0.94%	100.00%
3 or more dependent children	67.34%	24.76%	4.81%	3.09%	100.00%
Total	68.37%	23.48%	5.68%	2.48%	100.00%

Source: SILC Belgium 2006, our calculations

7.3   Disaggregation of married and cohabiting couples by activity status

With respect to married couples, in 58% of couples the man works full-time and in 27% of cases the man is retired. These figures are quite different for cohabiting couples, where in 79% of couples the man works full-time and only 6% of men are retired. This difference can be explained by the fact that on average cohabiting couples are younger than married couples. As regards women, married women can be divided into four groups: 27% work full-time, 26% are non-working, 23% work part-time and 16% are retired. The difference is significant if we compare these figures with those observed for cohabiting couples: 51% of cohabiting women work full-time, 23% work part-time and 12% are non-working. Dual-earner couples account for 24% of all married couples and 46% of cohabiting couples. A marked difference in activity is therefore observed between the two groups, for both men and women.

TABLE 52 • DISTRIBUTION OF MEN AND WOMEN ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

Married couples

		Women					Total
		Full-time	Part-time	Unem-ployed	Retired	Non-working	
Men	Full-time	40.95%	33.61%	6.29%	0.53%	18.62%	100.00%
	Part-time	24.54%	28.4%	13.34%	5.13%	28.59%	100.00%
	Unemployed	16.79%	13.6%	15.08%	11.22%	43.31%	100.00%
	Retired	2.42%	2.57%	3.17%	55.70%	36.14%	100.00%
	Non-working	16.61%	16.69%	20.37%	5.68%	40.66%	100.00%

		Women				
		Full-time	Part-time	Unemployed	Retired	Non-working
Men	Full-time	87.21%	85.09%	52.42%	1.86%	40.86%
	Part-time	3.16%	4.35%	6.72%	1.10%	3.79%
	Unemployed	4.77%	4.60%	16.78%	5.30%	12.69%
	Retired	2.36%	2.99%	12.12%	90.33%	36.38%
	Non-working	2.49%	2.98%	11.96%	1.41%	6.28%
	Total	100.00%	100.00%	100.00%	100.00%	100.00%

(continued)

	Women					Total
Men	**Full-time**	**Part-time**	**Unem-ployed**	**Retired**	**Non-working**	
Full-time	23.76%	19.50%	3.65%	*0.31%*	10.81%	58.03%
Part-time	*0.86%*	*1.00%*	*0.47%*	*0.18%*	*1.00%*	3.51%
Unemployed	1.30%	*1.05%*	1.17%	*0.87%*	3.36%	7.75%
Retired	*0.64%*	*0.68%*	*0.84%*	14.83%	9.62%	26.61%
Non-working	*0.68%*	*0.68%*	*0.83%*	*0.23%*	1.66%	4.08%
Total	27.24%	22.91%	6.96%	16.42%	26.45%	100.00%

Cohabiting couples

	Women					Total
Men	**Full-time**	**Part-time**	**Unem-ployed**	**Retired**	**Non-working**	
Full-time	58.15%	24.48%	7.09%	*0.75%*	9.53%	100.00%
Part time	*45.85%*	*36.54%*	*6.23%*	*6.14%*	*5.24%*	100.00%
Unemployed	*27.35%*	*13.82%*	*19.91%*	*11.75%*	*27.17%*	100.00%
Retired	*4.46%*	*7.49%*	*5.40%*	*58.69%*	*23.96%*	100.00%
Non-working	*15.94%*	*26.12%*	*37.70%*	*2.34%*	*17.91%*	100.00%

	Women				
Men	**Full-time**	**Part-time**	**Unemployed**	**Retired**	**Non-working**
Full-time	90.68%	82.76%	62.90%	*11.60%*	65.26%
Part-time	*4.27%*	*7.37%*	*3.30%*	*5.68%*	*2.14%*
Unemployed	*3.32%*	*3.63%*	*13.73%*	*14.15%*	*14.48%*
Retired	*0.51%*	*1.86%*	*3.52%*	*66.77%*	*12.05%*
Non-working	*1.23%*	*4.37%*	*16.55%*	*1.79%*	*6.07%*
Total	100,00%	100.00%	100.00%	100.00%	100.00%

Men		Women					Total
		Full-time	**Part-time**	**Unem-ployed**	**Retired**	**Non-working**	**Total**
	Full-time	46.14%	19.42%	5.63%	*0.59%*	7.56%	79.34%
	Part-time	*2.17%*	*1.73%*	*0.29%*	*0.29%*	*0.25%*	4.73%
	Unemployed	*1.69%*	*0.85%*	*1.23%*	*0.72%*	*1.68%*	6.17%
	Retired	*0.26%*	*0.44%*	*0.31%*	*3.42%*	*1.40%*	5.83%
	Non-working	*0.63%*	*1.03%*	*1.48%*	*0.09%*	*0.70%*	*3.93%*
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

In all cases, income inequalities are less marked in cohabiting couples and financial dependence rates are also lower for women within these couples

TABLE 53 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN ACTIVITY STATUS AND THAT OF THEIR PARTNER

Married couples

Men		Women				
		Full-time	**Part-time**	**Unemployed**	**Retired**	**Non-working**
	Full-time	0.77	0.54	0.31	*0.40*	0.12
	Part-time	*1.19*	*0.71*	*0.45*	*0.57*	*0.16*
	Unemployed	1.69	*0.95*	0.77	*0.68*	0.20
	Retired	*1.11*	*0.73*	*0.64*	0.45	0.09
	Non-working	*1.55*	*0.96*	*0.92*	*0.64*	0.29

Cohabiting couples

Men		Women				
		Full-time	**Part-time**	**Unemployed**	**Retired**	**Non-working**
	Full-time	0.81	0.65	0.36	*0.24*	0.20
	Part-time	*1.23*	*0.69*	*0.85*	*0.55*	*0.24*
	Unemployed	*2.24*	*1.62*	*0.73*	*0.97*	*0.30*
	Retired	*1.25*	*1.28*	*0.82*	*0.59*	*0.18*
	Non-working	*2.60*	*1.66*	*0.98*	*1.00*	*0.72*

Source: SILC Belgium 2006 and 2007, our calculations

TABLE 54 • RATES OF FINANCIAL DEPENDENCE ACCORDING TO THE ACTIVITY STATUS OF BOTH PARTNERS

Married couples

			Woman's activity status					Total
			Full-time	Part-time	Un-employed	Retired	Non-working	
Man's activity status	Full-time	Women	8.80%	12.74%	69.91%	32.79%	89.47%	29.12%
		Men	3.67%	2.18%	1.41%	0.00%	1.56%	2.61%
	Part-time	Women	0.00%	7.08%	54.07%	-	92.20%	36.60%
		Men	17.00%	7.69%	4.40%	-	4.19%	8.14%
	Unemployed	Women	7.36%	16.53%	39.55%	48.07%	89.61%	53.65%
		Men	35.87%	10.35%	18.45%	10.37%	6.67%	14.30%
	Retired	Women	0.00%	33.58%	42.87%	63.05%	95.46%	71.84%
		Men	7.69%	13.25%	2.39%	6.13%	4.57%	5.67%
	Non-working	Women	0.00%	10.24%	27.54%	33.80%	86.42%	44.37%
		Men	44.41%	17.94%	50.93%	15.54%	21.24%	30.26%
	Total	Women	8.03%	13.22%	55.41%	60.76%	91.60%	43.28%
		Men	6.74%	3.59%	10.51%	6.31%	4.65%	5.66%

Cohabiting couples

			Woman's activity status					Total
			Full-time	Part-time	Un-employed	Retired	Non-working	
Man's activity status	Full-time	Women	8.31%	20.03%	76.28%	29.71%	77.90%	22.79%
		Men	2.51%	4.27%	2.63%	11.34%	2.36%	3.00%
	Part-time	Women	8.36%	17.37%	-	-	-	15.67%
		Men	31.00%	0.00%	-	-	-	15.85%
	Unemployed	Women	3.48%	19.76%	72.90%	12.27%	80.34%	41.47%
		Men	60.00%	54.31%	49.82%	18.00%	18.62%	41.00%
	Retired	Women	-	-	-	50.90%	93.47%	55.00%
		Men	-	-	-	8.86%	5.09%	9.35%
	Non-working	Women	-	5.37%	53.67%	-	74.91%	65.00%
		Men	-	53.62%	39.98%	-	64.50%	49.62%
	Total	Women	8.00%	18.81%	69.46%	39.17%	79.85%	25.96%
		Men	6.46%	7.86%	16.91%	9.77%	8.77%	8.16%

Source: SILC Belgium 2006 and 2007, our calculations

7.4 Disaggregation of married and cohabiting couples by level of educational attainment

The level of educational attainment in cohabiting couples is higher than in married couples. 51% of co-habiting women have received higher education compared with 45% of cohabiting men, while 37% of married women have received higher education compared with 39% of married men. Whereas in 33% of cohabiting couples both partners have received higher education, this figure is only 26% for married couples. As the percentages for upper secondary education are similar, it is at the level of lower secondary education or below that there are more married people than cohabiting people, for both women and men.

TABLE 55 • DISTRIBUTION OF WOMEN AND MEN ACCORDING TO THEIR OWN LEVEL OF EDUCATIONAL ATTAINMENT AND THAT OF THEIR PARTNER

Married couples

		Woman's educational level			
		Lower secondary education or below	Upper secondary education	Higher education	Total
Man's educational level	Lower secondary education or below	61.93%	28.32%	9.75%	100.00%
	Upper secondary education	28.53%	46.14%	25.33%	100.00%
	Higher education	10.07%	22.95%	66.97%	100.00%

		Woman's educational level		
		Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	55.79%	24.15%	7.13%
	Upper secondary education	31.16%	47.71%	22.45%
	Higher education	13.05%	28.15%	70.42%
	Total	100.00%	100.00%	100.00%

		Woman's educational level			
		Lower secondary education or below	Upper secondary education	Higher education	Total
Man's educational level	Lower secondary education or below	16.97%	7.76%	2.67%	27.40%
	Upper secondary education	9.48%	15.33%	8.41%	33.22%
	Higher education	3.97%	9.04%	26.38%	39.39%
	Total	30.42%	32.13%	37.46%	100.00%

(continued)

Cohabiting couples

	Woman's educational level			
	Lower secondary education or below	**Upper secondary education**	**Higher education**	**Total**
Lower secondary education or below	43.36%	37.92%	*18.71%*	100.00%
Upper secondary education	15.89%	43.20%	40.91%	100.00%
Higher education	*5.62%*	21.66%	72.71%	100.00%

	Woman's educational level		
	Lower secondary education or below	**Upper secondary education**	**Higher education**
Lower secondary education or below	47.09%	20.29%	*6.35%*
Upper secondary education	37.11%	49.72%	29.84%
Higher education	*15.81%*	30.00%	63.81%
Total	100.00%	100.00%	100.00%

	Woman's educational level			
	Lower secondary education or below	**Upper secondary education**	**Higher education**	**Total**
Lower secondary education or below	7.56%	6.61%	*3.26%*	17.43%
Upper secondary education	5.95%	16.19%	15.33%	37.47%
Higher education	*2.54%*	9.77%	32.79%	45.10%
Total	16.05%	32.57%	51.38%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

Table 56 shows the ratios between women's and men's individualised incomes according to both partners' levels of educational attainment. In all cases, the income disparities between partners are higher in married couples. In both married and cohabiting couples, the disparities are lowest when the woman has received higher education.

TABLE 56 • RATIO BETWEEN WOMEN'S AND MEN'S AVERAGE INDIVIDUALISED NET INCOMES ACCORDING TO THEIR OWN LEVEL OF EDUCATION AND THAT OF THEIR PARTNER

Married couples

Individualised average income ratios		Woman's educational level		
		Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	0.34	0.46	0.83
	Upper secondary education	0.34	0.49	0.74
	Higher education	0.30	0.39	0.60

Cohabiting couples

Individualised average income ratios		Woman's educational level		
		Lower secondary education or below	Upper secondary education	Higher education
Man's educational level	Lower secondary education or below	0.56	0.72	*0.90*
	Upper secondary education	0.54	0.61	0.76
	Higher education	*0.58*	0.55	0.78

Source: SILC Belgium 2006 and 2007, our calculations

Financial dependence rates for women are higher in married couples than in cohabiting couples (43% and 26% respectively). The situation is the opposite for men, with 6% for married men and 8% for cohabiting men. In all instances, the financial dependence rate for women is higher within married couples.

TABLE 57 • RATES OF FINANCIAL DEPENDENCE ACCORDING TO BOTH PARTNERS' LEVELS OF EDUCATIONAL ATTAINMENT

Married couples

			Woman's educational level			Total
			Lower secondary education or below	Upper secondary education	Higher education	
Man's educational level	Lower secondary education or below	Women	71.00%	57.15%	21.93%	62.30%
		Men	6.00%	8.93%	10.63%	7.28%
	Upper secondary education	Women	65.52%	41.66%	21.50%	43.36%
		Men	5.54%	6.60%	6.38%	6.25%
	Higher education	Women	67.59%	45.11%	19.15%	30.00%
		Men	4.29%	4.29%	3.91%	4.04%
	Total	Women	68.86%	46.37%	19.87%	43.28%
		Men	5.63%	6.51%	4.95%	5.66%

Cohabiting couples

			Woman's educational level			Total
			Lower secondary education or below	Upper secondary education	Higher education	
Man's educational level	Lower secondary education or below	Women	*57.61%*	*30.76%*	*15.58%*	39.56%
		Men	*17.55%*	*12.05%*	*5.11%*	13.14%
	Upper secondary education	Women	*45.38%*	32.60%	18.50%	28.86%
		Men	*8.43%*	10.00%	4.00%	7.32%
	Higher education	Women	*40.88%*	29.46%	13.21%	18.28%
		Men	*19.20%*	6.00%	6.25%	6.93%
	Total	Women	50.43%	31.28%	14.94%	25.96%
		Men	14.43%	9.24%	5.52%	8.16%

Source: SILC Belgium 2006 and 2007, our calculations

Men and women forming part of a couple present certain differences in relation to the total population. Their average age is lower (by four years for women and one year for men) and the extreme age groups (people under 25 and those aged 65 and over) are less well represented than in the population as a whole. 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 women working part-time and women not working is higher among couples than it is in 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 incomes 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 transfers present the highest disparity (the ratio between women's and men's average transfers is 23 percentage points lower for couples than for the total population): 16% for pensions and 15% for unemployment benefit.

The more precarious situation of women living in a couple is likewise apparent from an analysis of the ratio comparing the percentage of women in the first and last deciles of total net income, which is 5.2 compared with 3.6 for women as a whole. The rate of financial dependence is the same for people living in couples and for the population as a whole, but the rate of dependence among women living in a couple is 5 points higher than that for all women, whereas the rate 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 rates of dependence is almost double that observed for the total population.

We then looked at inequality between the partners within couples. In 77% of couples, the man's income is higher than the woman's; only 6% of couples present virtual equality between women's and men's incomes. The gap between women's and men's incomes is largest in the first two deciles. The lower the household income, the more precarious the woman's situation. Income inequality between partners is less marked among cohabiting couples than among married couples.

In more than half of the couples, neither partner is financially dependent, in 43% 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 cohabiting couples.

This chapter also looked at income disparities and financial dependence within couples according to different characteristics.
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 (68%). Needless to say, this reflects the difficulties faced by women in establishing a continuous career, career breaks are often forced on them. The gap is narrower if we consider the population as a whole, among which we also find that the gap increases with age, excluding the final age group.
Among couples where both partners are financially dependent, 44% have an average age of over 55. This vulnerability to financial dependence of the eldest couples is even more marked among women: 55% of couples where only the woman is financially dependent, compared with 36% of couples where only the man is financially dependent, have an average age of over 55. 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 53% of all couples, 39% 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: 29% compared with 25% for couples aged between 35 and 50, and 18% for couples as a whole. The percentage of couples with two or more children is highest in the 35-50 age group.

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 greatest disparities are observed in childless couples, they are at their lowest where the couple has one dependent child and then increase once there is a second and particularly a third dependent child. In contrast, as regards the youngest couples, inequality increases with the number of dependent children, from 24% without children to 39% if there are two children. The same profile can be found in the middle age group, in which the disparities are always higher than in younger couples.
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 generational effect, which is less marked when we look at the younger age brackets.

The link between financial dependence and dependent children does not seem evident from the analysis of the data.

The majority of couples comprise two working partners (49% of the total), followed by couples where both partners are retired (14%), and finally couples composed of a full-time male worker and a non-working woman (9%). In all cases, men who work full-time have a higher income than their partner; the gap is smallest if the woman works full-time (18%), and largest where the woman does not work (88%). For all other types of activity status, the man's average income is less than his partner's if she works full-time (except for the self-employed) and if she works part-time where he is unemployed. We can therefore clearly see the extent to which full-time work is the best mechanism to protect women from inequality within the couple.

In our sample, women's and men's levels of educational attainment are very similar (40% of men and 39% of women have received higher education, 33% of men and 32% of women are educated to upper secondary level, 14% of men and 16% of women are educated to lower secondary level, and 13% of men and women are educated to primary level or below); 53% of couples are made up of members with the same level of educational attainment; 67% of men and 69% of women who have received higher education live with someone who has the same educational level.
Income disparities are mainly a function of the woman's educational level: they are highest where the woman's educational level is lowest (68% to 71%) and lowest where her educational level is highest (20% to 36%). Nevertheless, there is a significant gap where the man and the woman have both received higher education (36%).
These disparities are higher in couples than in the total population, and the lower the educational level of both partners the truer this is.
Rates of financial dependence fall as the educational level rises, but women's financial dependence remains much higher than men's at all levels of education.

It is interesting to distinguish among couples between those who are married and those cohabiting. In point of fact, cohabiting couples are younger on average and the inequalities between the partners' incomes are much less clear-cut than they are for married couples. Financial dependence of women

is more pronounced in married couples, regardless of the level of educational attainment, activity status or number of dependent children.

This analysis of income inequalities within couples in SILC Belgium 2006 shows that women in couples are highly dependent on their partner: women in couples have lower individual incomes and a higher rate of financial dependence than do women making up the population as a whole. This situation is more marked for married couples than for cohabiting couples. As in the population as a whole, working is the mechanism that best protects women from financial dependence.

CHAPTER 4

Changes in women's and men's incomes after a break-up or the partner's death in Belgium and Europe

The goal of this section of our study is to measure the effect of a break-up or the partner's death on net individual income and financial dependence.

The literature has highlighted the fact that divorce has adverse economic consequences, particularly for women, whose economic situation is assumed to deteriorate considerably after a break-up (Fritzell 1990, Burkhauser et al. 1991, Smock 1994, Jarvis and Jenkins 1999, Poortman 2000, Poortman and Kalmijn 2002, Andreß et al. 2003, Manting and Bouman 2006). The extent of this deterioration varies significantly from country to country depending on the methods and timescales applied in the study: the effects are more 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 the majority of divorce proceedings are initiated 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 divorce can be explained in many ways. Firstly, women may underestimate the economic consequences of a break-up. Secondly, reasons for divorcing are myriad and financial losses may be offset by other advantages: increased independence, satisfaction, etc. A third reason may lie in the way that the financial impact is measured: incorrect measurement of the effects of a divorce on the partners' income, resulting in an overestimation of the financial losses, particularly for women. As shown by Smock, Manning and Gupta (1999, p. 794): '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'.

This last explanation is of particular concern to us, because a review of the literature on this topic leads to an initial finding: the majority of studies that try to measure the effects of break-ups on couples' incomes work on the strong hypothesis that incomes are shared between household members prior to the break-up. They therefore compare a total household income split between its members with the individual income that each member will have after the break-up. For example, a wife with an income of €5,000 who lives with a man earning €10,000 is notionally credited with an income of €7,500 before the divorce and an income of €5,000 after the divorce, in other words a loss of €2,500 or 33%. According to our hypothesis, however (we reject the hypothesis that household income is shared amongst household members; we consider only individuals' personal income which they earn from their work, any State transfers they may receive and their income from immovable and movable property, regardless of their lifestyle and the household in which they live), the woman's income would be €5,000 in both cases. Therefore she would not lose anything.

Studies based on the hypothesis that income is shared are highly gender biased, given that many poor women live in households which are not poor. Furthermore, this hypothesis of sharing obviously explains the disastrous results observed for women who, prior to separation or divorce, had a more or less substantial portion of their partner's income which they no longer have afterwards.

In recent studies, this hypothesis is also upheld by Jansen (2008), Uunk (2004), Manting and Bouman (2006), de Vaus et al. (2008) and Andreß et al. (2006). These studies are all based on household income and calculate the equivalent adult income based on the hypothesis that income is pooled.

To calculate the financial consequences of divorce, Jansen (2008) uses the household's total net income adjusted using an equivalence scale. His findings, based on an analysis of the ECHP longitudinal data, classically show a higher loss of income for women than for men. More precisely, the author finds that men's income decreases by 10% in the year of the break-up; women's by 18%.

Uunk (2004) uses the longitudinal data from the European Household Panel, predecessor of the SILC, and shows that median income decreases by 24% on average from the year before the divorce to the year after. State transfers tend to temper the economic effects of divorce. These effects are in fact very different for women in the 14 European Union countries that the author studies. The countries where divorce causes the smallest decrease in income are the southern countries (Greece, Italy, Spain and Portugal) and Scandinavian countries (Denmark and Finland). In contrast, income decreases the most following divorce in Austria, France, Luxembourg and the United Kingdom.

Manting and Bouman's study (2006) concentrates on the Netherlands. It shows that in this country, a break-up causes an income fall of 14% and 4% for the woman and man respectively. For divorced people, however, the man's income increases by 7%, whereas the woman's decreases by 23%. One explanation of these disparities is that in married couples, the women's contribution to the household income is lower than in cohabiting couples.

De Vaus et al. (2008) analyse the economic consequences of a break-up from three perspectives: changes in equivalent income; financial difficulties caused by the break-up (measured by the inability to obtain certain goods and services or to pay bills); and the subjective perception of one's financial situation after the break-up (individuals state whether they consider themselves to be poor or not). These perspectives show that divorce has a negative effect on women's equivalent income and increases the financial difficulties they face. Divorce has only a slight impact on men's equivalent income, however. The financial difficulties faced by men immediately after divorce are significant, but in the long term men find themselves in a better position than before the divorce. Many women declare themselves poor immediately after divorce, but this number decreases over time. Divorce has an insignificant influence on the perception of one's financial situation. Women who have decision-making power in their relationship stand a lower risk of poverty one year after separation than those who do not.

Finally, Andreß et al. (2006) looked at the economic consequences of separation in different institutional contexts. They chose Belgium, Germany, the United Kingdom, Italy and Sweden as countries which represent four typical models of family aid. Their starting hypothesis is that economic autonomy is highest in Sweden and lowest in Italy. Belgium, Germany and the United Kingdom fall between these two extremes. Multivariate analysis is carried out on databases taken from the five countries' national household panels: it shows that break-ups have a more negative effect on women's income than on men's. The greatest decline in income is found in Italy; the smallest in Sweden. Finally, British and German women recover fairly quickly from the adverse economic effects of a break-up.

Four studies focus solely on Belgium: Dewilde (2003), Uunk (2004), Andreß, Borlogh, Bröckel, Giesselmann and Hummelsheim (2006), and Jansen (2008). They are all based on the idea of the household and on the calculation of an equivalent adult income based on the hypothesis that income is pooled. They make use of the longitudinal data from the European Household Panel, SILC's predecessor. All these studies show a decrease in income for women (a 24% average drop according to Andreß, 24% according to Uunk, and 18% according to Jansen for European women) with the exception of Dewilde (2003), who concludes that the changes are negligible for Belgium.

All the above-mentioned studies are based on the hypothesis that assets are shared within the household, and conclude that the woman's income decreases more than the man's after a break-up. We found only one study which deals with individuals' income before and after a break-up, namely that of Pamela Smock (1994), which analyses the changes in individual income and in shared income following a break-up using American data from the National Longitudinal Youth Survey. Smock shows that a

break-up causes an increase in the woman's personal annual income, rising from $7,035 in the year before the break-up to $12,047 in the year after the break-up. She explains this increase in individual income by the fact that the woman is more professionally active. The same author (Smock et al. 1999) compares the median individual income of divorced or separated women with that of women living in couples using the National Survey of Families and Households database. Her findings show that divorced and separated women have a median income of $18,000, compared with $12,000 for women living in couples.

Thus conclusions differ greatly according to the hypothesis applied. In the case of the BGIA project, we reject the hypothesis that resources are fully shared between partners; we analyse men's and women's individual incomes. This chapter is therefore one of the first to explore the changes in individual incomes after a break-up in Europe.

Following the example of these studies we tried, without success, to use the data of the SILC 2004-2007 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, 2004-2006 in our case, and comparing the individuals' situations one year before and one year after the break-up. We had to abandon the idea of using longitudinal data from the SILC for Belgium due to the small number of couples who had suffered a break-up and for whom information about both partners was available for all three years.

To try to examine the effects of a break-up, we initially carried out an in-depth comparison of the income and financial dependence situation of people who were either divorced, separated or widowed, with persons living in couples, using a sample from the 2006 and 2007 waves of the Belgian SILC data. This analysis appears in the second section of this chapter, following the literature review. The third section is devoted to a longitudinal study carried out on longitudinal data from the 2004-2007 European SILC for 18 European countries. Under this approach, households that have broken up are identified and the net individual income for the partners is calculated one year before and one year after the break-up.

1. SITUATION OF SINGLE INDIVIDUALS AFTER A BREAK-UP OR THE PARTNER'S DEATH, BASED ON THE 2006 AND 2007 SILC DATA

Analysing the situation of single people after a break-up or the death of their partner based on the 2006 SILC database reveals one significant obstacle: the small sample size. In order to address this problem, we increased the size of the sample by merging the Belgian SILC databases for 2006 and 2007.

The 2006 SILC database contains 9,630 adults, 4,660 of whom are men and 4,970 women, whilst the 2007 SILC database contains 10,021 adults, 4,857 of whom are men and 5,164 women. Merging the two databases gives a total of 19,651 adults for whom information on age, level of education and activity status are available (Table 1). We have defined an adult as someone older than 24 years, as well as people aged between 18 and 24 years who are active on the labour market (working or available for work and actively seeking employment according to the International Labour Organisation definition).

TABLE 1 • DISTRIBUTION OF INDIVIDUALS IN THE MERGED 2006-2007 BELGIAN SILC DATABASE BY MARITAL STATUS

	Divorced and separated			Widows/widowers			In couples			Total population		
	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
Number of obser-vations	764	499	1,263	669	225	894	5,496	5,496	10,992	10,134	9,517	19,651
percent-age	54.82%	45.18%	100.00%	78.74%	21.26%	100.00%	50.00%	50.00%	100.00%	51.21%	48.79%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

In the sample from the merged 2006 and 2007 SILC databases (Table 1), 10,992 people live in two-adult couples with or without children, 2,157 people live alone following a break-up or their partner's death. The number of separated people was too small to be representative, so we grouped together separated and divorced people. Our sample includes 1,263 divorced or separated people and 894 widows/widowers. In all groups, with the exception of the couples, the percentage of women is higher than that of men. Amongst individuals living alone following a break-up or their partner's death, the proportion of women is almost double that of men (66% to 34%). The percentage of women is highest in the group of widows/widowers, at 79%. These percentages are similar to those of the 2001 census which shows that the widowed population consists of 19% men and 81% women. According to the same source, 46% of divorced people are men and 54% women (2001 Belgian census).[30]

This section is divided into three parts: in the first we compare the characteristics of people making up the three groups; we then examine their incomes, and lastly we compare their rates of financial dependence.

1.1   Characteristics

1.1.1   Age

The population of widows/widowers stands out from the other groups because of their advanced age; 83% are older than 65 and the average age of the group is 73 (Table 2). With regard to the comparison between people living in couples and divorced or separated people, we also see that the average age of the latter group is higher than in the group of people in couples. This is logical given that divorce takes place most often after a number of years of marriage. 2006 statistics for the Belgian population show that married women are two years younger than men (51 and 53 years old), while the age differ-ence between widows and widowers is one year (75 for women and 74 for men). Divorced people have an average age of 50. This difference in the results can be explained by the criteria we used to select our sample of individuals.

[30] http://epp.eurostat.ec.europa.eu/portal/page/portal/population/data/database.

TABLE 2 • AVERAGE AGE OF INDIVIDUALS BY GENDER AND MARITAL STATUS

	Women	Men	Total
Divorced or separated	52	51	52
Widows/widowers	73	72	73
In couples	47	49	48

Source: SILC Belgium 2006 and 2007, our calculations

FIGURE 1 • BREAKDOWN BY AGE ACCORDING TO GENDER AND MARITAL STATUS

Men
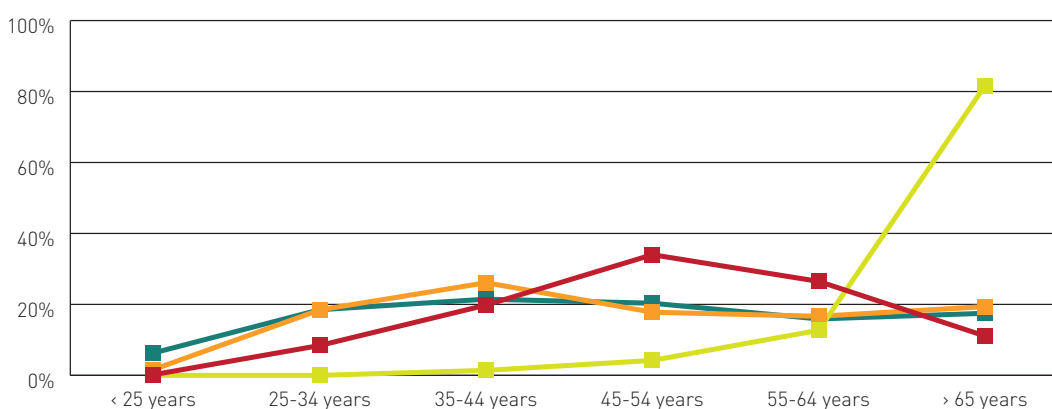
Women
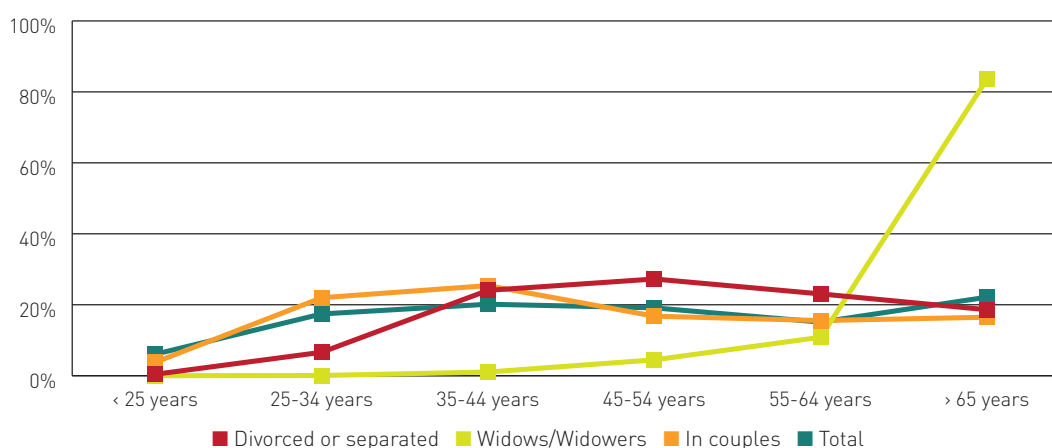
(continued)

Together
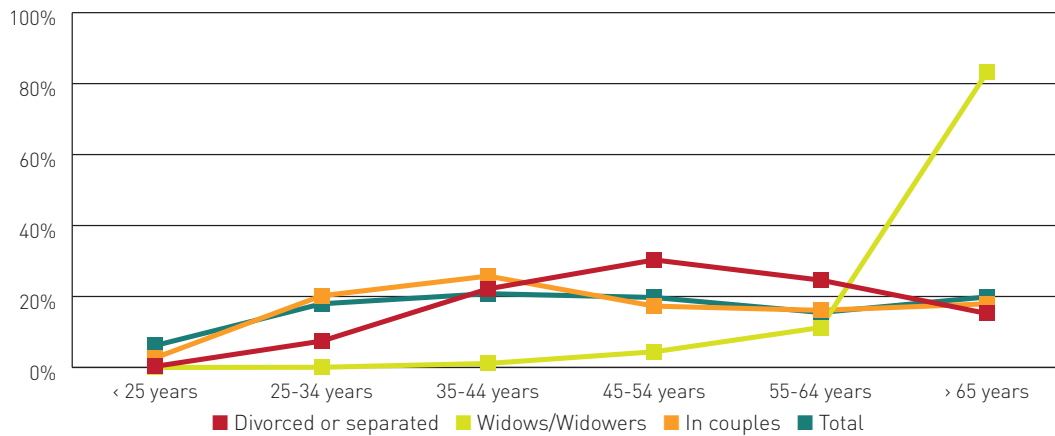
Source: SILC Belgium 2006, our calculations

1.1.2   Level of educational attainment

With regard to widows and widowers, a generational effect is at work here. The lower level of educa-
tion amongst widows/widowers must be seen in the context of their age.
For the other two groups, the level of education amongst people living in couples is higher than
amongst divorced and separated people, for both men and women (Figure 2). People living in couples
are more likely to have a higher education degree (40% compared with 33% amongst divorced and
separated people). We find it difficult to use the generation effect to explain this difference as, on aver-
age, the age difference between people who are divorced or separated and people living in couples is
just four years.

FIGURE 2 • DISTRIBUTION BY EDUCATIONAL LEVEL ACCORDING TO GENDER AND MARITAL STATUS

Men

Women

Together

Legend: ■ Divorced or seperated ■ Widows/Widowers ■ In couples

Source: SILC Belgium 2006, our calculations

4 Changes in women's and men's incomes after a break-up or the partner's death in Belgium and Europe
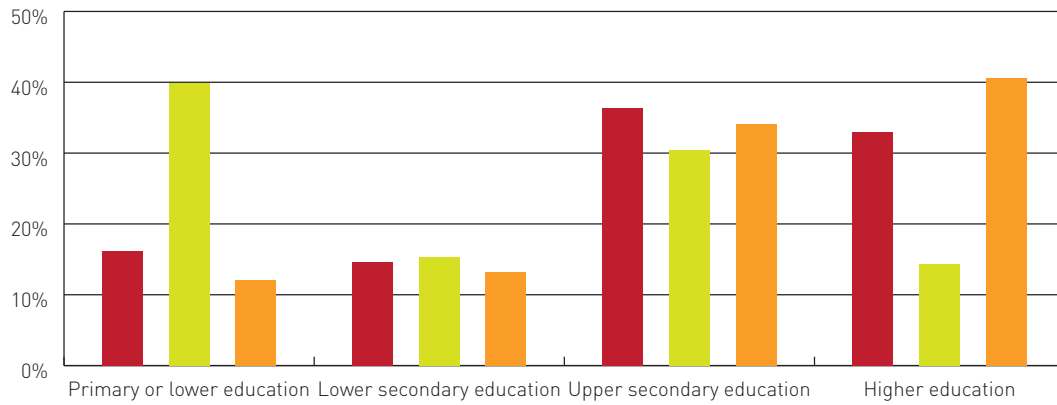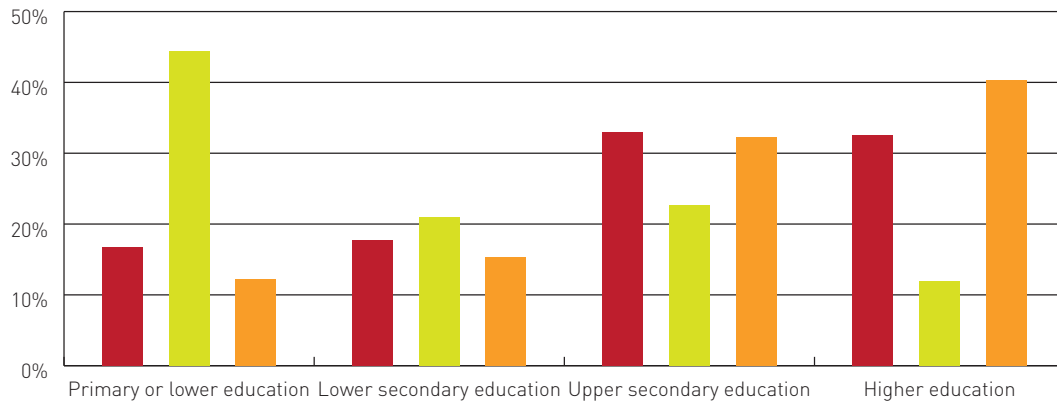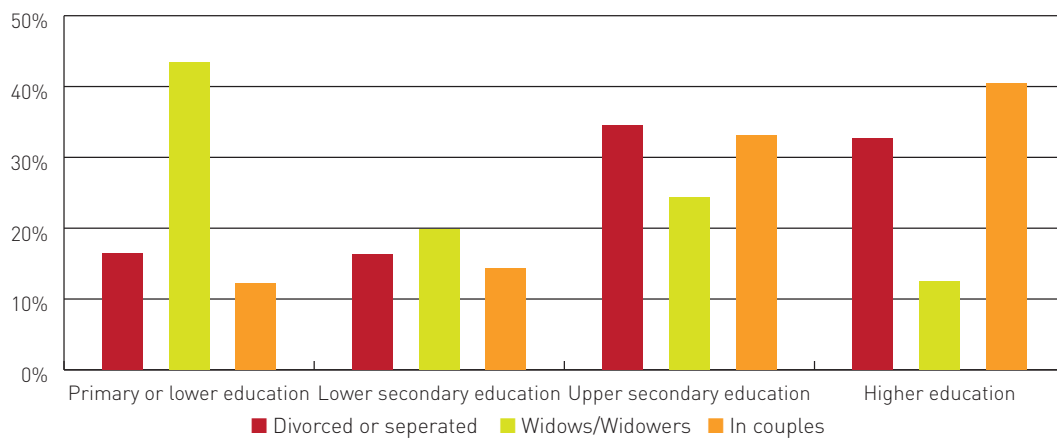
1.1.3   Activity status

More than 86% of widows and 83% of widowers are retired. There are around 18-19% of retirees in the other two groups (Table 3). The few observations carried out on the widows/widowers sub-groups limit the significance of any analysis.

A comparison between divorced people and people in couples shows that 47% of people in couples work full-time, compared with 40% of people who are divorced or separated. This difference is due to the 12% difference observed among the male population of the two groups (62% of men living with a partner and 50% of divorced or separated men). For women, 31% of divorced and separated women work full-time, 14% work part-time and 19% are unemployed. These figures are 32%, 23% and 7% respectively for women in couples. The difference is slight when it comes to full-time work (+1 percentage point for women living in couples), yet it is 9 percentage points up for part-time work. The largest gap between divorced or separated women and women living in couples is noticeable in the case of unemployment, where there is a difference of -12 percentage points. According to Jarvis and Jenkins (1999), an increase in transfers from the State explains the lower female labour force participation rate following a break-up. However, Johnson and Skinner (1986), who use US statistics, find that female labour force participation increases after a break-up, going from 68% one year before break-up, to 88% one year after. This change can be explained by the loss of the financial support they received from their partner and by ungenerous social policies.

1.1.4   Number of dependent children

The majority (over 96%) of widows/widowers do not have any dependent children, which is logical given their average age (73 years old) (Table 3). When comparing people living in couples with divorced and separated people, we can draw an initial conclusion: whilst 52% of people in couples do not have dependent children, this figure is 76% for divorced and separated people. As a general rule, couples always have more dependent children than people who are divorced and separated, and this is the case regardless of the number of dependent children. Among divorced and separated people, more women have dependent children than men. This is reasonable because it is normally women who keep the children after a break-up (Castro and Bumpass 1989, Amato 2000).

TABLE 3 • DISTRIBUTION BY AGE GROUP, EDUCATIONAL LEVEL AND ACTIVITY STATUS, ACCORDING TO GENDER AND MARITAL STATUS

Age group	Divorced or separated			Widows/widowers			In couples		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
‹ 25 years	*0.41%*	*0.19%*	*0.31%*	*0.00%*	*0.00%*	*0.00%*	3.81%	*1.64%*	2.73%
25 to 34 years	*6.61%*	*8.42%*	*7.43%*	*0.06%*	*0.00%*	*0.05%*	21.98%	18.45%	20.21%
35 to 44 years	24.06%	*19.81%*	22.14%	*1.04%*	*1.40%*	*1.12%*	25.40%	26.11%	25.75%
45 to 54 years	27.26%	34.01%	30.31%	*4.47%*	*4.21%*	*4.42%*	16.78%	17.79%	17.28%
55 to 64 years	23.06%	26.48%	24.61%	*10.84%*	*12.71%*	11.24%	15.55%	16.65%	16.10%
› 65 years	18.60%	*11.09%*	15.21%	83.58%	81.68%	83.18%	16.49%	19.37%	17.93%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Educational level									
Primary or lower education	16.69%	*16.16%*	16.45%	44.37%	*39.86%*	43.41%	12.26%	12.14%	12.20%
Lower secondary education	17.73%	*14.57%*	16.30%	21.03%	*15.29%*	19.81%	15.27%	13.25%	14.26%
Upper secondary education	33.03%	36.32%	34.51%	22.66%	*30.45%*	24.31%	32.21%	34.07%	33.14%
Higher	32.55%	32.96%	32.74%	*11.94%*	*14.39%*	12.46%	40.26%	40.54%	40.40%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Activity status									
Full-time workers	30.72%	50.42%	39.62%	*2.19%*	*3.65%*	*2.50%*	32.00%	62.31%	47.15%
Part-time workers	14.12%	*4.01%*	9.55%	*2.22%*	*3.97%*	*2.60%*	23.03%	3.75%	13.39%
Unemployed	19.38%	*16.88%*	18.25%	*1.47%*	*6.28%*	*2.50%*	7.36%	7.43%	7.40%
Retired	22.28%	*15.61%*	19.26%	86.36%	82.55%	85.55%	14.15%	22.45%	18.30%
Inactive	13.50%	*13.07%*	13.31%	*7.75%*	*3.55%*	*6.86%*	23.47%	4.06%	13.76%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Number of children									
0	62.86%	92.88%	76.43%	96.93%	95.23%	96.57%	52.38%	52.38%	52.38%
1	18.57%	*4.75%*	12.33%	*1.48%*	*1.85%*	*1.56%*	17.61%	17.61%	17.61%
2	13.93%	*1.95%*	8.52%	*0.73%*	*2.52%*	*1.11%*	19.65%	19.65%	19.65%
3 or +	*4.64%*	*0.42%*	*2.73%*	*0.85%*	*0.40%*	*0.76%*	10.36%	10.36%	10.36%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.0%0	100.00%
Average number	0.615%	0.099%	0.382%	0.059%	0.081%	0.063%	0.916%	0.916%	0.916%

Source: SILC Belgium 2006 and 2007, our calculations

The widows/widowers group is chiefly characterised by a high age and by the retired status of the people in it. The generation gap also explains the lower educational level of this group. The difference highlighted by the comparison of widows/widowers on the one hand and people who live with a partner and people who are divorced or separated on the other is mainly to do with age. Divorced and separated people are on average four years older than people living in couples, and fewer of them fall into the under-35 category. The level of education amongst divorced and separated people is lower. With regard to activity status, this group has a higher number of unemployed and a lower number of full-time and part-time workers amongst women. The divorced and separated people have fewer dependent children than people living in couples. The differences between men and women are characterised by their activity status: there is little difference between the percentage of women in full-time work within the two groups (31-32%). However, far more divorced women are unemployed, fewer are in part-time work and very few are inactive.

1.2 Individual net incomes

TABLE 4 • AVERAGE INDIVIDUALISED NET INCOMES BY MARITAL STATUS

	Women	Men	Total	Ratio of women/men
Divorced or separated	16,977	19,854	18,277	0.86
Widows/widowers	14,368	15,809	14,674	0.91
In couples	12,612	23,329	17,970	0.54
Total	13,320	22,669	17,704	0.59

Source: SILC Belgium 2006 and 2007, our calculations

Within each group analysed, the man's individual net income is always higher than that of women (Table 4). The gap is widest for people living in couples: women's average income is 46% lower than men's. Conversely, the gap is smallest amongst widows/widowers (9%). The gap between divorced and separated people is 14%.

With regard to men, the highest net income is observed for men living in couples; it is lower for widowers, who are generally retired. The gap between men in couples and divorced and separated men is 18%. For women, the highest average income is found for divorced and separated women; the lowest for those living in couples. This indicates that in the event of separation and divorce, women receive supplementary income either from work or in the form of State transfers. As we shall see later, this is principally from State transfers (see section 2.2.2). This result is different from that of Smock (1994) for the United States; she finds that the increase in women's income after divorce is explained by an increase in women's participation in the labour market. This disparity between the results can probably be explained by the more female-friendly social policies in Belgium.

1.2.1 Distribution of individuals by income group

In order to carry out this analysis, we categorised the 19,651 individuals who make up the total population in increasing order of net individual income and we divided them into three groups. The first group consists of the third of individuals whose net incomes are lowest, the second consists of the third of individuals whose net incomes are medium, and the third the individuals with the highest net incomes.

TABLE 5 • DISTRIBUTION OF TOTAL POPULATION BY GENDER AND NET INCOME GROUP

Income category	Women	Men	Total
Low	71.79%	28.21%	100.00%
Medium	50.35%	49.65%	100.00%
High	31.50%	68.50%	100.00%
Total	51.21%	48.79%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

The male/female split is balanced within the medium income group (Table 5). However, women make up more than 70% of the low income group whilst men represent 69% of the people in the high income group.

TABLE 6 • DISTRIBUTION OF INDIVIDUALS BY GENDER, MARITAL STATUS AND NET INCOME GROUP

Income group	Divorced and separated			Widows/widowers			In couples			Total population		
	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
Low	37.96%	27.30%	33.14%	41.83%	29.11%	39.13%	48.63%	12.43%	30.53%	46.73%	19.28%	33.34%
Medium	30.55%	35.22%	32.66%	45.93%	52.81%	47.4%	31.40%	32.53%	31.97%	32.77%	33.92%	33.33%
High	31.49%	37.48%	34.20%	12.23%	18.08%	13.48%	19.98%	55.03%	37.50%	20.50%	46.80%	33.33%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: SILC Belgium 2006 and 2007, our calculations

Within the total population, 47% of women belong to the low income group and 21% to the high income group. The figures are the opposite for men (Table 6): 47% belong to the high income group and 19% to the low income group. The disparity is widest between people living in couples where 55% of men compared with 20% of women have high incomes, whereas 12% of men and 49% of women have low incomes. Distribution is the most balanced within the divorced and separated group of people: 31% of women, compared with 37% of men belong to the high income group and 38% of women compared with 27% of men belong to the low income group.

TABLE 7 • DISTRIBUTION OF INDIVIDUALS BY INCOME GROUP AND MARITAL STATUS

Income group	Divorced or separated women	Divorced or separated men	Widows	Widowers	Women in couples	Men in couples	Total
Low	6.91%	4.09%	9.46%	*1.78%*	61.93%	15.84%	100,00%
Medium	5.25%	4.99%	9.81%	3.05%	37.77%	39.14%	100,00%
High	5.17%	5.08%	*2.50%*	*1.00%*	22.97%	63.29%	100,00%
Total	5.75%	4.74%	7.14%	1.93%	40.22%	40.22%	100,00%

Source: SILC Belgium 2006 and 2007, our calculations

The low income group consists mainly of women living in couples, who constitute 62% of the total number of people in this group (Table 7). In contrast, men in couples constitute 63% of high earners. There are 5% of divorced and separated men and women in the medium income group and in the high income group. Amongst those with low incomes, divorced and separated women represent 7% of the total, compared with 4% for divorced and separated men. There are more widows than widowers in the low and medium income groups (9% and 2%; 10% and 3% respectively).

1.2.2 Components of average net individual income

The average income for widows/widowers is made up chiefly of State pensions (Table 8). On average, divorced men have an income derived from economic activity which is slightly lower than that of men living in a couple, but the composition of their incomes is fairly similar, apart from in the case of transfers between households, because divorced and separated men make maintenance payments.

TABLE 8 • COMPOSITION OF AVERAGE NET INDIVIDUALISED INCOME BY GENDER AND MARITAL STATUS

	Divorced or separated			Widows/widowers			In couples		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
Income from economic activity	12,930	21,105	16,623	1,380	2,963	1,716	13,998	25,559	19,779
Income from investment income	-38	868	371	1,319	1,443	1,345	318	328	323
State transfers	7,538	6,511	7,074	13,489	14,465	13,697	3,133	6,730	4,931
Incl: Unemployment benefit	2,126	2,443	2,286	189	768	312	737	1,174	956
Retirement/survivors' pensions	2,911	2,695	2,814	12,934	13,198	12,990	1,194	4,382	2,788
Family allowance	1,159	219	734	185	282	205	747	747	747
Transfers between households	1011	-997	104	12	-93	-10	-51	-51	-51
Taxes	-4,464	-7,633	-5,896	-1,832	-2,967	-2,073	-4,786	-9,236	-7,011
Average net individual income	16,977	19,854	18,277	14,368	15,809	14,674	12,612	23,329	17,970

Source: SILC Belgium 2006 and 2007, our calculations

The income comparison between divorced or separated women and women living in couples shows that the greatest differences do not lie in income gained from economic activity, but in income from State transfers. Separated women receive on average €7,538 yet this figure is a mere €3,133 for women who live in a couple. The difference can be seen when it comes to unemployment benefit (which is generally 3 times greater) and pensions (which are generally 2.5 times greater).
Divorced and separated women have a higher income than women in couples because of State transfers. With regard to income from economic activity, divorced women's income is on average €1,000 lower.

When looking at income derived from economic activity, we observe considerable differences between men and women, regardless of marital status. Among people living in couples, women earn on average 55% of men's income, and among divorced and separated people, women's income is 61% of men's. With regard to State transfers, the gender differences are smaller when they are divorced and separated or widowed. As Burkhauser et al. (1991) highlight, State transfers and taxes lessen the gender income disparities among people who have suffered a break-up, without eradicating them.

However, State transfers received by men living in couples are more than twice those received by women in couples. Widowers receive slightly higher State transfers than widows. Transfers between households mainly apply to divorced and separated people; they are positive for women. Finally, given that women's income is systematically lower than men's, women pay fewer taxes regardless of their marital status. If they are living in a couple, they pay taxes corresponding to 52% of the taxes paid by men. This percentage increases to 58% among divorced and separated people.
The first section of Figure 3 below shows income from economic activity classified in increasing order according to gender and marital status. We find that women always earn substantially less than men. Marital status causes far fewer variations than gender. Women in couples and divorced and separated women derive approximately the same income from economic activity. Men in couples earn slightly more than divorced and separated men. The figure showing State transfers brings to light a completely different classification. Women living in couples receive the least aid from the State and widows/widowers receive the most. Whereas a widow receives on average transfers adding up to around €13,500, divorced or separated women receive only approximately €7,500. Finally, the figure showing transfers between households shows that divorced and separated women receive a figure identical to the amount paid out by divorced and separated men.

FIGURE 3 • INCOME COMPOSITION BY GENDER AND MARITAL STATUS

Average income from economic activity
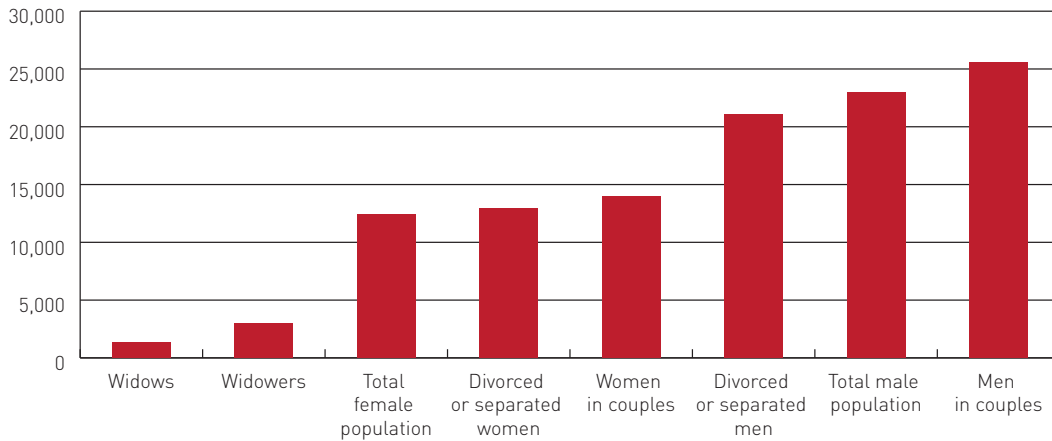
Average income from State transfers
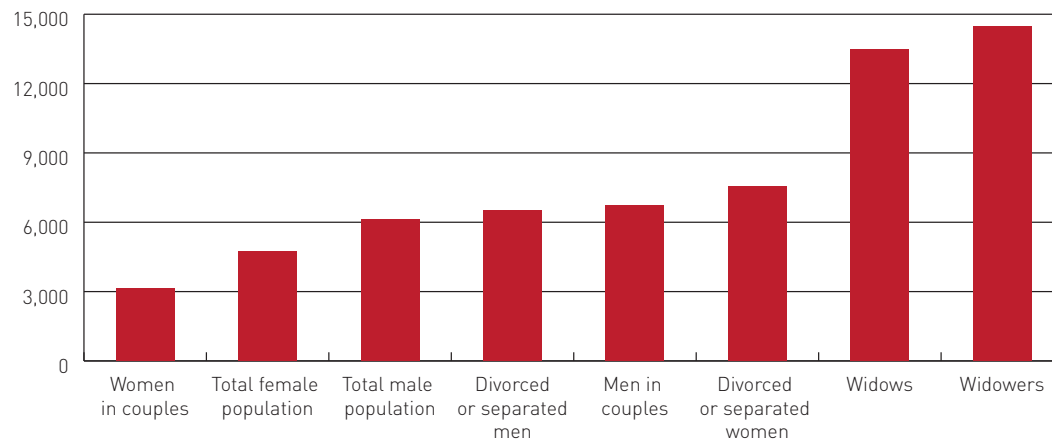
Average income from transfers between households

Source: SILC Belgium 2006, our calculations

In Table 8, the figures for the different transfers are the average amounts for the entire group in question (widows/widowers, divorced and separated people and people in couples), whilst in Table 9 the amounts for different transfers are presented per beneficiary.

TABLE 9 • DISTRIBUTION OF STATE TRANSFERS BY BENEFICIARY (NUMBER OF PEOPLE IN BRACKETS)

	Divorced or separated			Widows/widowers			In couples		
	Women	**Men**	**Total**	**Women**	**Men**	**Total**	**Women**	**Men**	**Total**
Unemployment benefit	*8,406* *(202)*	*10,757* *(98)*	9,327 (300)	*9,851* *(18)*	*11,986* *(12)*	*10,864* *(30)*	6,167 (661)	11,077 (590)	8,474 (12,51)
Survivors' and retirement pensions	*12,867* *(145)*	*16,929* *(94)*	14,358 (239)	13,679 (617)	15,643 (191)	14,061 (808)	10,279 (627)	19,185 (12,31)	16,182 (18,58)
Family allowance	3,116 (320)	*2,528* *(45)*	3,021 (365)	*6,173* *(32)*	*5,913* *(12)*	*6,095* *(44)*	1,617 (2,638)	1,617 (2,638)	1,617 (5,276)

Source: SILC Belgium 2006 and 2007, our calculations

When looking at unemployment benefit, we observe a significant difference in the amount per beneficiary according to gender (Table 9). The disparity between male and female benefits is widest in the group of people living in couples (€6,167 for women, compared with €11,077 for men). The smallest disparity is amongst divorced and separated people; on average women receive unemployment benefit of 78% of that received by men. The same observations can be made for retirement pensions; women's are systematically lower than men's, with a particularly marked disparity in the group of people living in couples. The considerable sum (€3,116) of family allowance received by divorced and separated women shows that it is generally divorced mothers who look after the children and who therefore receive the family allowance. Men and women in couples appear to receive identical amounts of family allowance because we have broken down this income component which is declared on a household level in the SILC Belgium 2006 and 2007 data.

1.2.3 Net individual income according to characteristics

It is difficult to carry out a systematic comparison of the net individual income of people in couples, divorced and separated people and widows/widowers, because of the small size of the sub-samples. Average income first increases with age and then decreases (Table 10). Older women living in couples have a very low income which is not the case for separated and divorced women. Income changes due to age follow a peaked curve, the peak of which is further to the left for women who live in couples and further to the right for divorced and separated women. Regardless of the age group, the disparity is greatest in the group of people living in a couple. Amongst the group of widowed people, widows have the lower income.

Income increases with the level of educational attainment, regardless of marital status. Divorced and separated women's income is always higher than that of women living in a couple, regardless of the level of education. Divorced and separated men's incomes are lower than those of men who live in a couple.

TABLE 10 • AVERAGE NET INDIVIDUALISED INCOME ACCORDING TO CERTAIN CHARACTERISTICS

Age group	Divorced or separated			Widows/widowers			In couples		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
‹ 25 years	*8,223*	*14,378*	*9,930*	*0*	*0*	*0*	10,357	*14,386*	11,567
25 to 34 years	*17,885*	*18,692*	*18,298*	*33,700*	*0*	*33,700*	14,792	21,244	17,737
35 to 44 years	19,414	*19,626*	19,500	*25,740*	*29,083*	*26,629*	16,530	27,499	22,091
45 to 54 years	19,803	20,679	20,247	*24,162*	*27,520*	*24,842*	14,115	27,346	20,924
55 to 64 years	15,120	20,812	17,888	*14,149*	*16,281*	14,662	97,65	22,642	16,424
› 65 years	11,855	*16,421*	13,360	13,716	14,905	13,964	5,345	17,350	11,829
Total	16,977	19,854	18,277	14,368	15,809	14,674	12,612	23,329	17,970
Level of education									
Primary education or less	10,659	*12,434*	11,447	12,518	*12,399*	12,495	5,333	15,760	10,522
Lower secondary education	14,588	*14,798*	14,673	13,331	*14,462*	13,517	7,760	19,045	13,003
Upper secondary education	15,600	18,741	17,093	15,682	*18,101*	16,326	10,677	21,510	16,246
Higher education	22,915	26,954	24,752	*20,577*	*21,837*	20,887	18,215	28,525	23,388
Total	16,977	19,854	18,277	14,368	15,809	14,674	12,612	23,329	17,970
Activity status									
Full-time worker	23,990	24,504	24,285	*33,660*	*31,762*	*33,071*	19,970	27,171	24,728
Part-time worker	19,407	*24,354*	20,345	*23,343*	*28,324*	*24,963*	15,662	21,206	16,439
Unemployed	13,102	*11,823*	12,567	*12,133*	*12,263*	*12,202*	9,295	14,840	12,081
Retired	12,241	*16,808*	13,913	13,758	14,903	13,993	8,389	17,676	14,086
Non-active	11,858	*14,551*	13,053	*13,555*	*12,761*	*13,468*	3,172	13,119	4,638
Total	16,977	19,854	18,277	14,368	15,809	14,674	12,612	23,329	17,970
Number of children									
0	13,875	19,549	16,990	13,927	15,037	14,160	9,815	19,611	14,713
With children	22,229	*23,842*	22,449	*28,288*	*31,227*	*29,157*	15,688	27,419	21,553
1	20,510	*22,113*	20,789	*24,363*	*31,819*	*26,238*	14,336	23,902	19,119
2	21,738	*26,997*	22,281	*26,014*	*28,356*	*27,143*	16,267	28,071	22,169
3 or +	*30,585*	*28,807*	*30,462*	*37,084*	*46,618*	*38,156*	16,888	32,158	24,523
Total	16,977	19,854	18,277	14,368	15,809	14,674	12,612	23,329	17,970

Source: SILC Belgium 2006 and 2007, our calculations

TABLE 11 • NET INDIVIDUALISED INCOME DISPARITY BETWEEN MEN AND WOMEN ACCORDING TO NUMBER OF DEPENDENT CHILDREN

	Divorced or separated			In couples		
	Women	**Men**	**Ratio of women/ men**	**Women**	**Men**	**Ratio of women/ men**
0	13,875	19,549	0.71	9,815	19611	0.50
With children	22,229	*23,842*	*0.93*	15,688	27,419	0.57
1	20,510	*22,113*	*0.93*	14,336	23,902	0.60
2	21,738	*26,997*	*0.81*	16,267	28,071	0.58
3 or +	*30,585*	*28,807*	*1.06*	16,888	32,158	0.53
Total	16,977	19,854	0.86	12,612	23,329	0.54

Source: SILC Belgium 2006 and 2007, our calculations

The sample of divorced and separated men and of widows and widowers by activity status is not statistically significant, which prevents an in-depth commentary.

As a rule, men always have a greater income than women irrespective of their activity status. However, amongst the group of divorced and separated people, unemployed women appear to have greater income than unemployed men. This is explained by the fact that unemployment benefit is adjusted depending on family status. It should also be noted that there is a small disparity in income between male and female full-time workers amongst the group of divorced and separated people.

One initial finding can be made: with regard to dependent children (Table 11), the average income for divorced and separated people who have dependent children is systematically higher than for people of the same status who have no dependent children.

The gender income disparity is -29% where there are no dependent children, yet it is just -7% where there are dependent children.

With regard to people living in a couple, the disparity in income between men and women who have no dependent children is -50%, whereas is it only -43% where there are dependent children.

1.3 Financial dependence

Amongst women, the lowest rate of financial dependence is observed for widows (16%). The rate is highest for women living in a couple (40%) (Table 12). For men, on the other hand, those living in a couple have the lowest financial dependence rate (6%).

It is impossible to analyse financial dependence according to characteristics because of the small number of observations available, even though we merged the 2006 and 2007 waves of SILC data.

TABLE 12 • RATE OF FINANCIAL DEPENDENCE

	Women	Men	Total	Ratio of women/men
Divorced or separated	19%	*11%*	15%	*1.7*
Widows/widowers	16%	*10%*	15%	*1.6*
In couples	40%	6%	23%	6.7
Total	34%	7%	21%	4.9

Source: SILC Belgium 2006 and 2007, our calculations

1.4   Conclusion

In this section of the study devoted to the effect of a break-up or their partner's death on individual net income and on financial dependence, we compared three categories of individuals: widows/widowers, divorced and separated people and people living in couples. The results are strongly determined by these different types of status as well as by individual characteristics.
The widows/widowers group is mainly characterised by an advanced age and by the retired status associated with it. The generation effect also explains why this group has a lower level of education. The differences that emerge from a comparison of people living with a partner and people who are divorced and separated are characterised by their age: on average, divorced and separated people are four years older than those who live in couples. The level of educational attainment is lower for divorced and separated people. As far as activity status is concerned, this group has a higher number of unemployed people and a smaller amount of full-time workers. With regard to the number of dependent children, this is lower for divorced and separated people than for couples. The differences between men and women are characterised by their activity status: little difference is evident between the percentage of women who work full-time within both groups (31-32%). On the other hand, many more divorced women are unemployed, very few of them are inactive and fewer of them work part-time.
Irrespective of marital status, the man's net individual income is always higher than the woman's. The gap is largest within couples. On the other hand, income inequalities are smallest between divorced and separated men and women.

On average, divorced men have an income derived from economic activity which is slightly lower than men living in a couple, but its composition is fairly similar, other than in the case of maintenance paid, which is higher. When we compare women living in a couple with divorced and separated women, differences in income are widest when it comes to State transfers (unemployment benefit and pensions). Whereas divorced and separated women receive transfers which are relatively high compared with those received by divorced and separated men when these women are unemployed, women living in a couple receive far less than men in a couple. The unemployment benefit system is graduated according to family situation and therefore strongly favours men who are heads of households. Women's retirement pensions are systematically lower than men's; the gap is particularly wide within the group of people living in couples. The substantial family allowances paid to divorced and separated women are indicative of the fact that as a general rule divorced mothers usually have custody of the children. The average income of widows/widowers is mainly made up of State-paid pensions.
It is difficult to carry out a systematic comparison of net individual income between people living in couples, those who are divorced and separated, or widowed based on characteristics, due to the small size of the sub-samples.

Changes in income according to age follow a peaked curve, the peak of which is further to the left for women in couples and further to the right for divorced and separated women. Regardless of age group, the largest income gap is between men and women who live in couples.

Even if income increases with the level of education, it is systematically higher for divorced and separated women than for women living in a couple. On the other hand, divorced and separated men's income is always lower than that of men living in a couple, apart from in the case of higher educational attainment. With regard to activity status, it is important to highlight the fact that the gap between male and female full-time workers within the group of divorced and separated people is small.

With regard to dependent children, when analysing individual incomes, our findings do not show the difficult situation which would be familiar to single parents. Irrespective of marital status and gender, on average people with dependent children have a higher income than people who have none. Unlike women living in a couple, divorced and separated women's income is almost equal to men's when they have dependent children.

Rates of financial dependence are lowest for men who live in a couple (6%) and for widowers, and they are highest for divorced and separated men (11%). Conversely, the level of dependence amongst women living in a couple is more than twice that observed for divorced and separated women and widows.

2. ANALYSIS OF CHANGE IN SINGLE WOMEN'S AND MEN'S INCOMES AFTER BREAK-UP BASED ON THE 2007 SILC LONGITUDINAL DATABASE FOR 18 COUNTRIES

This section presents the results of a study carried out on longitudinal data from the European SILC for 18 countries. The data relate to the period 2004-2007. The aim is to measure the effects of a break-up on the partners' individual net income.

The first section presents the data, the second shows the estimated model and the variables used. The descriptive statistics are set out in the third section. The fourth contains a breakdown of the results of the econometric estimations. Finally, a conclusion summarises the main results and implications of this part of the study.

2.1 The data

The longitudinal study of the effects of a break-up on single men's and women's individual income is based on the 2007 European SILC longitudinal database which includes findings for 22 countries. The method of measuring net income has a technical description which is available in the technical note appended to this report. Our sample covers only 18 of the 22 countries because we did not have the necessary information to calculate net income for four countries. The 18 countries are: Finland, Hungary, Iceland, Lithuania, the Netherlands, Norway, the Slovak Republic, the United Kingdom, Austria, Belgium, Cyprus, the Czech Republic, Estonia, Spain, Luxembourg, Poland, Sweden and Slovenia.

In our sample we defined adults as people who are older than 25 or aged 18 to 25 and considered economically active (i.e. people in this age group not living with their parents and, if that is the case, who are working or actively seeking work).

Our sample is made up of adults who were living in a couple during the survey conducted in year t (2004 or 2005), but who were not in a couple during the survey carried out in 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 have all the necessary information in year t+2 (2006 or 2007). Following the examples set by Smock (1994) and Uunk (2004), we consider the data collected during year t to be representative of the

individuals' situation before the break-up and the data from year t+2 representative of their situation following the break-up. Our study is therefore concerned with short term changes in income (one year before and one year after break-up). We chose year t+2 to represent individuals' situations following a break-up instead of year t+1 because of the time which elapses before information on income is collected by SILC. Indeed, the incomes declared during year t+1 were received in year t, the year in which the break-up took place.

People who are single following their partner's death and those who are living in a couple again after the break-up have not been included in our sample.

Our sample covering 18 countries consists of 416 women and 345 men (Table 13). They are divorced or separated adults. The headcount varies from country to country; the largest amount is from Luxembourg (115), and the smallest amount of individuals from the Slovak Republic (5). Jarvis and Jenkins (1999), Poortman (2000), and Uunk (2004) also use small sample sizes for panel studies comparing several European countries. Table 13 shows the number of individuals by gender for each of the 18 countries in our sample. All the findings have been weighted to ensure that they are representative of our sample.

TABLE 13 • DISTRIBUTION OF INDIVIDUALS BY COUNTRY

	Women	Men	Total
AT	30	22	52
BE	19	24	43
CY	14	6	20
CZ	14	7	21
EE	33	19	52
ES	33	15	48
FI	32	23	55
HU	18	15	33
IS	7	8	15
LT	12	7	19
LU	55	60	115
NL	9	12	21
NO	36	42	78
PL	30	13	43
SE	31	40	71
SI	15	11	26
SK	3	2	5
UK	25	19	44
Total	416	345	761

Note: AT=Austria, BE=Belgium, CY=Cyprus, CZ=Czech Republic, EE=Estonia, ES=Spain, FI=Finland, HU=Hungary, IS=Iceland, LT=Lithuania, LU=Luxembourg, NL=Netherlands, NO=Norway, PL=Poland, SE=Sweden, SI=Slovenia, SK=Slovak Republic, UK=United Kingdom.
Source: Longitudinal EU SILC 2004-2007

2.2   Descriptive statistics

In the sample, the average age when break-up occurs is at 44 years old. Almost half of these people are educated to upper secondary level, a quarter has received higher education and a quarter is educated to a lower level.

The matrix showing changes to activity status (Table 14) shows that:
- full-time work is fairly stable: 94% of men and 83% of women maintained this status after the break-up. A tenth of the women who worked full-time before the break-up change this status to part-time after the break-up.
- there is a high occurrence of changes from part-time to full-time: 52% of men and 30% of women who worked part-time before the break-up changed to work full-time afterwards.
- with regard to unemployed people, if a change is caused by the break-up, women generally change either to become non-workers (24%), or to work full-time (19%), while far more men find themselves working full-time after the break-up.
- a break-up causes 42% of men who were inactive before the event to become retired and 21% to find full-time employment. Over half the women who were non-active before the break-up change status because of the event: 13% find full-time work and 30% part-time work.
- as a general rule, people who are retired or otherwise inactive before the break-up tend to stay inactive after separation.
- people who are working tend to stay in the labour market, and even participate in it to a greater extent; this is particularly true for men.

TABLE 14 • MATRIX OF CHANGES TO ACTIVITY STATUS[31]

Men	Full-time work T+2	Part-time work T+2	Unemployed T+2	Retired T+2	Non-workers T+2
Full-time work T	93.54%	*1.76%*	*2.13%*	*0.30%*	*2.26%*
Part-time work T	*51.68%*	*44.04%*	*0.00%*	*3.71%*	*0.57%*
Unemployed T	*42.21%*	*1.36%*	*40.00%*	*0.00%*	*16.42%*
Retired T	*2.22%*	*1.17%*	*0.00%*	*94.46%*	*2.15%*
Inactive T	*21.16%*	*0.00%*	*2.12%*	*42.01%*	*34.70%*

Women	Full-time work T+2	Part-time work T+2	Unemployed T+2	Retired T+2	Non-workers T+2
Full-time work T	83.33%	*10.48%*	*0.94%*	*3.18%*	*2.06%*
Part-time work T	*30.05%*	*38.79%*	*9.07%*	*20.55%*	*1.53%*
Unemployed T	*19.44%*	*8.89%*	*47.80%*	*0.00%*	*23.87%*
Retired T	*2.03%*	*0.96%*	*0.00%*	*87.46%*	*9.56%*
Inactive T	*13.06%*	*29.84%*	*4.82%*	*8.27%*	*44.02%*

Source: 2007 Longitudinal EU SILC, our calculations

31 The figures in italics correspond to income groups for which we have a sample size smaller than 100 people.

The matrix showing changes (Table 15) in the number of dependent children should be interpreted with caution because the figures are not very significant. The majority of women keep the same number of dependent children after break-up (both before and after break-up, 72% have one dependent child, 83% have two and 69% have three or more) whereas the majority of men have fewer or no dependent children after the break-up. This is due to the fact that in most cases women retain custody of the children following a break-up (Castro and Bumpass 1989, Amato 2000).

TABLE 15 • MATRIX OF CHANGES TO NUMBER OF DEPENDENT CHILDREN

Men	No dependent children T+2	1 dependent child T+2	2 dependent children T+2	3 dependent children T+2
No dependent children T	83.74%	9.87%	3.86%	2.53%
1 dependent child T	65.25%	34.75%	0.00%	0.00%
2 dependent children T	73.32%	10.29%	16.39%	0.00%
3 dependent children T	36.98%	22.09%	3.72%	37.21%

Women	No dependent children T+2	1 dependent child T+2	2 dependent children T+2	3 dependent children T+2
No dependent children T	55.97%	18.29%	20.03%	5.71%
1 dependent child T	9.81%	71.88%	18.31%	0.00%
2 dependent children T	5.32%	11.34%	83.32%	0.02%
3 dependent children T	21.91%	1.84%	6.80%	69.45%

Source: 2007 Longitudinal EU SILC, our calculations

A break-up increases men's and women's net income (Table 16). However, women's income increases considerably more than men's: on average women's net income increases by 40%, whilst this figure is only 6% for men. This result confirms Smock's (1994) findings; she found that in the United States, women's individual net income increases on average by 71% and men's by 0.47%. However, men's average net income remains considerably higher than women's.

TABLE 16 • MEDIAN AND AVERAGE NET INDIVIDUALISED INCOME

	Median net individual income before break-up (t)	Median net individual income after break-up (t+2)	Change in median net individual income
Women	9,126	13,710	+50.23%
Men	18,479	19,103	+3.38%
Total	12,912	15,563	+20.53%

	Average net individual income before break-up (t)	Average net individual income after break-up (t+2)	Change in net individual income
Women	11,402	15,912	+39.55%
Men	19,485	20,633	+5.89%
Total	15,180	18,040	+18.84%

Source: Longitudinal EU SILC 2004-2007, our calculations

The increase in women's average net income following break-up is essentially due to State transfers which go from an average €2,930 before break-up to €7,496 after break-up (Table 17). The proportion of women's average net income which is made up of State transfers goes from 26% to 47% between t and t+2. Break-ups seem to have little effect on the income that women derive from economic activity. In general, the break-up does not force women to increase the time they work. Income from transfers between households shows as a credit for women and a debit for men, and this increases after break-up. Given that women more often have custody of the children, more men pay maintenance costs. As women's incomes are on average considerably lower than men's, the taxes women pay are lower than those men pay.

TABLE 17 • COMPONENTS OF AVERAGE NET INDIVIDUALISED INCOME

Components in t	Women	Men	Total
Income from economic activity	12,060	22,240	16,818
Investment income	-286	-284	-285
State transfers	2,930	4,882	3,842
Transfers between households	53	-65	-2
Taxes	-3,356	-7,288	-5,193
Net individual income	11,402	19,485	15,180

Components in t+2	Women	Men	Total
Income from economic activity	12,468	24,375	17,834
Investment income	-333	-461	-391
State transfers	7,496	5,610	6,646
Transfers between households	528	-548	43
Taxes	-4,248	-8,343	-6,093
Net individual income	15,912	20,633	18,040

Source: Longitudinal EU SILC 2007, our calculations

Whereas a break-up generally causes a considerable increase in the woman's net income and either does not change or causes a slight increase to the man's income, Table 18 shows that in our sample, 19% of women and 37% of men still experience a decrease in income after the break-up.

TABLE 18 • CHANGES TO INDIVIDUALISED NET INCOME BETWEEN T AND T+2

	Women	Men
Increase in net individual income		
Number of observations	339	218
Percentage	81.49	63.19
Decrease in net individual income		
Number of observations	*77*	127
Percentage	*18.51*	36.81
Total		
Number of observations	416	345
Percentage	100.00	100.00

Source: Longitudinal EU SILC 2004-2007

2.3 Description of the econometric model and variables applied

To analyse the determining factors in changes to individuals' income after a break-up, we took Uunk's study (2004) as our starting point but unlike him we worked on individual incomes whereas he works on equivalent incomes.

We estimated the following equation:

$\ln Y_{t+2} - \ln Y_t = \alpha + \beta X_{t \text{ or } t+2} + \varepsilon$

- The dependent variable ($\ln Y_{t+2} - \ln Y_t$) corresponds to the change in annual net individual income between t and t+2
- α is the constant
- X is the vector of explanatory variables and β the vector of the coefficients associated with them
- ε is the error term

The model is estimated by the ordinary least squares method. The standard deviations are robust thanks to the heteroscedasticity correction in accordance with the White model (1980). We used STATA.10 software.

The dependent variable is the difference between the logarithm of net individual income one year before the break-up and one year after. It allows us to evaluate the change in income between these

two dates. We applied this logarithm because income does not follow a normal distribution. Net income corresponds to the sum of earnings from economic activity, investment income, from transfers between households and from State transfers, all minus taxes.

Amongst the explanatory variables, on the one hand we have individual variables (the logarithm of net individual income before the break-up, age, number of dependent children, level of educational attainment and activity status) and on the other we have macro-economic variables (the kind of welfare state and the level of public childcare facilities for children aged 0 to 2 years).

Logarithm of net individual income before the break-up: This variable is used to control for the changes in income following a break-up. We would expect the coefficient of this variable to be negative, which would mean that an individual with a high income before the break-up would experience a smaller increase in income after the break-up, compared with someone who has a lower income before the break-up.

Age: Age is measured before the break-up. Age could have a positive effect on the changes in individual net income after a break-up if it stands for professional experience, or a negative effect if one considers the fact that it is more difficult for an older person to resume work activity.

Number of dependent children: The number of children is measured after the break-up. This variable could have a positive effect on changes in women's net individual income after break-up, inasmuch as State transfers are more generous for people with dependants. However, considering that in many countries women's activity rate decreases as the number of dependent children increases, children could prevent women from resuming work activity in the absence of accessible public childcare services.

Level of educational attainment: The level of educational attainment is measured before the break-up and has a positive effect on the female employment rate. Inasmuch as women who have a high level of education are more likely to work before the break-up, the level of education may have a negative effect on changes in net individual income after the break-up. However, if women did not work before the break-up, a high educational level will enable them to re-enter the labour market more easily and, in this case, the level of educational attainment will have a positive effect on the changes in net individual income. The three levels of educational attainment considered are: lower secondary level (primary and lower secondary levels have been grouped together in order to make them significant), upper secondary level, and higher level.

Activity status: We did not use the same methods as Uunk (2004) for this variable because they were not statistically significant (working fewer than 14 hours per week, working at least 14 hours per week). Instead we considered the influence that the change of activity status has between t and t+2 on changes in income. The first option comprises individuals who maintain the same activity status between the two dates considered, the second option comprises people who go from having the status of a worker (full-time or part-time) to someone who does not work (unemployed, retired, non-active), and the final option consists of those who are not active on the labour market in t but who are active in t+2.

Types of welfare state: One way of categorising welfare states which is often employed in the literature is that of Esping-Andersen. In 1990, this author set out three types of welfare state: the liberal, the conservative-corporatist and the social-democratic types. In the first regime, the market plays a large part, and the State intervenes only when the market fails and intervention is targeted at the

poorest. Employing women is neither encouraged, nor discouraged, but is left to market forces. The aim of the conservative regime is to preserve existing social differences. This is a more generous and better organised regime than the liberal one. Employing women is not encouraged because the man is supposed to provide for the family. In the social democratic regime, emphasis is put on the role of the State and equality between individuals on a socioeconomic level. The State guarantees equality between individuals and encourages the employment of men and women. Esping-Andersen's typology has attracted much criticism. Authors such as Leibfried (1992), Katrougalos (1996), Bonoli (1997), Ebbinghaus (1998) and Trifiletti (1998) criticised him for not isolating the Mediterranean regime within his classification. In 1999, Esping-Andersen acknowledged that southern countries have a distinct welfare state regime: the family in the broad sense is responsible for the well-being of its members. The social security system is selective and not very generous and policies promoting the employment of women are undeveloped. Furthermore, Esping-Andersen's typology has been heavily criticised by the feminist movement which accuses him of entirely overlooking gender and of favouring the conservative model of the man as breadwinner and the woman as housewife. Even though we uphold these critical points of view, we have used Esping-Andersen's typology study because it is standard in empirical literature. However, our results will show that the study is not robust when applied to this kind of analysis of changes in individual income following the break-up of a household. With regard to the new Member States of the European Union, we used the categories established by Miroslav (2008). The post-socialist countries are in fact too diverse to be grouped together. The 18 countries in our sample have been assembled into eight groups according to the type of welfare state:

- the conservative-corporatist regime (Austria, Belgium, Luxembourg)
- the social-democratic regime (Finland, the Netherlands, Sweden, Iceland, Norway)
- the liberal regime (the United Kingdom)
- the Mediterranean regime (Spain, Cyprus)
- the moderate liberal or light liberal regime (Lithuania, Estonia)
- the moderate conservative or light conservative regime (Czech Republic, Hungary, Poland)
- the quasi- or nearly conservative regime (Slovenia)
- the heterogeneous or uncertain middle regime (Slovak Republic)

We expect the individuals from the social-democratic regime to be the least penalised in economic terms after a break-up.

Public childcare facilities: This variable measures the percentage of children aged two or over who are looked after by public childcare facilities for a minimum of 30 hours per week in 2006.[32] We expect this variable to have a positive effect on the income trend for women after a break-up because their participation in the labour market depends on the accessibility of public childcare services.

2.4   Results of the estimations

The majority of studies on the economic consequences of divorce explain only the income changes caused by such an event and the ex-partners' individual characteristics (Andreß and Lohmann 2000 for Germany, Finnie 1993 for Canada, Gähler 1998 for Sweden, Jarvis and Jenkins 1999 for the United Kingdom, Poortman 2000 for the Netherlands, and Smock 1994 for the United States). However, State intervention lessens the economic consequences of divorce for women. Studies which look at the impact of institutional variables on income changes in the event of a break-up limit themselves to

comparing income before and after State intervention or transfers, and conclude that this intervention reduces the economic impact of a break-up for women (Hoffman 1977, Burkhauser et al. 1991, Jarvis and Jenkins 1999, and Poortman 2000). The Uunk study (2004) is one of the few documents to evaluate the joint effect of individual and institutional variables on income changes in the case of a break-up. Given the small size of his sample, Uunk had to limit himself to three macroeconomic variables: the State benefits that single parents receive, the number of places available at public childcare facilities, and the types of welfare state.

In this analysis we measure, like Uunk (2004), the influence of both individual characteristics and macroeconomic variables, but unlike Uunk, we measure their influence on net individual income changes, rather than on equivalent income after a break-up. In our model, these explanatory variables are progressively introduced. Therefore we estimate five variants of our basic model. All the estimations have been separately carried out for women (Table 19) and men (Table 20). The first variant includes only the income before the break-up and the macro-economic variable relative to the different types of welfare state. The second variant of our model includes the income before the break-up and the macro-economic variable relative to the amount of public childcare facilities. The explanatory variables of the third variant are the income before the break-up and the two previous macroeconomic variables. The model's fourth variant excludes macroeconomic variables, but includes all individual characteristics. Finally, the fifth variable is the full model combining all explanatory, individual and macroeconomic & variables.

The explanatory power of these five models is between 77% and 85% for women. Models estimated on the sample of men prove less statistically significant; R^2 varies from 19% to 52%. The choice of variables therefore seems a more appropriate explanation of the changes in women's net individual income following a break-up.

According to model 1, the higher women's net individual income is before the break-up, the less their income changes (i.e. increases) between t and t+2. In other words, the lower an individual's income before the break-up, the more their income will increase afterwards. This result confirms our expectations. Women with a lower income before the event will have more of a motivation to change their activity status, particularly if they find themselves alone with dependent children. Furthermore, many State transfers are capped or fixed in order to target the people who need them most. Our expectations were also confirmed when looking at the impact of the type of welfare state on changes to income in the event of a break-up. For women living in a former socialist country, whether the social system is described as light liberal, moderate conservative, quasi-conservative or heterogeneous, a break-up causes a smaller increase in income than in countries where a social-democratic regime is in place. The social-democratic regime is characterised by social policies which explicitly aim to reduce inequalities and increase the employment of women.

With regard to men, we observe that income before the break-up has less of an adverse effect than for women (-41% compared with -90% for women). This is in line with the descriptive statistics: changes in income after a break-up are more marked for women than for men. The positive sign on the coefficient associated with the conservative regime is rather unexpected because it shows that a man living in such a regime will see his income increase more in the event of a break-up than a man in a standard social democratic regime.

Model 2 indicates that access to public childcare facilities for very young children has a positive effect for women but not for men. This is not surprising, as it is usually women who have custody of the children and the availability of public childcare facilities helps them to combine family and work-related responsibilities.

In model 3, which has three explanatory variables (income before the break-up, type of welfare state and availability of public childcare facilities), we observe that the variable for availability of public

childcare services is significant only for women. Apart from in the former socialist countries, the way the variable for type of welfare state works is difficult to interpret, at least for estimations on the female sample.

In model 4, which only includes individual variables (and not the macroeconomic variables) for women, the increase in women's net individual income caused by a break-up increases in line with the women's age, which would suggest that age is a proxy for work experience. A woman who has been educated at most to lower secondary school level sees her income increase less following a break-up than a woman educated to upper secondary level. However, we observe the opposite for women with higher education who see their income increase more than that of women who have received upper secondary education. A high level of education makes it easier for women who did not work before the break-up to re-enter the labour market after the event. In the same way, a woman who did not work before the break-up but who goes out to work afterwards would see her income increase more than a woman who maintains the same activity status before and after the break-up. With regard to men, none of the coefficients estimated was statistically significant.

In model 5, which includes all of the explanatory variables, we observe that activity status loses its significance for women. It is possible that the effect of this variable is encompassed by the availability of public childcare facilities. The more widely these facilities are available, the easier it is for women to participate in the labour market.

TABLE 19 • DETERMINANTS OF THE CHANGE IN WOMEN'S NET INDIVIDUALISED INCOMES FOLLOWING A BREAK-UP

Dependent variable: ln (net income after break-up) – ln (net income before break-up)	Model 1	Model 2	Model 3	Model 4	Model 5
ln (net income before break-up)	-0.898*** (0.038)	-0.866*** (0.049)	-0.866*** (0.049)	-0.847*** (0.050)	-0.890*** (0.037)
Age (before break-up)				0.011** (0.004)	0.010** (0.005)
Number of dependent children (after break-up)				-0.030 (0.100)	0.050 (0.088)
Level of education (before break-up)					
Lower secondary education or less				-0.442** (0.203)	-0.409** (0.194)
Upper secondary education				Reference	Reference
Higher education				0.279* (0.153)	0.298** (0.135)
Activity status between t and t+2					
No change in activity status				Reference	Reference
Working in t and not working in t+2				-0.830 (0.632)	-1.030 (0.755)
Not working in t and working in t+2				0.388** (0.169)	0.207 (0.169)
Type of welfare state					
Social-democratic	Reference		Reference		Reference
Conservative-corporatist	0.072 (0.181)		0.412** (0.161)		0.238 (0.175)
Mediterranean	-0.182 (0.206)		-0.059 (0.182)		0.056 (0.157)
Liberal	0.129 (0.166)		0.680*** (0.203)		0.462** (0.198)
Moderate conservative	-1.385*** (0.324)		-0.776** (0.34)		-0.964*** (0.337)
Moderate liberal	-1.156*** (0.272)		-0.584** (0.291)		-1.194*** (0.290)
Quasi-conservative	-0.276 (0.315)		-0.383 (0.284)		-0.176 (0.349)
Heterogeneous	-1.438*** (0.476)		-0.864* (0.491)		-1.233*** (0.332)
Public childcare services					
Number of places available in public childcare facilities		0.028*** (0.008)	0.030*** (0.008)		0.017** (0.008)
R^2	0.803	0.807	0.844	0.77	0.848

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; ( ): standard deviations
Source: Longitudinal EU SILC 2007, our calculations

TABLE 20 • DETERMINANTS OF THE CHANGE IN MEN'S NET INDIVIDUALISED INCOMES FOLLOWING A BREAK-UP

Dependent variable: ln (net income after break-up) – ln (net income before break-up)	Model 1	Model 2	Model 3	Model 4	Model 5
ln (net income before break-up)	-0.410** (0.161)	-0.500*** (0.058)	-0.443** (0.171)	-0.362*** (0.125)	-0.540*** (0.136)
Age (before break-up)				0.001 (0.002)	-0.003 (0.003)
Number of dependent children (after break-up)				0.079 (0.074)	0.127** (0.062)
Level of education (before break-up)					
Lower secondary education or less				0.011 (0.113)	-0.010 (0.128)
Upper secondary education				Reference	Reference
Higher education				0.214** (0.088)	0.283*** (0.104)
Activity status between t and t+2					
No change in activity status				Reference	Reference
Working in t and not working in t+2				-0.009 (0.176)	-0.166 (0.132)
Not working in t and working in t+2				0.404 (0.301)	0.223 (0.351)
Type of welfare state					
Social-democratic	Reference		Reference		Reference
Conservative-corporatist	-0.082 (0.090)		-0.039 (0.084)		0.011 (0.090)
Mediterranean	0.007 (0.214)		0.028 (0.200)		0.002 (0.169)
Liberal	0.047 (0.116)		0.073 (0.142)		0.055 (0.134)
Moderate conservative	-0.295 (0.326)		-0.347 (0.322)		-0.537* (0.288)
Moderate liberal	-3.369* (1.976)		-3.455* (1.989)		-3.466* (1.881)
Quasi-conservative	2.565** (1.160)		2.402** (1.197)		1.752* (0.964)
Heterogeneous	-0.553 (0.343)		-0.601* (0.340)		-0.716** (0.291)
Public childcare services					
Number of places available in public childcare facilities		0.002 (0.004)	-0.002 (0.005)		0.000 (0.005)
R^2	0.269	0.518	0.310	0.189	0.397

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; ( ): standard deviations
Source: Longitudinal EU SILC 2007, our calculations

2.5 Conclusion

The aim of this analysis was to examine the effects of a break-up on the net individual income of women and men.

We used the 2007 SILC longitudinal database to carry out our analysis. Our results show that, following a break-up, men's average net individual income increases by 6% whilst for women this figure reaches 40%. Our results conflict with the findings of the rest of the literature, which generally cites negative economic consequences of a break-up, particularly for women. This can be explained by the fact that the majority of studies on income and poverty use the hypothesis that income is shared equally within households, but we reject this hypothesis in our analysis. What is original about this study is in fact that it looks at the personal incomes of individuals - namely the income they have as a result of their work, any State transfers they may receive and their income from immovable and movable property, regardless of their lifestyle and the household in which they live. In spite of the considerable increase in women's net individual income in the event of a break-up, which is highlighted by our results, women's income still remains lower than that of men in the same situation.

We took Uunk's study (2004) as our starting point to estimate an econometric model enabling us to identify individual and macroeconomic variables influencing the variation in net individual income in the event of a break-up. Our results show that the model estimated is more apt when it comes to explaining the variation in women's net individual income than men's following a break-up.

With regard to individual characteristics, we show that the income received before the break-up has a negative influence on the increase in income after the break-up; the increase in income caused by the break-up is not as large for a person with a high income before the break-up. Age has a positive influence on the variation of income, inasmuch as it represents professional experience. Individuals with a high level of educational attainment see their income rise after a break-up to a greater extent than individuals with a lower level of education. A high level of educational attainment makes it easier for women who did not work prior to the break-up to re-enter the labour market after the event. Finally, 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 macroeconomic variables are concerned, an increase in the number of places in public childcare facilities exerts a positive influence on the variation in income in the event of a break-up. Public childcare therefore seems 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.

CHAPTER 5

Analysis of time inequality between women and men in Belgium

This chapter concerns Belgian databases which could be used to measure inequalities between men and women in spheres other than income.

Firstly we will examine the Belgian Household Budget and the Belgian Time Use Surveys (2005) in order to determine the possible variables in each of these databases at the level of the individual. Then we will complete the analyses and indicators suggested in the preceding chapters in terms of gender inequalities in consumption, lifestyle and time.

1. ANALYSIS OF DATABASES CONSTRUCTED FROM THE HOUSEHOLD BUDGET SURVEY AND THE TIME USE SURVEY

1.1 Household Budget Survey

The Household Budget Survey is an annual survey whose aim is to determine the level and composition of income and expenses of a representative sample of private households.
Each year, just over 3,500 households take part in this survey and keep a detailed daily log of all their income and expenses for one month (approximately 300 households are surveyed in this way every month). At the end of the month the households must also complete a questionnaire in which they record retrospectively the major non-recurring expenses of the previous four months.

The particular interest of this Survey lies in the very great number of variables relative to household expenses, since it includes a specific section on household consumption, whether this be bought goods and services, goods produced by the household or even goods given by the employer or by a public body. This section includes almost 1,500 variables and is based on the expenditure categories used by the Belgian National Institute of Statistics (to 6 figures), which gives us a large amount of information concerning the expenses and habits of households to a very detailed level[33] in the areas of:

- food (bread and cereals, meat, fish, dairy produce, fruit, vegetables, sweets and confectionery, ready meals, alcoholic and non-alcoholic drinks, tobacco);
- clothing (clothes, baby clothes, accessories, shoes, clothing and shoe repairs);
- housing (gross rental costs; heating, lighting and water);
- furniture, household appliances, household equipment and regular maintenance (furniture and fittings, carpets, other floor-coverings, repairs; household textiles, soft furnishings and repairs; heating appliances and large household appliances, etc.);
- health and personal care expenses (medicines and pharmaceutical products, equipment for treatments, services of doctors, nurses and other practitioners, etc.);
- transport and communication (vehicle purchase, running costs of private vehicles, transport services, etc.);
- culture, leisure and education (equipment and accessories; leisure, entertainment and cultural services; newspapers, books, stationery, tuition);
- other goods and services (toiletries; personal articles; restaurants, cafés and hotels; leisure travel; financial services and insurance, etc.);

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33 Here we give only the main items of expenditure but they are broken down into much greater detail in the database. For example, the heading 'bread and cereals' is further divided into large white loaves, small white rolls, mixed-grain/brown loaves, baguettes, brioches, etc.; under the heading 'meat', there is further division into beef, veal, pork, rabbit, chicken, etc.

- expenses not covered under consumer goods (taxes, payments to other people and organisations, investments, loans, etc.).

This Survey also gives us a range of information about the household such as:

- the accommodation (type of housing occupied, such as a detached/semi-detached/terraced single-family home, apartment in a building of 2/3-4/5-9/10 and more homes, etc.; property tax; year of construction; dimensions and number of kitchen/bedrooms/etc.; garden/balcony/etc.; garage; etc.);
- vehicles (number of cars; car ownership e.g. purchased outright, leased, etc.; number of company cars, etc.);
- durable goods available to the household on the last day of the reference month (number of motor-cycles, bicycles, caravans, telephones, mobile phones, internet connections, televisions, cameras, DVD players, washing machines, vacuum cleaners, etc.);
- childcare (date of birth, type of childcare used, number of days the child uses this childcare, etc.);
- paid help from outside the household (frequency and cost of babysitting, having meals prepared, having the house or car cleaned, getting an appliance installed, etc.).

The analysis of the database showed that the Household Budget Survey contains a large amount of information concerning expenditure and habits in the areas of food, clothing, housing, furniture and household appliances, health, transport and communication, culture and leisure, etc. but that these data are collected at household level.
An analysis of the inequalities between women and men regarding consumption and lifestyle cannot therefore be carried out at individual level using the available databases. The only analysis possible at individual level from the perspective of a gender comparison would be to study the consumption and lifestyle of men and women living alone (with or without children). However, such a study would concern only a specific section of the population and would not be representative of the population as a whole.

1.2   Time Use Survey

The Time Use Survey is an individual survey whose aim is to quantify the various daily activities on which people spend their time. People must keep a diary of every activity they perform in slots of 10 minutes, and the time at which they do them in the course of one weekday (from Monday to Friday) and one day at the weekend (Saturday or Sunday). The respondents use their own words to describe their activities, which are then encoded according to a very detailed list of activities done during the week or at weekends, as the timetable is divided into more than 272 different activities, with 31 sub-categories and the following 9 main categories:

- sleeping and eating
- personal and medical care
- social activity
- housework
- shopping and using services
- non-specified use of time
- work (paid and voluntary)/study
- recreation and leisure
- sport, culture and travel

These pieces of information are then linked together to make up the timetable of a fictitious week by taking the daily time and multiplying it by 5, and the time of a weekend day multiplied by 2 in order to construct a representative week of 5 weekdays and 2 weekend days.

The respondents must also note down a series of complementary details about these activities, be it where the activity takes place, with whom they do it, the type of transport used, etc. They must also fill in a questionnaire with a range of information about the person's activities and their subjective evaluation:

• the feeling of being overloaded (on a self-evaluation scale from never to every day), the feeling of not having time to do everything one would like, the activities on which the person would like to spend more time;
• the frequency of certain leisure activities (cinema; ballet, concerts, opera; museums, exhibitions; libraries; sporting events; etc.);
• the frequency of certain sports activities (jogging, swimming, fitness, ball games, etc.);
• the frequency and time spent on certain voluntary activities (sports club, religious group, charity work, political party/trades union, etc.);
• the frequency of using help from someone on the outside (childcare, having meals prepared, house maintenance, gardening, etc.);
• the frequency of help given to certain people outside the household (parents/parents-in-law, children, grandchildren, etc.).

In 1999, more than 8,000 respondents, aged 12 or more, took part in this survey, compared with 6,400 in 2005, representing almost 3,500 households.

From this we can see that the Belgian Time Use Survey provides us with a series of individual data concerning the time allocations of women and men, which allows us to look into the distribution of time and to analyse gender inequalities in this area and to suggest indicators.
In fact, the amount and distribution of time appear to be factors of great inequality between women and men. Women and men fulfil several roles in society (production, reproduction, etc.), but men can usually concentrate on just one of their roles at a time whereas women fulfil several roles simultaneously, with a consequently limited time devoted to each of these roles (Blackden and Wodon 2006). This refers to the concept of time poverty according to which some people have less time for rest, leisure, social and cultural activities, because they spend a lot of their time at work (whether paid or not).

In conclusion, based on the Belgian Household Budget and the Belgian Time Use Surveys, the only additional analyses which can be carried out at an individual level and would be representative of the population as a whole, concern time allocation and time poverty inequalities.

2.1 Definitions of time allocation and time poverty

As the notion of time poverty relates directly to time and use of time, we will first define the concept of time allocation before looking more closely at time poverty.

According to Barrère-Maurisson et al. (2001), there are five types of time:

- working time, which includes time spent at work, in training and in study, as well as the journey time between home and the place of work or study
- family/parenting time, defined as 'time spent with or for the children'
- domestic time, which includes regular activities such as preparing meals, laying and clearing the table, shopping, doing the laundry, gardening, DIY, etc.
- personal time, made up of free time
- physiological time, which includes time spent on sleep, washing and meals.

More generally, the literature agrees that these five types of time can be classed in just two main categories:

- working time, made up of working, parenting and domestic time (and therefore time which may or may not be paid)
- time outside of work (which is not paid), made up of personal and physiological time and remaining time, which can be used for leisure, social, cultural and other activities.

The concept of time poverty refers to both these categories of time, because time poverty is defined as the fact that some people do not have enough time to rest or follow their leisure pursuits, etc., once the time they devote to work - whether for a paid job or not - is taken into account (Bardasi and Wodon 2006). These people must therefore make choices and allocate their time according to the constraints upon them and, as time is a limited resource, more time spent working means less time spent on leisure and, consequently, greater time poverty (Bardasi and Wodon 2006). According to Fall and Verger (2005), 'the greater or lesser amount of time left free by the acquisition of resources, in particular by professional work, is another element to take into account in order to understand the level of well-being which has been attained'.

In order to analyse individual gender inequalities of time and time poverty, it is mainly a matter of evaluating how much time women and men devote to work (whether paid or not) compared with the time they devote to non-work activities (unpaid), and to what extent their use of time differs.

2.2 Measures of time allocation and time poverty

2.2.1 Time allocation

According to Lawson (2007), poverty as a term describing time use can be measured by analysing the time women and men allocate to different activities (paid work, domestic work, looking after children, leisure, etc.).

There are various ways of analysing how time is allocated within the household: logbooks, direct questions and a whole series of other methods.

The people questioned also vary from one survey to another. It might be a single member of the family who estimates how time is shared out among all the other members of the family, or all the other family members questioned separately or else all the adults in the household.

The results may differ according to the person answering, as respondents tend to overestimate the time they spend on domestic tasks and to underestimate that spent by other members (Marini and Shelton 1993). Some authors such as Marini and Shelton (1993) even calculate an average of these two responses in order to avoid an over or underestimated response.

Within the BGIA project, we need a survey in which the questions are asked individually. This is so that we can compare how people's time is shared out between the different activities and see to what extent women are more likely to risk facing time poverty than men.

Logbooks

One of the most widely used methods is 'time diaries' (Harvey 1993), that is, a logbook in which the respondent (and sometimes his/her partner) notes down what he or she is doing at a predetermined interval of time (often every ten minutes) over a 24 hour period.

This technique varies according to how the data are collected. The respondent either completes the logbook as they go along, or they complete it the following day, and these two methods are of equal value (Robinson 1985).

Although Harvey (1993) claims that logbooks in which all activities are noted is a sound method, other authors point out the limitations of this technique. Logbooks can indeed be problematic if the day under consideration is not a typical day for that individual. To lower this risk, most surveys include different days of the week, of which one will be from the five-day working week and another from the weekend (Robinson 1977, Sanik, 1981). Other surveys collect data from different seasons of the year (Hill 1985) but data are difficult to obtain during the summer holidays (Lyberg 1990).

Other drawbacks of this technique have been raised. Geurts and De Ree (1993) say that the results obtained are directly linked to the format of the questionnaire, while according to Nichols (1980) and Warner (1986), problems may appear when the respondent has performed several tasks simultaneously.

Direct questions

The direct question method involves asking the respondent about the amount of time he or she normally devotes to each activity.

This methodology may lead to bias in that the person is liable to respond in a way they consider socially desirable (Hofferth 1999). According to Sudman and Bradburn (1974), an interview is a form of social interaction, so the respondent's behaviour is dependent on norms and values. The respondent will want to make a good impression and will control the image he presents to the questioner (Phillips 1971). This results in errors in the responses and times estimated, which are greater than when logbooks are used (Robinson 1985, Juster and Stafford 1991, Niemi, 1993). This is particularly true for activities deemed 'socially non-desirable' (Bateson 1984) and for frequent activities (Marini and Shelton 1993), whereas the reverse occurs with less common activities (Hill 1985). According to Juster and Stafford (Juster and Stafford 1991), hours of paid work are particularly inaccurately reported by respondents when the method is anything other than logbooks. There is a tendency to overestimate

them by stating conventional work hours whereas logbooks provide a measure of the hours which were actually worked.

Moreover, the system of direct questions does not allow for the verification and validation of responses, although the times reported by the respondent may be inaccurate (Juster and Stafford 1985, Marini and Shelton 1993). In fact most of the activities which the respondent performs in the course of a day and the time spent on each one of them cannot be remembered fully if they are not regular activities, repeated daily, and do not leave any real memory behind. However, many authors have shown that data collected by logbook are more reliable (Robinson 1985, Juster and Stafford 1991, Niemi, 1993). Generally speaking, the times estimated are more reliable when the questions are asked in a precise way and the activities are clearly identified.

Other methods

There are other ways to study the distribution of tasks within a household. For example, Berk and Berk (1978) analyse who carries out certain specific tasks rather than the time spent on these activities. Blair and Lichter (1991) base their studies on an index of dissimilarity in order to study the segregation that can be observed in the sharing out of domestic chores. Warner (Warner 1986) studies the proportion of time spent by both the husband and the wife doing unpaid activities, as this method indicates whether the tasks are normally done by the woman or the man, or whether they both carry out these tasks together (Blood and Wolfe 1960, Huber and Spitze 1983, Ferree 1990). Other authors such as Ishii-Kuntz and Coltrane (1992) and Peters and Haldeman (1987) use estimated times to calculate proportional measurements. Finally, some authors such as Geerken and Gove (1983) are interested in determining who is the person responsible for the chores and not who actually does them.

2.2.2   Time poverty

The second method enabling us to measure time poverty uses the concept defined by Bardasi and Wodon (2006). These two authors define a 'time poverty line' corresponding to a multiple of the median number of hours that the population devotes to work (paid or unpaid). This threshold then allows us to divide the population in two and to classify each section as time-poor or non-poor.

This threshold is generally obtained by using a multiple of 1.5 and/or 2 for working hours (Bardasi and Wodon 2006, Lawson 2007).

Lawson (2007) also suggests using the time considered 'normal' to do the work as the time poverty threshold.

2.3   Literature review

Time allocation has been a standard issue since the work of Gary Becker (1965) and is the object of a large number of studies which have shown that inequalities in time distribution observed between men and women, and the consequent risk of time poverty, depend on a series of factors. These may be economic (labour market, pay, etc.) or non-economic (Ilahi 2000) such as the composition of the household (number of dependants, age etc.), available infrastructure such as child-minding services for example, social norms, etc.

The different types of time correspond to the multiple roles played by women and men in society: the

role of production (whether through paid or unpaid work), reproduction (including looking after children or dependent adults, preparing meals, housework, etc.) or else work in the community.[34]

An individual's distribution of time amongst these various activities depends largely on his or her gender. Social norms assign the role of reproduction to women and the role of production in the labour market to men. This results in women devoting more time to work carried out in the family arena (often to the detriment of their occupational activity) than men. Thus the concept of time poverty also refers to the overload of unpaid work which generates an unequal distribution of well-being at the heart of families (Blackden and Wodon 2006).

According to Becker (1965), the unequal sharing of tasks and time within the household could be explained by the hypothesis of a large productivity gap between women and men. In his theory of time allocation, each household, viewed as an indivisible unit, will maximise its total availability under one single budgetary constraint by allocating its time between paid work (done in the labour market), unpaid work (done in the private sphere) and leisure. The sharing of intra-household time could therefore be explained by the fact that women are more productive in the realm of domestic work and childcare, whereas men are more highly educated and more productive in exercising paid occupational activities, which would explain the time inequalities between the genders and the time poverty which could result from this.

This theory was for a long time reinforced by educational disparities between women and men, but it has now been contradicted by the rise in women's level of education, which has now surpassed that of men. This would lead us to reject the hypothesis of gender productivity.

Besides, the hypothesis of a unitary concept of the household is also challenged by a number of authors. The character of the household is defined by several decision-makers, each having their own preferences and with relationships between the different members of the household characterised by negotiation or conflict (Manser and Brown 1980, Mc Elroy and Horney 1981, Bowles 1985, Folbre 1986, Chiappori 1988, 1992 and 1997). Under this approach, neither partner wishes to spend time on domestic and family tasks and the intra-household sharing of tasks depends on the power of negotiation, which is itself dependent on the level of education and of personal income. Time poverty will therefore be much greater for women if income inequality between the partners is high (because this implies a more rigid division of labour).

According to Blackden and Wodon (2006), time poverty and financial poverty can reinforce each other. For example, if a woman takes on all the household and family responsibilities, she is left with less time available for paid work, which puts at risk her participation in the labour market and, consequently, her financial independence. Women are in general more likely to take on the unpaid work (caring for dependants, household chores, etc.) and their total time spent on paid and unpaid work is greater than that of men (UNDP 1997).

What is more, people in a situation of poverty are also those who allocate a large part of their time to unpaid productive activities and to domestic activities, whereas those who are not poor devote most of their time to paid activities. So the question we must ask is to what extent women are at greater risk of exclusion than men, since they generally devote more of their time than men to unpaid work.

In fact, Bardasi and Wodon (2006) show that 24.2% of women are poor in terms of time use, compared with 9.5% of men, and that the risk of time poverty is more marked for married women.

Lawson (2007), for his part, found that households where the head of the household is a woman are poorer in terms of time use than those where the head of the household is a man, whatever the composition of the household might be (that is, the number of adults and dependent people). This result

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34 'The community role encompasses community administrative activities which ensure the provision of services and cohesion, this role being performed by both public authorities and private citizens' (Saya 2007).

is mainly due to the fact that households run by women spend a lot more time on domestic and family work. These women therefore have less time for leisure and cultural activities, and to develop their social networks, whereas this plays an important role in enabling households to climb out of poverty (Lawson and Hulme 2007).

Besides, when women with one or more children are the head of the household with no other adult to help with family and domestic responsibilities, they are faced with greater time and mobility constraints and can be tempted to take jobs which are less well paid but more compatible with their family responsibilities (Buvinic and Rao Gupta 1997). This then increases the risk of financial poverty.

Lawson (2007) also shows that people aged between 25 and 34 and between 35 and 44 are more affected by time poverty, which is explained by the fact that both of these age groups spend more time at work than the population as a whole. People in a situation of time poverty are defined here as those who spend a number of hours at work (paid or unpaid) which is 1.5 times greater than the median number of hours worked by the population as a whole.

Glorieux and Van Tienoven (2009) analysed the timetable of women and men in Belgium and its evolution between 1966 and 2005. From this we see that there are still considerable differences between the genders, even if these tend to decrease over the period. The time spent by women on household chores has decreased by a third, whereas it has doubled for men (but women were still spending nearly 24 hours per week on these activities in 2005, while men spent about 14 hours only on them); gender disparities in paid work also decreased between 1966 and 2005, the difference observed in 2005 being about 10 hours per week whereas it was 27 hours in 1966. As far as leisure is concerned, gender disparities have widened.
Glorieux and Van Tienoven note that despite these changes, the distribution of time between paid and unpaid (family and domestic) work is directly related to gender and is still stereotypical:

- men spend more time doing paid work than women, the difference being greatest (that is, by 10 - 15 hours per week) for the 26-40 and 41-55 age groups, for categories with the poorest level of education and for households with young children;
- women spend more time than men doing household chores, the difference being greatest (that is, by 10 - 14 hours per week) for the 41-55 and 56-70 age groups, for categories with the poorest level of education and for households with young children;
- women spend more time than men looking after and bringing up children, the difference being greatest (that is, by 4 - 8 hours per week) for the 26-40 age group and for households with young children.

From this it can be seen that in terms of workload (i.e. the total of paid work, household and family tasks), women spend on average 3 hours more per week on these activities than men.

This then raises the question of the extent to which women are more subject to time constraints concerning their leisure and relaxation, and therefore more likely to experience time poverty. The literature has shown that women are more affected by lack of time because of the fact that they combine paid work, domestic work and family work (Vickery 1977, Hochschild and Machung 1989, Cagatay 1998). Also, people who have a heavier workload (usually women) have less quality leisure time[35] (Shaw 1988, Bittman and Wajcman 2000).

35 That is to say, leisure time is more often interrupted and broken up by other activities, or combined with the carrying out of domestic and family chores, etc.

In Belgium, the figures reported by Glorieux and Van Tienoven (2009) show that women spend on average 6.5 fewer hours on leisure than men. This disparity between the genders produces a U curve following the life cycle: the disparities are greater for younger age groups and decrease as age increases until the lowest differences are found in the 26-40 age group, then they increase again.

Moreover, their study shows that women are more likely to feel subjective time pressure because they feel more overloaded in their daily lives than men do (60% of women compared with 47% of men).

2.4   Analysis

2.4.1   Data and sample

The data used in this chapter come from two surveys carried out in 2005: the Belgian Household Budget Survey combined with the Belgian Time Use Survey.

To recap, our study is based on adults, whom we have defined as people aged over 24 and those between 18 and 24 who are active on the labour market (who are working or available for work and actively seeking work as defined by the International Labour Organisation). The sample used therefore comprised 5,200 individuals aged between 18 and 99.

2.4.2   Descriptive statistics

Of the 5,200 people in the sample, 51.77% are women and 48.23% are men: the most best-represented age groups are those between 30-49 and 50-59 (Table 1).

TABLE 1 • GENERAL DESCRIPTIVE CHARACTERISTICS, POPULATION AGED 18-99

	Women	Men	Total
Number of observations	2,692	2,508	5,200
Age			
‹ 30 years	13.11%	10.65%	11.92%
30-49 years	43.46%	44.82%	44.12%
50-59 years	18.35%	18.58%	18.46%
60-65 years	9.03%	9.61%	9.31%
› 65 years	16.05%	16.35%	16.19%
Marital status			
Married	52.09%	56.48%	54.21%
Single	22.74%	24.16%	23.43%
Widow(er)	9.92%	*3.92%*	7.01%
Divorced	15.26%	15.44%	15.35%
Number of children			
0 children	58.51%	62.00%	60.19%
1 child	14.30%	12.68%	13.52%
2 children	16.57%	15.91%	16.25%
3 children or more	10.62%	9.41%	10.04%
Type of household			
Single person	27.38%	25.92%	26.67%
2 adults (‹ 65) without children	19.09%	21.77%	20.38%
2 adults (of whom 1 › 65) without children	7.47%	8.13%	7.79%
1 adult with child (‹ 17)	3.97%	*1.56%*	2.81%
2 adults with 1 child (‹ 17)	5.27%	5.86%	5.56%
2 adults with 2 children (‹ 17)	9.36%	10.09%	9.71%
2 adults with more than 2 children (‹ 17)	4.64%	4.98%	4.81%
Single person or couple with children (› 16)	17.76%	17.90%	17.83%
Others	5.05%	*3.79%*	4.44%
Level of education			
Primary/lower secondary education	29.23%	27.41%	28.35%
Upper secondary education	26.44%	28.44%	27.40%
Post-secondary education	44.33%	44.15%	44.24%
Activity status			
Full-time worker	32.39%	52.30%	41.73%
Part-time worker	16.37%	4.91%	11.00%
Unemployed	8.88%	7.82%	8.38%
Pensioners / early retired	21.26%	29.61%	25.18%
Others	21.10%	5.36%	13.72%
Income (in €)			
Income from work (main activity)	772.08	1231.71	994.66
Income from social security	385.58	477.16	429.93
Other income	64.43	100.51	81.90
Total available income	1222.08	1809.37	1506.49
Income poverty	29,81%	7,50%	19,01%

Source: Belgian Time Use Survey 2005, our calculations

Approximately one out of every two men and women in the sample are married, slightly fewer than one in three is single and one in six is divorced. However, the gender differences are more marked for widowed people as they concern almost 4% of men as against 10% of women (the sample of widowers is below 100 observations).

The majority of women and men do not have (or no longer have) responsibility for a child because they make up nearly 60% of the sample; 16% have 2 children; 13% have 1 child and 10% have 3 or more children.

Whatever their sex, the most common types of household are those comprising a single person (approximately 26%), two adults under 65 without a child (approximately 20%), a single person or couple with children aged 16 or more (approximately 18%) and, finally, two adults with two children under 17 (approximately 10%).

As far as education is concerned, there are few gender differences: 29% of women (27.4% of men) have a primary or lower secondary certificate, 26.4% of women (28.4% of men) have an upper secondary certificate, and 44.3% of women (44.1% of men) have a post-secondary qualification.

Large disparities between women and men are revealed in activity status since, whereas one in two men is working full-time, the figure for women is one in three; part-time work is more widespread amongst women as 16% of women work part-time compared with almost 5% of men; pensioners and the early-retired have a proportionately greater representation amongst the men; and, finally, the 'others' category (which includes amongst others people not in any paid work) represents more than 20% of women and 5% of men.

The same disparities are seen in income, with very marked differences in income from work, because women earn approximately €772 net per month as against €1,231.71 net per month for men (however, these are average income figures for the population as a whole, so when non-working people are left out these income figures rise to €1,962 and €1,462 respectively). The ratio of net income per month for women/men rises to 0.63 and is very close to the figure calculated on the basis of SILC Belgium data for 2006 (see first chapter), for which the ratio was 0.62. (As for the ratio for the beneficiary population, this stands at 0.72 based on the SILC Belgium, compared with 0.75 based on the Time Use Survey).

As far as social security income for the total population is concerned, women receive on average €386 as against €477 for men, but the difference is greater if only those who receive social security benefits or allowances are taken into account, because women then receive an average of €704 and men €1,044 (that is, a ratio of 0.67 as against 0.75 calculated in the first chapter).
Finally, by calculating the poverty indicator in such a way as to consider a person poor if his or her individual disposable income is lower than 60% of the average income of the population as a whole, we find that 7.5% of men are poor compared with nearly 30% of women (whereas on the SILC Belgium basis, the percentages were11% and 36% respectively).

The time spent on various activities differs considerably according to gender (Table 2).

TABLE 2 • DESCRIPTIVE STATISTICS OF TIME (HOURS PER WEEK), POPULATION AGED 18-99

	Women	Men	Total
Number of observations	2,692	2,508	5,200
Paid work	14.57	21.99	18.15
Domestic work	24.44	15.56	20.16
Parenting work	3.11	1.33	2.25
Rest	79.77	76.29	78.09
Leisure	35.18	41.15	38.06
Travel	9.74	10.90	10.30
Other	1.73	1.13	1.44

Source: Belgian Time Use Survey 2005, our calculations

The most marked gender differences are seen in the sphere of domestic work as, on average, women spend nearly 9 hours more than men doing this, and of paid work, where they spend 7 hours less than men on the labour market.

Time for leisure is also influenced by gender. Women spend 35 hours per week on leisure and men more than 41 hours per week.

Finally, the time devoted to bringing up and looking after children represents more than 3 hours for women, compared with approximately 1 hour 20 minutes for men. It should be noted that these differences (like those observed in paid work) are more marked when the sample is limited to the section of the population aged 25-49.

A more in-depth study of time distribution for various categories (Table 3) produces the following main results:

1) that so far as the number of hours devoted to paid work is concerned:
- it is consistently higher for men than for women;
- it decreases with age for both genders, but women work consistently less than men (the greatest difference being observed in the 30-49 age group where it reaches more than 10 hours per week);
- it is lower for married people than for single people and divorced women (which could largely be explained by the greater financial constraints on single people, which pressure them to work more than people living in a couple);
- it increases with the number of children for both men and women, a result which raises some questions when we know that women are more likely to reduce their working hours when they have children, whereas the reverse is true for men (Maron and Meulders 2008). This result may be explained by the fact that the age at which people have children is also the age at which they are more likely to be in work, and that the sample covers the 18 to 99 age range. In fact, by limiting the sample to the 24-49 age range, women's number of hours of paid work decreases with the number of children, whereas it increases for fathers;
- it greatly increases with the level of educational attainment;
- it is very low for poor people (the connection no doubt being that the low number of hours worked implies greater probability of financial poverty).

2) that so far as the number of hours devoted to domestic work is concerned:
- it is consistently lower for men than for women;
- it increases with age;
- it is lower for single people than for others, which might perhaps be explained by the fact that these people spend more hours at work and that this is to the detriment of domestic work;
- it decreases with the level of education, which could be explained by the fact that better educated people have less time to spend on domestic work because of their higher number of hours of paid work, and they could also be more able to afford to pay for external services to carry out domestic chores;
- it is lower for people who work full-time than for people who work part-time, the unemployed, the (early) retired and other non-active people.

3) that so far as the number of hours devoted to parenting work is concerned:
- it is consistently lower for men than for women;
- it is, unsurprisingly, higher in the 30-49 age group, which corresponds to the age for having children, but what is of greater note are the large gender disparities, as the difference in parenting time between men and women is between 2 and nearly 3 hours per week in this age group, and these inequalities increase with the number of children;
- it increases with the level of educational attainment.

4) that so far as the number of hours devoted to rest and to leisure are concerned:
- it is consistently lower for men than for women as far as rest is concerned, but the reverse is true for leisure;
- these two types of time use follow a U curve according to age, the lowest level being reached by the 30-49 age group;
- these two types of time decrease with the number of children and the level of education;
- it is lower for people working full-time and higher for people in income poverty.

TABLE 3 • DESCRIPTIVE STATISTICS OF TIME (HOURS PER WEEK) BY CATEGORY, POPULATION AGED 18-99

	Men						
	Paid work	Domestic work	Parent-ing work	Rest	Leisure	Travel	Other
Age							
‹ 30 years	28.71	10.07	1.23	75.62	38.04	12.05	0.61
30-49 years	31.60	13.42	2.12	73.71	34.57	11.80	1.12
50-59 years	21.27	17.76	0.56	74.85	42.19	10.97	1.13
60-65 years	5.86	19.58	0.72	80.41	51.54	9.46	1.49
› 65 years	1.57	20.14	0.47	83.00	53.91	8.48	1.30
Marital status							
Married	21.85	16.22	1.77	76.40	40.39	10.80	0.93
Single	26.17	12.43	0.84	75.63	40.01	11.41	0.94
Widower	*2.86*	*21.74*	*0.46*	*81.28*	*53.41*	*8.15*	*0.85*
Divorced	20.71	16.53	0.70	75.62	42.75	11.14	2.29
Number of children							
0 children	17.19	16.03	0.46	77.73	45.21	10.44	1.29
1 child	25.40	15.95	2.24	74.46	38.29	11.43	0.82
2 children	32.11	14.14	2.97	73.70	32.99	11.62	0.74
3 children or more	31.94	14.38	3.12	73.64	31.99	12.02	1.20
Type of household							
Single person	18.77	16.15	0.32	75.93	45.26	10.63	1.73
2 adults (‹ 65) without children	20.47	15.92	0.54	77.32	42.09	10.70	1.06
2 adults (of whom 1 › 65) without children	0.47	20.04	0.68	84.10	53.78	8.39	1.36
1 adult with child (‹ 17)	*34.94*	*15.87*	*1.38*	*73.78*	*29.78*	*11.74*	*0.43*
2 adults with 1 child (‹ 17)	30.22	12.68	3.97	74.39	33.88	12.45	0.92
2 adults with 2 children (‹ 17)	33.42	13.70	4.40	73.30	31.03	11.58	0.51
2 adults with more than 2 children (‹ 17)	30.63	13.51	4.91	73.58	31.43	13.00	0.93
Single person or couple with children (› 16)	25.94	15.10	0.32	74.85	40.03	11.07	0.35
Others	*20.44*	*14.04*	*1.99*	*78.33*	*41.33*	*11.25*	*3.21*
Level of education							
Primary/lower secondary education	14.89	17.60	0.92	78.70	46.29	9.14	2.21
Upper secondary education	22.81	14.85	1.21	75.94	41.60	10.70	0.89
Post-secondary education	26.31	14.48	1.71	75.03	37.32	12.20	0.55
Activity status							
Full-time worker	34.01	13.07	1.67	73.11	33.50	12.08	1.07
Part-time worker	25.98	13.55	1.14	75.78	39.92	11.09	0.71
Unemployed	3.11	19.03	1.31	78.15	53.08	10.62	2.05
Pensioners / early retired	1.37	21.10	0.55	81.58	54.29	8.69	1.35
Others	2.20	16.06	1.48	83.16	52.29	10.09	1.54
Income poverty							
Non-poor	23.66	15.52	1.34	75.83	40.17	10.94	1.16
Poor	4.01	16.23	0.88	81.45	51.60	10.31	0.98

	Women						
	Paid work	**Domestic work**	**Parent-ing work**	**Rest**	**Leisure**	**Travel**	**Other**
Age							
‹ 30 years	21.70	16.77	4.97	79.10	31.42	11.28	0.66
30-49 years	21.15	23.15	4.34	77.10	30.11	10.98	1.27
50-59 years	12.66	27.38	1.27	79.35	37.19	9.34	2.29
60-65 years	1.90	30.09	1.81	82.51	43.28	8.06	1.39
› 65 years	0.23	27.68	1.11	86.48	45.13	6.54	3.40
Marital status							
Married	13.08	27.05	3.87	79.83	33.96	9.25	1.47
Single	21.56	18.83	2.56	78.04	33.67	11.36	1.13
Widow	3.27	25.97	1.79	84.28	43.94	7.69	3.77
Divorced	16.54	22.74	2.17	79.49	35.77	10.41	2.17
Number of children							
0 children	12.46	23.65	1.06	81.44	38.82	9.15	2.30
1 child	16.49	24.05	4.49	79.61	32.75	9.93	0.90
2 children	19.30	25.07	6.56	76.52	28.76	10.99	0.87
3 children or more	16.26	28.34	7.16	75.89	28.43	10.81	1.07
Type of household							
Single person	14.82	22.22	0.95	79.74	39.08	9.81	2.57
2 adults (‹ 65) without children	13.44	24.82	1.14	81.20	36.95	9.09	1.83
2 adults (of whom 1 › 65) without children	0.13	29.50	1.05	87.20	42.98	6.33	2.81
1 adult with child (‹ 17)	17.02	24.87	7.14	76.19	30.90	11.40	0.56
2 adults with 1 child (‹ 17)	21.21	20.83	9.21	77.19	28.65	10.60	1.60
2 adults with 2 children (‹ 17)	21.41	22.91	9.20	76.23	26.15	10.96	1.13
2 adults with more than 2 children (‹ 17)	16.03	27.01	11.00	75.36	26.36	11.06	1.21
Single person or couple with children (› 16)	16.05	26.77	1.27	78.41	34.09	10.31	0.79
Others	10.77	23.31	3.72	84.50	34.73	9.26	1.16
Level of education							
Primary/lower secondary education	5.45	28.00	2.27	83.97	40.37	7.20	3.04
Upper secondary education	14.40	24.86	2.84	78.80	35.51	10.11	1.27
Post-secondary education	20.84	21.75	3.68	77.51	31.74	11.14	1.17
Activity status							
Full-time worker	30.52	18.08	2.65	76.36	27.86	11.71	1.04
Part-time worker	19.43	24.73	3.46	77.46	30.56	11.35	0.39
Unemployed	2.67	28.06	4.74	80.33	40.14	9.69	0.64
Pensioners / early retired	0.26	28.53	1.48	84.14	45.54	7.15	3.55
Others	1.47	30.15	4.02	83.29	39.72	7.81	2.21
Income poverty							
Non-poor	19.67	22.50	3.04	78.30	32.86	10.55	1.42
Poor	3.21	28.89	3.34	82.92	40.30	7.92	2.44

(continued)

	Total						
	Paid work	**Domestic work**	**Parent-ing work**	**Rest**	**Leisure**	**Travel**	**Other**
Age							
‹ 30 years	24.72	13.88	3.36	77.60	34.27	11.61	0.64
30-49 years	26.27	18.38	3.25	75.44	32.29	11.38	1.20
50-59 years	16.84	22.71	0.92	77.17	39.62	10.14	1.73
60-65 years	3.87	24.85	1.27	81.47	47.39	8.75	1.44
› 65 years	0.88	24.01	0.80	84.79	49.40	7.48	2.38
Marital status							
Married	17.51	21.58	2.81	78.10	37.21	10.03	1.20
Single	23.86	15.64	1.70	76.84	36.84	11.38	1.03
Widow/Widower	3.16	24.83	1.43	83.47	46.51	7.81	2.98
Divorced	18.57	19.71	1.45	77.60	39.17	10.76	2.23
Number of children							
0 children	14.81	19.86	0.76	79.59	42.00	9.79	1.80
1 child	20.52	20.39	3.47	77.28	35.25	10.61	0.87
2 children	25.35	19.91	4.86	75.19	30.76	11.29	0.80
3 children or more	23.35	22.03	5.33	74.87	30.04	11.36	1.13
Type of household							
Single person	16.67	19.37	0.65	77.95	41.97	10.20	2.18
2 adults (‹ 65) without children	17.06	20.23	0.83	79.20	39.60	9.92	1.43
2 adults (of whom 1 › 65) without children	0.30	24.73	0.87	85.64	48.42	7.37	2.08
1 adult with child (‹ 17)	21.81	22.46	5.60	75.55	30.60	11.49	0.53
2 adults with 1 child (‹ 17)	25.79	16.68	6.54	75.77	31.31	11.54	1.25
2 adults with 2 children (‹ 17)	27.43	18.30	6.80	74.76	28.60	11.27	0.82
2 adults with more than 2 children (‹ 17)	23.33	20.26	7.96	74.47	28.89	12.03	1.07
Single person or couple with children (› 16)	20.84	21.12	0.81	76.68	36.97	10.68	0.58
Others	14.75	19.50	3.01	81.96	37.45	10.08	2.01
Level of education							
Primary/lower secondary education	9.84	23.17	1.64	81.52	43.12	8.10	2.66
Upper secondary education	18.60	19.87	2.03	77.37	38.55	10.40	1.08
Post-secondary education	23.47	18.26	2.73	76.32	34.42	11.65	0.87
Activity status							
Full-time worker	32.57	15.13	2,07	74.45	31.18	11.93	1.05
Part-time worker	20.81	22.39	2.97	77.11	32.52	11.30	0.46
Unemployed	2.86	24.11	3.24	79.38	45.80	10.09	1.26
Pensioners / early retired	0.87	24.43	0.97	82.73	50.37	8.00	2.33
Others	1.60	27.57	3.56	83.26	42.02	8.23	2.09
Income poverty							
Non-poor	21.87	18.64	2.10	76.93	36.90	10.76	1.28
Poor	3.37	26.47	2.87	82.64	42.46	8.38	2.16

Source: Belgian Time Use Survey 2005, our calculations

2.4.3   Indicators of gender inequalities in time use

Time poverty

The first indicator is based on the idea of time poverty: that is, it gives information on the time remaining once the total time devoted to work is taken into account (whether this is paid work performed in the professional sphere or unpaid work in the private sphere, such as domestic or parenting work).

This indicator shows the difference in the level of time poverty between men and women, since it is constructed as the ratio between the percentage of women and men in a situation of time poverty. The higher (lower) the ratio, the more time poverty concerns women (men).
Here, a person is considered to experience time poverty if the total time he or she devotes to any type of work (paid and/or unpaid) is over 1.5 times higher than the total average time spent on work observed in the population as a whole.[36] In our sample, the total average working time is 40.56 hours per week, and the time poverty threshold is 60.84 hours of total work per week.

$$\text{Indicator 1} = \frac{\text{\% of time-poor women}}{\text{\% of time-poor men}}$$

Note: time-poor if the total working time › 1.5 times the average total working time of the population as a whole

The results are broken down according to a set of characteristics such as age, marital status, number of children in the household, type of household, level of educational attainment, activity status and, finally, income poverty. They are shown in the following table (Table 4).

[36] The 1.5 threshold is the threshold normally used by authors studying time poverty (Bardasi and Wodon 2006).

TABLE 4 • INDICATOR 1 'INEQUALITY OF TIME POVERTY BETWEEN WOMEN AND MEN' BY CATEGORY, POPULATION AGED 18-99

	% Women	% Men	Indicator 1
Age			
‹ 30 years	18.98	14.98	1.27
30-49 years	25.47	22.33	1.14
50-59 years	13.56	16.52	0.82
60-65 years	3.70	3.32	1.11
› 65 years	1.39	1.22	1.14
Marital status			
Married	19.12	16.93	1.13
Single	15.04	14.40	1.04
Widow/Widower	6.44	3.06	2.10
Divorced	15.76	12.95	1.22
Number of children			
0 children	9.40	9.45	0.99
1 child	19.74	21.70	0.91
2 children	30.94	26.32	1.18
3 children or more	29.72	25.42	1.17
Type of household			
Single person	10.45	10.62	0.98
2 adults (‹ 65) without children	11.48	11.72	0.98
2 adults (of whom 1 › 65) without children	0.50	0.00	-
1 adult with child (‹ 17)	24.30	23.08	1.05
2 adults with 1 child (‹ 17)	32.39	25.85	1.25
2 adults with 2 children (‹ 17)	36.51	30.83	1.18
2 adults with more than 2 children (‹ 17)	36.00	27.20	1.32
Single person or couple with children (› 16)	17.36	16.04	1.08
Others	13.24	17.89	0.74
Level of education			
Primary/lower secondary education	7.57	11.73	0.65
Upper secondary education	16.59	15.51	1.07
Post-secondary education	22.55	17.18	1.31
Activity status			
Full-time worker	29.23	22.37	1.31
Part-time worker	21.93	11.82	1.86
Unemployed	6.22	2.29	2.72
Pensioners / early retired	1.67	1.21	1.38
Others	7.48	1.67	4.48
Income poverty			
Non-poor	20.83	16.48	1.26
Poor	6.99	1.08	6.47
General indicator	16.60	15.19	1.09

Source: Belgian Time Use Survey 2005, our calculations

When we look at the global indicator (Table 4, last line), it seems that women experience a situation of time poverty more often than men because the indicator is 1.09, meaning that there are approximately 10% more women than men in time poverty.

As far as the break-down by category is concerned, it is almost impossible to interpret results when the number of observations is generally lower than 100, the minimum threshold which we have established to be able to interpret results in a meaningful way.

Such a result is, however, not surprising, given that time poverty is established using a threshold defined by, among other factors, the number of hours of paid work observed in the population as a whole. Very few people have a total workload greater than this threshold in groups of people who do not work (such as the unemployed, the retired, the over 60s, etc.). We therefore see a small number of people in a situation of time poverty, and as this number of observations is lower than 100 we are not able to interpret the results.

Degree of time poverty

The first indicator shows the different proportions of women and men who are affected by time poverty (and to what extent women are more or less affected by this type of poverty), but it does not, however, give us any information concerning the scale of the time poverty disparities between the genders.

We therefore constructed a second indicator in order to measure the extent to which gender differences do, or do not, appear in time poverty. This indicator is calculated as the ratio between the average remaining time of women and of men. The lower this indicator is, and the further below 1 (the higher and the further above 1), the more women (men) have less time for rest, leisure, etc. than do men (women).

$$\text{Indicator 2} = \frac{\text{Average remaining time of women}}{\text{Average remaining time of men}}$$

Note: remaining time = total time-paid work-domestic work-parenting work (hours/week)

TABLE 5 • INDICATOR 2 'INEQUALITY OF DEGREE OF TIME POVERTY BETWEEN WOMEN AND MEN' BY CATEGORY, POPULATION AGED 18-99

	Time Women	Time Men	Indicator 2
Age			
‹ 30 years	124.57	127.99	0.97
30-49 years	119.37	120.85	0.99
50-59 years	126.68	128.41	0.99
60-65 years	134.21	141.84	0.95
› 65 years	138.98	145.81	0.95
Marital status			
Married	124.00	128.16	0.97
Single	125.04	128.56	0.97
Widow/Widower	136.97	*142.93*	*0.96*
Divorced	126.55	130.06	0.97
Number of children			
0 children	130.84	134.33	0.97
1 child	122.97	124.42	0.99
2 children	117.07	118.78	0.99
3 children or more	116.24	118.56	0.98
Type of household			
Single person	130.01	132.77	0.98
2 adults (‹ 65) without children	128.61	131.07	0.98
2 adults (of whom 1 › 65) without children	137.32	146.80	0.94
1 adult with child (‹ 17)	118.97	*115.81*	*1.03*
2 adults with 1 child (‹ 17)	116.75	121.14	0.96
2 adults with 2 children (‹ 17)	114.48	116.48	0.98
2 adults with more than 2 children (‹ 17)	113.95	118.95	0.96
Single person or couple with children (› 16)	123.90	126.64	0.98
Others	130.21	*131.52*	*0.99*
Level of education			
Primary/lower secondary education	132.28	134.59	0.98
Upper secondary education	125.89	129.13	0.97
Post-secondary education	121.73	125.50	0.97
Activity status			
Full-time worker	116.76	119.25	0.98
Part-time worker	120.37	127.33	0.95
Unemployed	132.53	144.56	0.92
Pensioners / early retired	137.74	144.97	0.95
Others	132.36	148.26	0.89
Income poverty			
Non-poor	122.79	127.48	0.96
Poor	132.56	146.88	0.90
General indicator	125.88	129.12	0.97

Source: Belgian Time Use Survey 2005, our calculations

The global indicator (Table 5, last line) shows that women have less time than men for rest and for social and cultural activities and that the average difference is 3%, or slightly more than 3 hours per week.

These differences are even more marked in the groups at either end of the age range, that is, the under 30s and the over 60s, and amount to between 3 and 7 hours per week.
This could largely be explained by the fact that the 30-49 age group corresponds to the age at which one has to look after children and, generally speaking, men increase the time they spend doing paid work when there is a child, whereas the reverse is true for women, who devote more time to unpaid work to the detriment of their paid work. These two effects could therefore compensate for each other when the remaining time is analysed (the increase in men's work being more or less the same as the increase in women's work) in such a way that the inequalities in the remaining time will stay the same. This result is, moreover, confirmed when the ratio is analysed according to the number of children, as the inequalities are more marked when there is no dependent child in the household.

The indicator varies according to the type of household and is lowest for households made up of two adults (of whom one is under 65) without children because the difference in remaining time between women and men is 6%, or nearly 10 hours per week. This type of household is largely composed of people of above average age and figures more prominently in the over 60 age groups for whom the paid working time and the parenting working time are very low whereas the domestic working time is among the highest, and there are very big differences in the total time committed by women and men (slightly less than 10 hours per week, see Table 3 which shows the descriptive statistics).

Activity status is the characteristic for which the indicator shows the greatest variation, i.e. between 0.89 and 0.98. It reveals greater gender inequalities in the unemployed and in those belonging to the last category ('others'), whereas the inequalities are least marked in people who are working full-time. As far as the 'others' category is concerned, this result could be explained by the fact that this group is mainly made up of women at home, for whom unpaid work takes up a large amount time and limits the amount of time for rest and for social and cultural activities, whereas for men this group is mainly made up of the disabled, people unable to work, etc. The gender differences for this group are therefore very marked, and we should note that there are proportionately more women in this category than men (21% of women as against 5% of men, approximately, see Table 3).
As far as the unemployed are concerned, the descriptive statistics show that this is one of the categories in which the time devoted to domestic tasks differs most between women and men, and consequently there is greater time poverty for women, all other factors being equal.
Gender differences in remaining time are therefore more marked when this time is higher (i.e. when the total workload is lower, as is the case for the unemployed, the (early) retired, etc.). Indeed, when people are in paid work, this automatically means that there is less time available for unpaid work or for rest and leisure (the length of a day being limited to 24 hours). Less available time also means less time which could be shared unequally according to gender between unpaid work and social and cultural activities.

People experiencing income poverty have, on average, more remaining time to devote to leisure and rest than do the non-poor (and therefore have less time poverty), but male-female inequalities are more marked in people living in financial poverty. Women have 10% less time to spend on rest and leisure than men, that is, approximately 12 hours per week.

Finally, marital status and the level of educational attainment do not seem to have any effect on this indicator, as it is 0.97, i.e. the average value observed for the global indicator.

Paid working time

The two preceding indicators are based on remaining time, which is itself defined in relation to paid working time. If an individual devotes more time to work, all other things being equal, that implies less time for the remaining activities (since time is limited to 24 hours per day), and therefore that person is more likely to be experiencing time poverty.
As time poverty depends on paid work, we are attempting to discover if time poverty disparities can be explained by paid working time disparities (or the reverse, see below).
Besides, paid working time also has an influence on income poverty because people who are unemployed or early retired, for example, are at a greater risk of poverty than people performing work which generates an income for them (see first chapter).

We therefore constructed a third indicator which will take account of the differences between women and men in the time they devote to paid work, in order to see the extent to which various socioeconomic factors influence this time and what is the link between this time and the risk of time and income poverty.
It is calculated as the ratio between the average paid working time for women and for men (in hours per week). The lower (higher) this ratio, the more women (men) work less than men (women) for payment.

$$\text{Indicator 3} = \frac{\text{Average paid working time for women}}{\text{Average paid working time for men}}$$

TABLE 6 • INDICATOR 3 'GENDER INEQUALITY IN PAID WORKING TIME' BY CATEGORY, POPULATION AGED 18-99

	Time Women	Time Men	Indicator 3
Age			
‹ 30 years	21.70	28.71	0.76
30-49 years	21.15	31.60	0.67
50-59 years	12.66	21.27	0.60
60-65 years	1.90	5.86	0.32
› 65 years	0.23	1.57	0.15
Marital status			
Married	13.08	21.85	0.60
Single	21.56	26.17	0.82
Widow/Widower	*3.27*	*2.86*	*1.14*
Divorced	16.54	20.71	0.80
Number of children			
0 children	12.46	17.19	0.72
1 child	16.49	25.40	0.65
2 children	19.30	32.11	0.60
3 children or more	16.26	31.94	0.51
Type of household			
Single person	14.82	18.77	0.79
2 adults (‹ 65) without children	13.44	20.47	0.66
2 adults (of whom 1 › 65) without children	0.13	0.47	0.28
1 adult with child (‹ 17)	17.02	*34.94*	*0.49*
2 adults with 1 child (‹ 17)	21.21	30.22	0.70
2 adults with 2 children (‹ 17)	21.41	33.42	0.64
2 adults with more than 2 children (‹ 17)	16.03	30.63	0.52
Single person or couple with children (› 16)	16.05	25.94	0.62
Others	10.77	*20.44*	*0.53*
Level of education			
Primary/lower secondary education	5.45	14.89	0.37
Upper secondary education	14.40	22.81	0.63
Post-secondary education	20.84	26.31	0.79
Activity status			
Full-time worker	30.52	34.01	0.90
Part-time worker	19.43	25.98	0.75
Unemployed	2.67	3.11	0.86
Pensioners / early retired	0.26	1.37	0.19
Others	1.47	2.20	0.67
Income poverty			
Non-poor	19.67	23.66	0.83
Poor	3.21	4.01	0.80
General indicator	14.57	21.99	0.66

Source: Belgian Time Use Survey 2005, our calculations

The global indicator (Table 6, last line) shows much greater gender differences than for the two preceding indicators. Indeed, women's paid working time represents on average only 66% of men's paid working time, that is, a difference of more than 7 hours per week.

These gender disparities vary considerably according to the socioeconomic factors studied. Unsurprisingly, time spent on paid work largely depends on age, but it appears that the differences between men and women widen with age. In the under 30 age group, women's paid working time represents 76% of men's paid working time, whereas in the 50-59 age group, this goes down to 60% and is only 15% for those over 65.

Gender disparities are higher for married people as the woman works on average 60% of the man's paid working time (that is, more than 8 hours less per week), and they increase with the number of children because the indicator goes from 0.72 where there is no child in the household, to 0.51 where there are 3 or more children.

On the other hand, gender disparities decrease with the level of education (although they remain high), because the paid working time of women who have at most a lower secondary education certificate corresponds to 37% of the working time of men with the same level of education, whereas this percentage is 79% in the case of people who have a post-secondary qualification.

Gender disparities vary greatly according to the type of household. They are highest in households consisting of two adults, one of whom is over 65 without children because the indicator is 0.28 (which means that the time for women's paid work is 3 times lower than that for men) and, conversely, are lowest for single people for whom the indicator is 0.79.

Activity status greatly influences paid working time for women and men. The differences between the genders are lowest for full-time workers (for whom the indicator is 0.90) whereas they are highest for the (early) retired (for whom the indicator is 0.19, meaning that women spend 5 times less time working than do men).

Finally, the indicator changes very little in terms of income poverty status, because it lies between 0.80 and 0.83, whether people are poor or not.

Unpaid working time

The fourth indicator measures gender inequalities concerning unpaid working time, that is, time given over to domestic chores and to the bringing up of children. Women generally spend more time doing unpaid work than men, and this is even more true when there are children in the household (Maron and Meulders 2007). Very often this occurs to the detriment of paid work but it can also imply less time for leisure, rest, etc. and can thus impact as much on time poverty as on income poverty.
We are therefore attempting to discover here whether the time poverty disparities which we have observed between women and men are due to differences in the time given to other unpaid work.

To do this we constructed this indicator as the ratio between average unpaid working time for women and for men (in hours per week). The higher (lower) this ratio is, the more time women (men) devote to domestic and parenting work than men (women).

$$\text{Indicator 4} = \frac{\text{Average unpaid working time for women}}{\text{Average unpaid working time for men}}$$

TABLE 7 • INDICATOR 4 'GENDER INEQUALITY IN UNPAID WORKING TIME' BY CATEGORY, POPULATION AGED 18-99

	Time Women	Time Men	Indicator 4
Age			
‹ 30 years	21.73	11.30	1.92
30-49 years	27.48	15.54	1.77
50-59 years	28.66	18.32	1.56
60-65 years	31.90	20.30	1.57
› 65 years	28.79	20.61	1.40
Marital status			
Married	30.92	17.99	1.72
Single	21.39	13.27	1.61
Widow/Widower	27.76	*22.21*	*1.25*
Divorced	24.91	17.23	1.45
Number of children			
0 children	24.71	16.48	1.50
1 child	28.55	18.18	1.57
2 children	31.63	17.11	1.85
3 children or more	35.50	17.50	2.03
Type of household			
Single person	23.17	16.46	1.41
2 adults (‹ 65) without children	25.95	16.46	1.58
2 adults (of whom 1 › 65) without children	30.55	20.73	1.47
1 adult with child (‹ 17)	32.01	*17.24*	*1.86*
2 adults with 1 child (‹ 17)	30.04	16.65	1.80
2 adults with 2 children (‹ 17)	32.11	18.11	1.77
2 adults with more than 2 children (‹ 17)	38.01	18.43	2.06
Single person or couple with children (› 16)	28.05	15.42	1.82
Others	27.03	*16.04*	*1.69*
Level of education			
Primary/lower secondary education	30.27	18.52	1.63
Upper secondary education	27.70	16.07	1.72
Post-secondary education	25.42	16.19	1.57
Activity status			
Full-time worker	20.73	14.74	1.41
Part-time worker	28.19	14.69	1.92
Unemployed	32.80	20.34	1.61
Pensioners / early retired	30.01	21.65	1.39
Others	34.18	17.54	1.95
Income poverty			
Non-poor	25.54	16.86	1.51
Poor	32.23	17.11	1.88
General indicator	27.55	16.89	1.63

Source: Belgian Time Use Survey 2005, our calculations

The differences observed between women and men at the level of unpaid working time are very marked (and are, moreover, proportionately higher than those for paid working time) since women devote on average 63% more time to domestic and parenting work than men, which represents more than 10 hours per week (Table 7, last line).

These differences decrease with age as men increase their participation in unpaid work throughout their lifetime proportionately more than women do. This result could lead us to think that men invest more of their time in the domestic and family sphere when they have more time, and when they are spending less time on paid work, whereas women invest their time in unpaid work at a steady rate and devote more time than men to it at every stage of life. This is also explained by the presence of children and the workload they represent at a certain time of life, generally between 25 and 54.

Gender inequalities are more marked for married people, as they spend more time on unpaid work than people of other marital status, and women spend 1.7 times more time on unpaid work than men. This is also true when there are children, because gender inequalities increase with the number of children: women spend 1.5 times more time than men on unpaid work when there is no child in the household, compared with twice as much when there are at least 3 children. This result might be explained by the fact that the presence of a child implies extra unpaid working time, and the outcome is that the arrival of a child in the household deepens the gender inequalities because most of the time spent on bringing up the child is invested by the mother.

This result is confirmed by analysing the type of household, because it seems that households made up of 2 adults with 2 children are also those where the mother takes on more family and domestic responsibilities, since they spend twice as much time on these as fathers. Generally speaking, households with children are associated with higher levels of male-female inequality than others: these inequalities are lowest in households consisting of a single person or of two adults without children.

As is the case with disparities observed regarding paid working time and time spent on leisure and rest, disparities in unpaid working time are less marked for people who have post-secondary education than for those who have at most a lower secondary certificate.
As far as activity status is concerned, the disparities in unpaid working time are lowest for pensioners/the (early) retired and for people who work full-time, but they are highest for part-time workers and for 'others' including, particularly, women who stay at home.

Finally, women experiencing financial poverty take on more unpaid work than men in the same situation or non-poor women. The indicator, in fact, reaches 1.88 in the poor population and 1.51 in the non-poor.

Income poverty and time poverty combined

The last indicator is designed to show to what extent people in a situation of time poverty are also those in a situation of income poverty. Here it is a case of examining whether the two types of poverty reinforce each other or whether, on the contrary, they do not affect the same groups of individuals.

As with the other indicators, this one is designed to show the gender inequalities which exist in combined poverty, that is, the ratio between the percentage of women and of men in a situation of both time and income poverty.

$$\text{Indicator 5} = \frac{\text{\% of time-poor and income-poor women}}{\text{\% of time-poor and income-poor men}}$$

Note:
- time-poor if total working time › 1.5 * total average working time of the population
- income-poor if disposable income ‹ 60% disposable average income of the population

We should note that fewer than 6% of the total population experience both types of poverty, and that the population affected by time poverty seems to be different from that affected by income poverty. In fact, the percentage of people in a situation of time poverty is nearly 16% of the total population, whereas that of people in a situation of income poverty is 19%. 6% of the population experience both these types of poverty. It appears, therefore, that these two types of poverty are relatively different from each other, which can be explained by, among other reasons, the fact that poor people are generally those who have more time to spend on leisure, rest, etc. (they generally spend less time on paid work, and therefore have time to spend on other activities, all other things being equal).

In spite of this fact, women are proportionately more affected by these two types of poverty than men because the indicator is 6.5, which means that there are 6.5 times more women who experience both income and time poverty than there are men. However, we must treat this result with caution because the number of observations in this sample is very low and below 100. We were therefore not able to break this information down according to the usual characteristics (age group, marital status, number of children, type of household, etc.).

3. CONCLUSION

The Belgian Household Budget Survey has the major disadvantage of collecting information at the household level only. The fact that these data are not individualised makes it impossible to analyse and draw up a male-female inequality indicator for consumption and lifestyle measured on an individual database. The only analysis possible at individual level would be to study the consumption and life-styles of women and men living alone (with(out) child(ren)), but that would involve only one particular section of the population and would not be representative of the population as a whole.

The Time Use Survey has the advantage of providing a set of individual data concerning the way women and men divide their time (between a number of activities broken down in a very detailed way), which has allowed us to look at the distribution of women's and men's time and to analyse inequalities in this area based on five indicators drawn up against a series of socioeconomic characteristics such as age, marital status, number of children, activity status and financial poverty.

From this we can see that, in the population as a whole, more than one person in six is in a situation of time poverty. Women are more affected than men, the difference being around 10%.

As there are more women than men in a situation of time poverty, the indicator of the degree of time poverty between women and men shows that women have 0.97% of the time that men have for rest and social and cultural activities (that is, the time remaining once paid and unpaid working time have been taken into account). This means that women have on average 3 hours less per week for rest and leisure.

As time poverty is based on the idea of total working time, whether for paid work or not, we examined gender inequalities in these various types of time, in order to find out if time poverty inequalities can be explained more by inequalities observed in paid working time or in unpaid working time.
From this we see that gender differences in terms of time poverty can indeed be explained by inequalities observed in these two types of work, but that the inequalities in unpaid working time are greater. In fact, the indicator showing the differences between men and women for unpaid work shows that women spend on average 63% more time on domestic chores and on parenting work than men (i.e. slightly more than 10 hours per week) whereas the gender gap indicator for paid working time shows that paid working time for women represents on average 66% of paid working time for men (the difference being around 7 hours per week).

Inequalities in both paid and unpaid working time vary considerably according to the socioeconomic factors studied.
Indeed, inequalities in the responsibility taken for domestic and parenting work are even greater for married people, as married women spend 1.7 times more time on unpaid work than married men, and when there is a child, women invest more of themselves in the sphere of the family to the detriment of their paid work and their leisure. These inequalities become greater with the number of children, because women spend 1.5 times more time on unpaid work than men when there is one child in the household and twice as much when there are at least 3 children. It would therefore seem that the arrival of a child in the household reinforces inequality because most of the time given to bringing up the child is provided by the mother.
Moreover, a number of studies have shown that the type of activity varies considerably according to

gender: women take on more everyday tasks which are repetitive and not optional, such as doing the housework, preparing meals, washing and feeding children, while men spend more of their time on so-called semi-leisure activities like gardening, DIY, etc. and they play with the children and tell them stories, and so on (Maron and Meulders 2007).

Inequalities in paid working time become greater with age. On the other hand, inequalities in domestic work decrease with age, because men increase their participation in the domestic and family sphere proportionately more than women. This result might suggest that men invest more of themselves in the private sphere when they spend less time on paid work, whereas women perform unpaid work at a constant rate and spend more time on it than men throughout their lives. It might also be explained by the presence of a child and the workload this represents at a certain period of one's life, generally between ages 25 and 54, and which is mainly undertaken by mothers.

Inequalities in both paid work and unpaid work decrease with the level of educational attainment. In other words, a higher level of education is associated with a more equal distribution of time between women and men on the various tasks. This could be explained by the fact that educated people have proportionately less time to spend on domestic and parenting work because of the time they spend on the labour market, all other things being equal (as a day is limited to 24 hours per day), and they might also have greater financial resources to enable them to pay for external help with domestic and parenting tasks.

Moreover, gender inequalities are least marked among people who work full-time, because the time spent by women on paid work corresponds to 90% of that spent by men and the time spent by women on unpaid work corresponds to 141% of the unpaid working time of men, whereas these percentages are 86% and 161% respectively in the case of the unemployed, 75% and 192% in the case of part-time workers, and 67% and 195% in the category comprising other activity status, which is largely made up of women at home.

Finally, it is apparent that time poverty and financial poverty are two relatively distinct types of poverty. Indeed, our results show that approximately 16%-19% of the population is affected by time poverty or monetary poverty, but that only 6% combine both types of poverty. Of these, the majority are women.

This result may be explained by the fact that, in general, people who are financially poor are those who do not have paid work and are therefore those who are not constrained by paid work which would limit the time they could spend on rest, leisure, and social and cultural activities.

CHAPTER 6

Conclusions

Under this project we endeavoured first of all to calculate the individual incomes of women and men in Belgium, and we have suggested ways of calculating various indicators to measure the income disparities between men and women and the individual risk of 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.

An analysis of the disparities between women's and men's individual incomes 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 our analysis of its components shows that the disparity observed in respect of basic pay is augmented by the various forms of indirect pay.
• Government transfers 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. These inequalities are brought about by the non-individualisation of entitlements and by women's discontinuous careers and part-time work.

An analysis of net individual incomes by decile complements this picture:

• 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 between the ages of 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.

Our 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.

Two indicators of inequality arise 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 area where the two distributions intersect (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 indicators 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 men. The second indicator, which is evolving 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.

Our 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 return to identical characteristics or to unobserved characteristics, amounts to 68%. By considering only workers, the 'explained' part rises to 43%. The 'unexplained' part still accounts for 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 accounts for more than half of the gross pay gap (54% in the 2009 report on the gender pay gap in Belgium published by the Institute for the equality of women and men; 72% in the analysis by O'Dorchai (2008)). Whether it be in respect of their total income or just their earnings, less 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.

2. 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 strongly implies that the incomes of members of a household are pooled and shared in full. Based on this definition and on the individual incomes we had calculated, we coined the term '**financial dependence**': people who are financially dependent 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 he/she belongs, and we examine each person's individual income.

The financial dependence rate 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 financially dependent.

- The income of women who are financially dependent is further removed from the dependence threshold than that of men. We can therefore 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 transfers 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 is of more benefit to men than to 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 based on 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 rate 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 chosen hypotheses: 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 activity status, age, education, lifestyle and nationality - all other things being equal.

All other things being equal - in other words, for persons having the same activity status, belonging to the same age group, having the same level of educational attainment and being part of 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%.

- **Activity status** is the characteristic with the greatest impact on the rate of financial dependence. Working full-time is found to be 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 one considers, the women in receipt of them possess lower incomes than men: this holds true for earned income and for State transfers. Only 31% of the gap between women's and men's incomes can be explained 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 fully pooled and shared among the members of a household masks the risk of poverty run by women.

3. 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.

TABLE 1 • PROPOSED INDICATORS

	SILC-Belgium 2006	SILC-Belgium 2007
Indicators of income inequality		
Ratio between women's and men's average incomes		
Gross income	0.55	0.56
Net income	0.62	0.63
Income from economic activity	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
Government transfers	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
Ratio comparing the percentage of women in the first and last deciles	3.6	3.6
Indicators relating to decomposition of the Gini coefficient		
Relative economic distance	0.605	0.586
Ratio between transvariation and gross inter-group inequalities	0.393	0.414
Indicators of inequality regarding the risk of financial dependence or individual poverty		
Rate of individual financial dependence or at-risk-of-poverty rate		
Women	36%	34%
Men	11%	11%
Total	24%	23%
Ratio between women's and men's rates of financial dependence	3.3	3.1
Ratio between women's and men's relative median gaps	1.7	1.6
Ratio between women's and men's intensity of financial dependence	5.6	5.0

Source: SILC Belgium 2006 and 2007, our calculations

Under the heading 'Indicators of inequality regarding the risk of financial dependence or individual poverty', we first present the rates of financial dependence or of individual poverty risk, calculated on the basis of women's and men's net individual incomes.

The ratio between women's and men's rates of financial dependence encapsulates the differential risk faced by women and men: women are more than three times as likely than men to be financially dependent. 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 the relative median gaps for women and for men enables us to measure the extent of their respective financial dependence.

Finally, the last indicator is the ratio comparing the intensity of risk of dependence for women and for men. The intensity of risk of dependence is the product of two components: the rate 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 dependent individuals.

4. EUROPEAN COMPARISON

The same estimations were carried out for several European countries (Table 2). 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
Ratio between women's and men's net individual incomes	0.61	0.62	0.63	0.70	0.59	0.55	0.75	0.80	0.61
Ratio comparing the percentage of women in the first and last deciles	3.4	3.5	3.2	2.5	3.5	3.8	1.7	2.3	2.8
Rate of financial dependence									
Women	38	36	49	31	40	43	28	20	36
Men	11	11	15	13	19	9	21	13	16
Ratio between women's and men's levels of financial dependence	3.4	3.2	3.4	2.3	2.1	4.9	1.4	1.4	2.3
Ratio of W/M relative median gaps	1.4	1.8	1.6	1.3	2.3	2.0	1.1	0.8	1.1
Ratio of W/M intensity of dependence	4.7	5.8	5.3	3.0	5.0	10.1	1.5	1.1	2.6

Source: EU-SILC 2006, 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 transfers. 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 transfers 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 transfers reduce the rates of poverty risk by approximately 37%.

The rate of risk of financial dependence is 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 rate of financial dependence among men ranges from 9% in Luxembourg to 21% in Poland, whereas among women it ranges from 20% in Sweden to 49% in Spain.

In addition to the ratio comparing women's and men's rates of financial dependence, we also calculated the other indicators of financial dependence for the various European countries.
The relative median gap ratio for women and for men indicates that, in all of the countries studied, women who are financially dependent 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 the intensity of dependence for women and for men 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.

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 make up 35% of the population in this decile). The ratio comparing the proportion of women in the first and last deciles ranges from 1.7 in Poland to 3.8 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 Luxembourg.

Figure 1 presents the rates of financial dependence and the European at-risk-of-poverty rates for women and for men. It enables us to make a comparison between the rate of financial dependence, calculated on 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 rate of financial dependence is much higher than the rate of poverty risk. Conversely, the rate of financial dependence among men is relatively similar to their rate of poverty risk.

FIGURE 1 • COMPARISON OF FINANCIAL DEPENDENCE LEVELS AND EUROPEAN AT-RISK-OF-POVERTY RATES

Women

Men
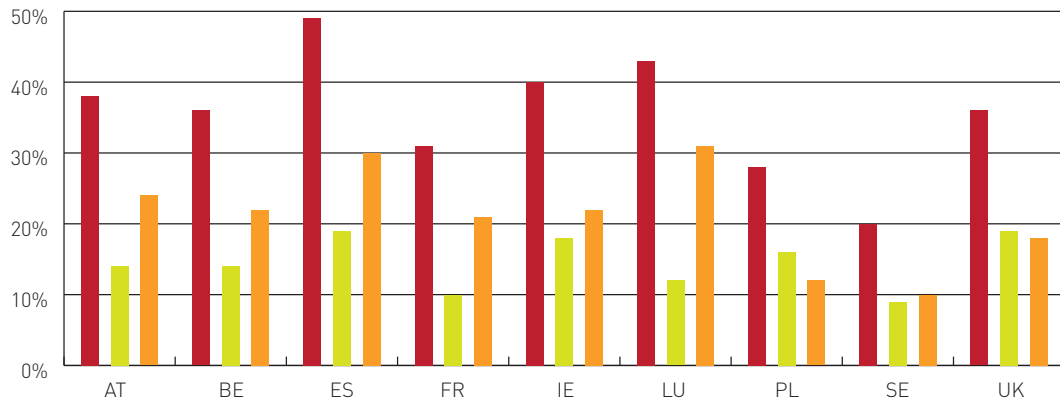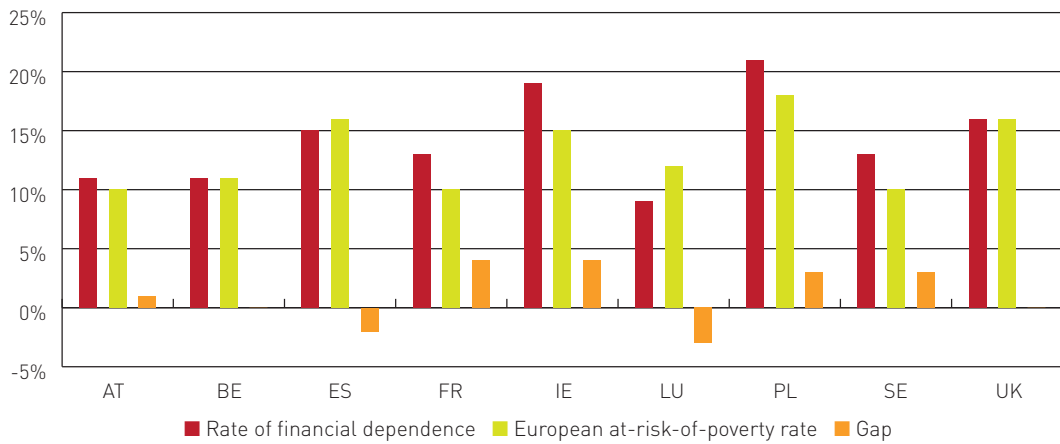
■ Rate of financial dependence ■ European at-risk-of-poverty rate ■ Gap

Source: EU-SILC 2006, our calculations

In all of the countries studied, apart from Poland and the United Kingdom, the rate of financial dependence among women is at least twice as high as their at-risk-of-poverty rate. This indicates that many women would find themselves facing 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).

5. INEQUALITY WITHIN COUPLES

Men and women forming couples 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, while the percentage of women working part-time and not in work 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 incomes 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 transfers present the highest disparity (the ratio between women's and men's average transfers 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 with 3.6 for women as a whole. The rate of financial dependence is the same for people living in couples and for the population as a whole, but the dependence rate among women living in a couple is 4 points higher than that for all women, whereas the dependence rate 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 rates 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; this percentage is 69% for cohabiting couples and 81% for married couples. Women with a higher income than their partner are more frequently found among cohabiting couples than married couples (23% compared with 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 gender pay gap 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 half of all 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, career breaks being 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 with 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 gender pay gap 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 testifies to a generational effect, which is less pronounced when we look at the younger age brackets.

The majority of couples comprise two working people (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 is employed 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. Dual-earner couples 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 activity 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 work 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 university degrees, 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. 58% of couples are made up of individuals 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 have university degrees, compared with 45% of cohabiting men, while 37% of married women have been educated to this level, compared to 39% of married men.

As concerns 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 both have university degrees (36%).

It is interesting to distinguish between couples who are married and those who are cohabiting. In point of fact, cohabiting couples are younger on average and the inequality between the partners' incomes is much less pronounced than 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 inequality within couples in the 2006 and 2007 SILC for Belgium shows a high degree of dependence on their partner among married women: married women have lower individual incomes and a higher rate of financial dependence than 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.

6. THE EFFECTS OF A BREAK-UP

The objective of this part of our study is to measure the effects on net individual income and 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 and depending on the methods and 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 or sat-isfaction, etc. A third reason might lie in the way that the financial effects are measured: an incorrect assessment 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) point out, *'Women ex-periencing 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 was a matter of concern to us, as a review of the literature on this topic pro-duced an initial finding: the majority of studies seeking to measure the effects of break-ups on in-come work on the strong 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 individual income following the break-up. For example, a wife with an income of €5,000 liv-ing with a man who earns €10,000 is notionally credited with an income of €7,500 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 consider only the personal incomes of individuals, i.e. those possessed by them alone as a result of their work, any State transfers 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 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 undergone 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 broken up for whom information on each partner was available over the three-year period.

To try to grasp the effects of a break-up, we began by carrying out an in depth comparison of the incomes and financial dependence 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 SILC for Belgium. We then performed a longitudinal study based on longitudinal data from the 2004-2007 European SILC for 18 countries. Using this approach, households that have undergone 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 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 advanced age and by the retired status associated with this. The generational 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 four years older than those living in couples. Those who are divorced or separated have a lower educational level. As far as activity 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. There are notable differences between women and men as concerns their activity 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 are inactive, 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 largest within couples. Income inequality is lowest between divorced and separated women and men.

On average, divorced men have a slightly lower income from economic activity than men living in a couple; the composition of their income is fairly similar, other than in the case of maintenance payments, which are higher. As regards a comparison between women living in a couple and those who are divorced or separated, income differentials are wider in terms of State transfers (unemployment benefit and pensions). Whereas the allowances received by divorced and separated women who become unemployed are relatively high compared with those received by divorced and separated men, 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 for the group comprising people living in a couple. The substantial family allowances paid to divorced and separated women are indicative of the fact that it is usually divorced mothers who have custody of dependent children. The average income of widows and widowers consists primarily of State pensions.

Rates of financial dependence are lowest for men living in a couple (6%) and for widowers; they are highest for men who are divorced or separated (11%). Conversely, the rate 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 the survey was 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 necessary information 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 that a break-up has adverse economic consequences, 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 transfers 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 findings 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 attributable to State transfers. Women's income from their economic activity seems to be 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 macroeconomic variables influencing the variation in net individual income when 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 less well-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 macroeconomic 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).

7. 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 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 presents 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 duties) - 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

	Women	Men	Ratio of women/men
Percentage of people who are time-poor	16.60%	15.19%	1.09%
Intensity of time poverty	125.88	129.12	0.97
Time devoted to paid work	14.57	21.99	0.66
Time devoted to unpaid work	27.55	16.89	1.63
Total time poverty	*0.07*	*0.01*	*6.50*

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 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 three 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 per week).

Furthermore, our findings illustrate that inequality in respect of both paid and unpaid work varies considerably depending on the socioeconomic 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 findings 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 types of poverty.

8. 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 respective preferences and 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 the implications are far-reaching. How can gender inequality be combated effectively unless such inequality is measured in the light of individual incomes? How can poverty among women be combated if it is hidden by being buried within the household?

9. 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 households' members 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 transfers received' and HY130 'Regular inter-household cash transfers 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 less relevant 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.

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, was supplemented in 2009 by a module entitled 'Decision-making within the couple' (DDC). The new module investigates how decisions are made within the household: 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'[37] is to be included in the 2010 SILC. This module comprises seven compulsory variables relating to the regime and management of 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 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.);

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37 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.

- expenditure on personal hygiene and health care (medicines and pharmaceutical products, thera-peutic 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 read-ers, 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 should therefore be altered by individualising the question-naires.

The Time Use Survey gathers 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 concerning this survey.

10. INDICATORS CALCULATED AT INDIVIDUAL LEVEL WHICH DO NOT UNDERESTIMATE INCOME INEQUALITY AND WOMEN'S RISK OF POVERTY

Once individual data have been added to these databases, it will also be necessary to revisit the in-equality and poverty indicators, and to challenge at long last the strong hypothesis that resources are shared equally among 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 strong 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 circumstances are 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.

11. INDIVIDUALISED SOCIAL AND TAXATION POLICIES

Even once 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 transfers 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
Indicators of income inequality		
Ratio between women's and men's average incomes		
Gross income	0.55	0.56
Net income	0.62	0.63
Income from economic activity	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
Government transfers	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
Ratio comparing the percentage of women in the first and last deciles	3.6	3.6
Indicators relating to decomposition of the Gini coefficient		
Relative economic distance	0.605	0.586
Ratio between transvariation and gross inter-group inequalities	0.393	0.414
Indicators of inequality regarding the risk of financial dependence or individual poverty		
Rate of individual financial dependence or at-risk-of-poverty rate		
Women	36%	34%
Men	11%	11%
Total	24%	23%
Ratio between women's and men's rates of financial dependence	3.3	3.1
Ratio between women's and men's relative median gaps	1.7	1.6
Ratio between women's and men's intensity of financial dependence	5.6	5.0

Indicators of time inequality	
	Time Use Survey - Belgium 2005
Inequality of time poverty	1.09
Inequality of intensity of time poverty	0.97
Inequality of paid working time	0.66
Inequality of unpaid working time	1.63
Inequality of total time poverty	*6.50*

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

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ANNEXES

LIST OF ANNEXES

ANNEXES TO CHAPTER 1

ANNEX 1 • THE CANBERRA GROUP'S DEFINITION OF INCOME

1	**Employee income**
	Cash or near cash
1.1	Cash wages and salaries
1.2	Tips and bonuses
1.3	Profit sharing including stock options
1.4	Severance and termination pay
1.5	Allowances payable for working in remote locations etc, where part of conditions of employment
	Cash value of 'fringe benefits'
1.6	Employers' social insurance contributions
1.7	Goods and services provided to employee as part of employment package
2	**Income from self-employment**
	Cash or near cash
2.1	Profit/loss from unincorporated enterprise
2.2	Royalties
	In-kind, imputed
2.3	Goods and services produced for barter, less cost of inputs
2.4	Goods produced for home consumption, less cost of inputs
2.5	Income less expenses from owner-occupied dwellings
3	**Rentals 2.4.2.3**
3.1	Income less expenses from rentals, except rent of land
4	**Property income 2.4.2.4**
4.1	Interest received less interest paid
4.2	Dividends
4.3	Rent from land
5	**Current transfers received**
5.1	Social insurance benefits from employers' schemes
5.2	Social insurance benefits in cash from government schemes
5.3	Universal social assistance benefits in cash from government
5.4	Means-tested social assistance benefits in cash from government
5.5	Regular inter-household cash transfers received
5.6	Regular support received from non-profit making institutions such as charities
6	**Total income (sum of 1 to 5)**
7	**Current transfers paid**
7.1	Employers' social insurance contributions
7.2	Employees' social insurance contributions
7.3	Taxes on income
7.4	Regular taxes on wealth
7.5	Regular inter-household cash transfers
7.6	Regular cash transfers to charities
8	**Disposable income (6 less 7)**
9	**Social transfers in kind (STIK) received**
10	**Adjusted disposable income (8 plus 9)**

Source: The Canberra Group, (2001), Final Report and Recommendations, Otawa, p.18.

ANNEX 2 • LIST OF INDIVIDUAL INCOME COMPONENTS AND THEIR DEFINITIONS[38]

1. Income from economic activity:
This is the sum total of income earned by employees: pay, bonuses and overtime, income in kind and other employment-related benefits.
Income from economic activity also includes income from self-employment.

1.1 Income from employment:
This consists of pay, income from casual work (e.g. seasonal work, sporadic temporary work), bonuses and allowances, income from additional activity and redundancy money (or severance pay).

1.1.3 Bonuses:
These consist of:
1.1.3.1 Holiday pay
1.1.3.2 End-of-year bonus
1.1.3.3 Thirteenth month
1.1.3.4 Paid overtime
1.1.3.5 Profit-sharing
1.1.3.6 Other additional income
1.1.3.7 Commission
1.1.3.8 Tips
1.1.3.9 Sales or production bonus
1.1.3.10 Fourteenth month
1.1.3.11 Company shares, employee's place of work
1.1.3.12 Bonuses received for working abroad, or in particular locations or circumstances (i.e. not expenses allowances but additional work-related allowances)

1.2 Non-wage income:
This corresponds to the 'Employees' income in kind' variable, which, in the case of SILC-Belgium 2006, only covers company cars. The amount is calculated on the basis of the following criteria: model, make, horsepower for tax purposes and year of registration. Other types of income in kind will be available from 2007 onwards (e.g. private phone bills paid by the employer, etc.).

1.3 Income from self-employment:
This represents income earned in connection with self-employed activity. A single variable in SILC-Belgium 2006 shows this income: 'Profits or losses resulting from self-employment'.

2. Investment income:
This is the sum total of investment income, and comprises income from property or land rentals, income from financial investments, plus interest and dividends of all kinds. Life assurance benefits and income from private pension savings schemes, based on voluntary contributions repaid in the form of annuities, are deemed to be interest on investment and are therefore classified under this heading.

3. Inter-household transfers:
In the light of comments made by the DGSIE, we decided not to take into consideration either income received by persons aged under 16 or charity aid. Consequently, this item only includes maintenance-

related transfers (received and paid) and regular financial support (received and paid) to and from other households.

4. State transfers:
These are transfers received from the authorities, and include all types of allowances:

4.1 Pension

4.2 Unemployment benefit
4.2.1 Unemployment benefit as such
4.2.2 Early retirement pension
4.2.3 Career break allowance (time credit)
4.2.4 Minimum guaranteed income benefit (part-time working while seeking a full-time job)
4.2.5 Welfare fund allowance (e.g. temporary lay-offs in the building sector)
4.2.6 Supplement received for taking a vocational training course / completion bonus
4.2.7 Interim allowance for school-leavers
4.2.8 Other unemployment benefits

4.3 Incapacity benefit
4.3.1 Invalidity lasting more than a year: invalidity resulting from illness or accident, dating back more than a year, and unrelated to work
4.3.2 Permanent incapacity for work: accident at or travelling to/from work, resulting in permanent incapacity for work
4.3.3 Permanent occupational illness: occupational illness resulting in permanent incapacity for work
4.3.4 Death of a family member in service or travelling to/from work
4.3.5 Permanent and essential assistance provided by another person; additional allowance covering assistance from a third party
4.3.6 Other sickness or accident-related benefits

4.4 Sick pay
4.4.1 Incapacity for work resulting from illness or accident, dating back less than a year, and unrelated to work
4.4.2 Allowance paid to disabled persons (income replacement allowance, additional allowance, integration allowance)
4.4.3 Accident at or travelling to/from work, resulting in temporary incapacity for work
4.4.4 Occupational illness resulting in temporary incapacity for work
4.4.5 Flanders region health insurance scheme

4.5 Student grants

4.6 Maternity allowance

4.7 Survivor's pension

4.8 Career break allowance linked to parental leave

4.9 Social integration income (formerly known as 'Minimex' [Guaranteed minimum income benefit] in Belgium)

Taxes:

These correspond to income taxes and social security contributions, any additional tax paid or received, advance payments by the self-employed (income tax) and social security contributions paid by the self-employed.

Gross income:

This corresponds to income from economic activity + investment income + inter-household transfers

Net income:

This equals: gross income + State transfers – taxes

ANNEX 3 • NUMBER OF OBSERVATIONS, PERCENTAGE OF WOMEN AND MEN AND PROPORTIONS OF MEN AND WOMEN BY HOUSEHOLD TYPE

Household types	Women		Men		Proportions of women and men	
	Obs.	% (weighted)	Obs.	% (weighted)	Women	Men
Single person	816	19.8%	687	18.3%	53%	47%
2 adults (< 65) with no dependent children	975	19.1%	972	20.3%	50%	50%
2 adults with no dependent children (at least adult is > 65)	650	13.2%	656	14.0%	50%	50%
Other households with no dependent children	512	10.7%	577	12.8%	47%	53%
Lone parents	297	5.1%	*40*	*0.8%*	87%	*13%*
2 adults, 1 dependent child	484	10.0%	482	10.4%	50%	50%
2 adults, 2 dependent children	642	11.2%	625	11.4%	51%	49%
2 adults, 3 or more dependent children	288	5.3%	293	5.7%	50%	50%
3 adults or more with 1 or more dependent child(ren)	306	5.6%	328	6.4%	48%	52%
Total	4,970	100.0%	4,660	100.0%		

ANNEX 4 • DECOMPOSITION OF THE GINI COEFFICIENT USING THE DAGUM METHOD (FORMULAE)

Dagum (1997a, pp. 519-526) proposes a method for decomposing the Gini coefficient into three components. The Gini coefficient is formulated thus:

$$G = \frac{\sum_{i=1}^{n} \sum_{r=1}^{n} |y_i - y_r|}{2n^2 \mu} \tag{1}$$

Where n represents units of income y_i (i=1,…, n) in the population P which is split into k subpopulations P_j (j=1,…, k), where the size of P_j is n_j, P_j is a function of distribution $F_j(y)$ and its average is μ_j. The Gini index for (intragroup) subpopulation P_j is as follows:

$$G_{jj} = \frac{\sum_{i=1}^{n_j} \sum_{r=1}^{n_j} |y_i - y_r|}{2n_j^2 \mu_j} \tag{2}$$

The intergroup Gini coefficient:

$$G_{jh} = \frac{\sum_{i=1}^{n_j} \sum_{r=1}^{n_h} |y_{ji} - y_{hr}|}{n_j n_h (\mu_j + \mu_h)} \tag{3}$$

Dagum introduces two concepts for measuring the area of intersection between the two distributions:

- Gross economic affluence, which is a weighted average of differences in income x_{ij}-x_{rh} for each income x_{ij} of a member of P_j exceeding income x_{rh} of a member of P_h (y_{ji} › y_{hr}), given that the average income of group P_j is higher than that of group P_h (μ_j › μ_h).

$$d_{jh} = \int_0^{\infty} dF_j(y) \int_0^y (y - x) dF_h(x) \tag{4}$$

- The second concept is the first-order moment of transvariation, which is the weighted average of differences in income x_{ij}-x_{rh} for each income x_{rh} of a member of P_h greater than income x_{ij} of a member of P_j (y_{ji} ‹ y_{hr}), bearing in mind that μ_j › μ_h.
  The expression 'transvariation' refers to differences in income with a sign opposite to that of the difference in averages of the corresponding subgroups.

$$p_{jh} = \int_0^{\infty} dF_h(y) \int_0^y (y - x) dF_j(x) \tag{5}$$

Net economic affluence = $d_{jh} - p_{jh}$.

Where there is no overlap between two distributions, the first-order moment of transvariation is zero ($p_{jh} = 0$), and where the averages of the two distributions are equal, gross economic affluence is equal to the first-order moment of transvariation ($d_{jh} = p_{jh}$).

Based on these two concepts, relative economic affluence is defined thus:

$$D_{jh} = \frac{(d_{jh} - p_{jh})}{(d_{jh} + p_{jh})}$$

(6)

Relative economic affluence (also known as relative economic wealth) lies between 0 and 1. It moves closer to 1 where the two distributions diverge. It is equal to 0 where the two distributions are identical.

Relative economic affluence enables us to separate out intergroup inequalities into two components and thus to identify the three components highlighted by the Dagum method:

1) The share of total inequality observed by the Gini coefficient which is attributable to the net intra-group inequality obtained by the product of $G_{jh} \times D_{jh}$:

$$G^{nb} = \sum_{j=2}^{k} \sum_{h=1}^{j-1} G_{jh} D_{jh} (p_j s_h + p_h s_j)$$

(7)

2) The share of the intensity of transvariation obtained by the product of $G_{jh} \times (1 - D_{jh})$:

$$G^{t} = \sum_{j=2}^{k} \sum_{h=1}^{j-1} G_{jh} (1 - D_{jh})(p_j s_h + p_h s_j)$$

(8)

The latter two items constitute the gross intergroup inequality:

$$G^{gb} = G^{nb} + G^{t}$$

(9)

3) The share of inequality measured by Gini which is attributable to intragroup inequality:

$$G^{w} = \sum_{j=1}^{k} G_{jj} p_j s_j$$

(10)

ANNEXES TO CHAPTER 2

ANNEX 1 • DETAILS OF THE RATIO OF AVERAGES FOR WOMEN/MEN

AT						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	

AT						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Net income	11011	17376	5775	13341	5236	21701	0.61

Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Earnings of employees	5890	25382	2695	19335	3195	30360	0.64
Income from self-employment	1068	19168	423	13956	645	22524	0.62
Income from economic activity	6648	25633	3006	19350	3642	30705	0.63

Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Pensions	3030	18790	1717	15330	1313	23494	0.65
Unemployment	662	4697	307	4365	355	4963	0.88
Incapacity benefits	356	15047	113	9745	243	17171	0.57
Sick pay	170	3495	69	3323	101	3607	0.92
Student grant	85	3005	42	2873	43	3158	0.91
Survivor's pension	98	10881	91	11560	7	4679	2.47
Income from individual State transfers	4241	14898	2259	12747	1982	17289	0.74

BE						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Net income	9426	17982	4804	13835	4622	22226	0.62

Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Earnings of employees	4996	30678	2363	25054	2633	35426	0.71
Income from self-employment	729	23241	227	17232	502	25793	0.67
Income from economic activity	5625	30290	2558	24689	3067	34692	0.71

Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	Average	Obs.	Average	Obs.	Average	
Pensions	1846	15196	851	12076	995	18320	0.66
Unemployment	1296	8783	705	7042	591	10691	0.66
Incapacity benefits	336	9551	159	8608	177	10370	0.83
Sick pay	165	5124	95	5025	70	5244	0.96
Student grant	144	464	74	455	70	472	0.96
Survivor's pension	81	13136	77	13360	4	9022	1.48
Income from individual State transfers	3674	12339	1859	10049	1815	14776	0.68

ES						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	20642	12500	9658	9487	10984	15050	0.63
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	11508	17209	4977	13896	6531	19646	0.71
Income from self-employment	2097	14361	689	11205	1408	15824	0.71
Income from economic activity	13397	17117	5609	13750	7788	19466	0.71
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	4440	10179	1894	7757	2546	12098	0.64
Unemployment	1166	3628	635	3321	531	3978	0.83
Incapacity benefits	466	7918	161	6464	305	8642	0.75
Sick pay	394	4307	197	4060	197	4613	0.88
Student grant	91	2035	55	2433	36	1533	1.59
Survivor's pension	371	6345	329	6599	42	4422	1.49
Income from individual State transfers	6822	8289	3208	6449	3614	9983	0.65

FR						
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	14380	19469	7427	16183	6953	23073	0.70
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	8720	23740	4313	19999	4407	27513	0.73
Income from self-employment	762	31475	242	29427	520	32326	0.91
Income from economic activity	9362	24743	4518	20657	4844	28624	0.72
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	3455	16842	1741	14093	1714	19895	0.71
Unemployment	1161	7122	636	5976	525	8521	0.70
Incapacity benefits	378	7330	157	7739	221	6995	1.11
Sick pay	633	2922	325	2908	308	2937	0.99
Student grant	84	2076	57	2230	27	1715	1.30
Survivor's pension	137	10631	133	10820	4	3521	3.07
Income from individual State transfers	5465	13401	2869	11295	2596	15890	0.71

IE						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	10063	22056	5193	16439	4870	27732	0.59
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	4605	29469	2285	23472	2320	35103	0.67
Income from self-employment	1122	36101	218	27794	904	38067	0.73
Income from economic activity	5562	31600	2451	24231	3111	37361	0.65
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	2731	14504	1339	11433	1392	17460	0.65
Unemployment	738	6850	305	4993	433	8169	0.61
Incapacity benefits	855	6453	434	5410	421	7506	0.72
Sick pay	17	1269	4	2138	13	1080	1.98
Student grant	94	3738	58	3502	36	4162	0.84
Survivor's pension	151	9009	121	8951	30	9179	0.98
Income from individual State transfers	4389	10672	2164	8579	2225	12691	0.68

LU						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	6710	29712	3411	21418	3299	38718	0.55
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	4275	42853	1805	31914	2470	50844	0.63
Income from self-employment	367	53767	123	40926	244	60280	0.68
Income from economic activity	4483	44937	1881	32883	2602	53728	0.61
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	1218	29915	528	22108	690	38113	0.58
Unemployment	265	17689	97	12061	168	21591	0.56
Incapacity benefits	278	16407	118	13518	160	18512	0.73
Sick pay	18	9059	11	5814	7	13317	0.44
Student grant	33	4335	22	2643	11	5319	0.50
Survivor's pension	351	7795	247	10173	104	1022	9.96
Income from individual State transfers	1961	25729	939	19436	1022	32695	0.59

(continued)

PL						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	29321	3394	15641	2926	13680	3927	0.75
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	12356	5968	5786	5486	6570	6393	0.86
Income from self-employment	3445	4221	1296	3380	2149	4717	0.72
Income from economic activity	15054	5900	6794	5360	8260	6347	0.84
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	8518	3548	5332	3145	3186	4272	0.74
Unemployment	1160	1617	545	1506	615	1716	0.88
Incapacity benefits	2203	2060	908	1762	1295	2252	0.78
Sick pay	143	528	77	525	66	532	0.99
Student grant	135	726	93	734	42	708	1.04
Survivor's pension	308	2396	251	2535	57	1852	1.37
Income from individual State transfers	12335	3036	7128	2801	5207	3369	0.83

SE						
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	10719	18728	5443	16631	5276	20883	0.80
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	8607	23998	4332	20059	4275	27951	0.72
Income from self-employment	1644	5907	619	3447	1025	7365	0.47
Income from economic activity	9098	23993	4506	19845	4592	28030	0.71
Income	**Total**		**Women**		**Men**	**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	1805	13725	974	10463	831	17841	0.59
Unemployment	1155	6154	657	5745	498	6694	0.86
Incapacity benefits	887	10663	551	9946	336	11770	0.85
Sick pay	2460	3082	1390	3174	1070	2962	1.07
Student grant	952	3937	585	4169	367	3593	1.16
Survivor's pension	87	6877	80	6996	7	3534	1.98
Income from individual State transfers	5989	9190	3305	8403	2684	10166	0.83

UK						
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Net income	15889	20059	8563	15424	7326	25329	0.61
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Earnings of employees	8225	32426	4266	24546	3959	40459	0.61
Income from self-employment	1147	29481	376	20148	771	33826	0.60
Income from economic activity	9211	33170	4568	24780	4643	41018	0.60
Income	**Total**		**Women**		**Men**		**Ratio of averages for women/men**
	Obs.	**Average**	**Obs.**	**Average**	**Obs.**	**Average**	
Pensions	5354	13431	2835	10492	2519	16962	0.62
Unemployment	168	4542	52	4105	116	4727	0.87
Incapacity benefits	526	4353	291	4577	235	4094	1.12
Sick pay	539	6399	233	5894	306	6784	0.87
Student grant	96	8696	64	8115	32	9709	0.84
Survivor's pension	89	8241	70	8912	19	5803	1.54
Income from individual State transfers	6371	12357	3415	9849	2956	15354	0.64

Source: EU-SILC 2006

ANNEX 2 • FINANCIAL DEPENDENCE RATE

Financial dependence rate	AT		BE		ES		FR		IE	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Total (observations)	5,856	5,252	4,964	4,657	12,114	11,359	7,495	6,977	5,412	4,911
Gender	38%	11%	36%	11%	49%	15%	31%	13%	40%	19%
Occupational status										
Full-time workers	11%	5%	7%	3%	10%	7%	7%	4%	5%	5%
Part-time workers	33%	15%	15%	12%	44%	33%	32%	31%	33%	27%
Unemployed	61%	62%	46%	29%	90%	76%	49%	46%	63%	62%
Pensioners	29%	6%	41%	10%	32%	11%	30%	15%	32%	25%
Other non-active	86%	76%	84%	56%	88%	67%	84%	74%	73%	72%
Age bracket										
‹ 30 years	43%	23%	36%	27%	43%	28%	39%	27%	32%	33%
30-49 years	34%	9%	23%	7%	46%	12%	24%	7%	34%	10%
50-59 years	39%	11%	41%	10%	61%	14%	29%	11%	50%	17%
60-65 years	39%	6%	51%	10%	71%	16%	34%	10%	72%	27%
› 65 years	38%	7%	51%	10%	56%	11%	37%	18%	48%	21%
Household type										
Single person	18%	13%	21%	15%	24%	16%	17%	15%	21%	27%
2 adults (‹ 65) with no dependent children	35%	12%	39%	11%	36%	12%	35%	13%	42%	22%
2 adults (1 is › 65) with no dependent children	54%	6%	71%	8%	68%	13%	51%	19%	73%	28%
More than 2 adults but no dependent children	48%	17%	50%	17%	60%	21%	47%	28%	48%	27%
Single parent with dependent children	7%	22%	2%	1%	19%	8%	5%	6%	9%	0%
2 adults, 1 dependent child	41%	6%	28%	6%	45%	9%	23%	7%	34%	8%
2 adults, 2 dependent children	50%	4%	24%	4%	55%	10%	29%	4%	42%	10%
2 adults, 3 or + dependent children	47%	4%	28%	5%	59%	6%	39%	4%	45%	7%
3 adults or more with dependent children	43%	14%	46%	23%	60%	21%	45%	29%	47%	19%
Other	–	–	39%	40%	–	–	40%	7%	–	–
Education										
Lower secondary education	52%	22%	53%	14%	65%	17%	42%	20%	56%	25%
Upper secondary education	34%	9%	39%	12%	43%	15%	30%	11%	42%	23%
Higher education	24%	7%	19%	9%	27%	11%	19%	10%	25%	11%
Origin										
Local	36%	10%	35%	11%	51%	15%	30%	12%	41%	20%
Other	56%	24%	71%	40%	53%	16%	51%	42%	49%	31%
EU	46%	14%	40%	12%	53%	25%	39%	18%	41%	11%

(continued)

Financial dependence rate	LU		PL		SE		UK	
	Women	Men	Women	Men	Women	Men	Women	Men
Total (observations)	3,536	3,536	16,262	14,070	5,448	5,288	8,590	7,344
Gender	43%	9%	28%	21%	20%	13%	36%	16%
Occupational status								
Full-time workers	10%	5%	14%	11%	8%	8%	8%	7%
Part-time workers	36%	17%	42%	37%	15%	23%	40%	26%
Unemployed	68%	65%	96%	92%	44%	39%	67%	71%
Pensioners	30%	4%	4%	2%	28%	9%	52%	21%
Other non-active	82%	54%	49%	34%	58%	63%	66%	52%
Age bracket								
‹ 30 years	44%	28%	50%	38%	46%	37%	33%	24%
30-49 years	44%	6%	38%	22%	10%	9%	28%	11%
50-59 years	53%	7%	27%	23%	9%	7%	39%	17%
60-65 years	56%	10%	11%	10%	16%	6%	48%	21%
› 65 years	46%	4%	7%	2%	32%	6%	48%	18%
Household type								
Single person	9%	12%	4%	19%	17%	21%	21%	20%
2 adults (‹ 65) with no dependent children	43%	8%	27%	19%	18%	12%	30%	13%
2 adults (1 is › 65) with no dependent children	81%	4%	14%	13%	33%	6%	67%	18%
More than 2 adults but no dependent children	62%	18%	34%	30%	36%	26%	43%	23%
Single parent with dependent children	11%	0%	14%	8%	10%	12%	5%	5%
2 adults, 1 dependent child	43%	5%	31%	13%	19%	7%	41%	13%
2 adults, 2 dependent children	56%	5%	41%	13%	13%	5%	42%	7%
2 adults, 3 or + dependent children	63%	2%	55%	18%	14%	7%	50%	8%
3 adults or more with dependent children	60%	21%	44%	30%	32%	32%	46%	24%
Other	–	–	38%	28%	49%	21%	39%	14%
Education								
Lower secondary education	57%	13%	26%	28%	31%	13%	51%	23%
Upper secondary education	45%	7%	37%	23%	18%	13%	36%	17%
Higher education	26%	8%	16%	9%	16%	14%	24%	9%
Origin								
Local	45%	7%	30%	22%	18%	12%	37%	16%
Other	72%	35%	37%	10%	50%	27%	42%	22%
EU	48%	12%	12%	17%	35%	32%	48%	10%

Source: EU-SILC 2006

TECHNICAL ANNEX

Explaining the definition and calculation of individual income and inequality indicators based on the data contained in SILC-Belgium 2006 and 2007, EU-SILC 2006 and the 2005 Belgian time use survey

The aim of the BGIA project[39] is to analyse the incomes of women and men, as they can be calculated from existing databases. More particularly, it is to develop a method for calculating individual incomes and proposing indicators that highlight inequalities between women and men within the household itself, concerning disposable incomes and in relation to poverty.
This attempt to discern individual incomes is novel in that it reveals the inequality masked by traditional methods of measuring poverty, which assume that household resources are equally shared (income pooling).

This memorandum sets out details of all the stages involved in the process of defining and calculating an individualised income based on the SILC-Belgium 2006 and SILC-Belgium 2007 databases. We also explain the procedure followed to calculate the inequality indicators proposed within the framework of the project.

SILC (Survey on Income and Living Conditions) is currently being used as a European benchmark for analyses relating to poverty and social exclusion.[40] It is further developed each year via the implementation of modules which bring together a number of new variables relating to a specific theme. Nevertheless, the base unit of the survey remains the household, and a number of income variables are not available at individual level. To deal with this shortcoming, we make assumptions in order to break down incomes for which figures are available only at household level.

Part One of this memorandum is devoted to the definition and calculation of individual income and inequality indicators, based on the data contained in SILC-Belgium and in EU-SILC.
The first section of this part presents the SILC-Belgium databases for 2006 and 2007. The method followed to select the sample is then described, including the identification of adults, children, and of the existence of a couple or blood relationship within the household. We then present in detail the definition of income used for the purposes of our study, based on the recommendations made by the Canberra Expert Group,[41] set out in its 2001 report, which is seen as a benchmark in terms of defining income, and of the income variables contained in the SILC-Belgium databases for 2006 and 2007. Section 3 presents the assumptions behind the breakdown of the different items of income available at household level in SILC-Belgium 2006 and 2007. Particular attention is paid to the relative significance of each item to be broken down in order to obtain the individual shares of the income in question. Section 4 contains a discussion of certain comments concerning the calculation of individual incomes at European level, allowing international comparisons to be made. Finally, the last section presents the methodology used to construct the inequality indicators proposed as part of this project.

Part Two of this memorandum is devoted to the definition and calculation of time inequality indicators, based on data derived from the Belgian Time Use Survey. The first section of this part presents the database of the 2005 Belgian Time Use Survey. The selection method used for variables and for the sample is then described, together with the construction of new variables. Finally, the third section explains the calculation of the five inequality indicators relating to time use chosen for the purposes of the BGIA project.

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39 The 'Gender and income: Analysis and development of indicators - BGIA (Belgian Gender and Income Analysis)' project brings together the Federal Science Policy Office, the Institute for the equality of women and men (IEFH), the Directorate-general Statistics and Economic Information (DGSIE) and the Department of Applied Economics of the Free University of Brussels (DULBEA).
40 For a detailed description of SILC, please consult: http://forum.europa.eu.int/Public/irc/dsis/eusilc/library.
41 The Canberra Group, Final Report and Recommendations, Ottawa 2001.

1   SILC-Belgium 2006 and 2007

SILC-Belgium is the Belgian component of EU-SILC, a European Union database on income and living conditions. EU-SILC replaced the ECHP (European Community Household Panel) database[42] in 2004, and is intended to gather up-to-date and comparable multidimensional, cross-sectional and longi-tudinal microdata on income, poverty, social exclusion and living conditions. SILC was created with a view to overcoming the technical problems experienced by the ECHP, complying with international recommendations on income definition and expanding data collection to the entire European Union.

The Belgian component of the European SILC comprises 6 files, including 4 'European' files:

1) file D, which provides information on all households making up the sample
2) file R, which contains information on all individuals belonging to the participating households
3) file H, which contains household data (for all participating households)
4) lastly, file P holds individual data (for all individuals aged 16 or over in participating households)

The two additional files named HH and INDV contain the responses to the Belgian questionnaire and the figures used to calculate the European data contained in files H and P. These files contain a greater level of detail and can be used to work out individualised income figures, as described in section 3.

SILC-Belgium 2006 covers 5,860 households and 14,329 individuals, of whom 11,314 are aged 16 or over (the 2007 figures are 6,348 households and 12,322 individuals aged 16 or over). SILC-Belgium 2007 contains a number of additional income variables which were not examined in 2006. These will be presented in section 3, relating to definition of income.

2   Selection of the sample

A number of variables must be checked when defining the sample. Although SILC contains a number of already constructed variables, such as 'household type', other significant variables required for the purpose of identifying blood relationships within the household are not directly available. It is, however, possible to construct these by combining the information contributed by other variables. In particular, this information will be used for the breakdown of certain items of income among house-hold members. In this section, the reconstruction of these basic variables is described, together with the underlying assumptions.

42 For details of the stages of development of EU-SILC, see Clemenceau and Museaux (2007).

2.1 Definition of adults

The adults identified by SILC as such are shown in file P, which contains individual data. Consequently, there is no variable enabling us to designate them directly. SILC, however, provides a detailed explanation of its methodology, which we have applied. Thus the following are identified as adults:

1) individuals aged 25 and over
2) individuals aged 16 to 24, who meet both of the following conditions:

    a. there is no father or mother in their household[43]
    b. if condition (a) is not met, these persons must actually be working (full-time or part-time) or actively seeking employment

Any individuals who do not meet these conditions are deemed to be 'dependent children'. The variables used and their codes in SILC-Belgium 2006 and 2007 are as follows:

- AGE for age
- RB220 and RB230 for the father's and mother's identifier
- PL030 for employment status
- and PL020 and PL025 for availability and active searching for employment

2.2 Assumptions concerning parents

Parents must be identified, particularly for the purpose of granting family allowances. An adult is deemed to be a parent if their identifier is shown under variable RB220 'identifier of father' or RB230 'identifier of mother' of a 'child' from the same household. Grandparents are not deemed to be 'parents' in this case, as their children are aged over 25, and are therefore considered as adults.

2.3 Identification of couples

To analyse any inequalities existing within couples, we need to be able to identify couples comprising two adults of different genders. To this end, we used the following variables:

- PB180 'Identifier of spouse or partner', which indicates the presence of a couple in the household
- the gender variable: RB090
- and lastly, checking for the number of adults present in the household

2.4 Assumptions concerning households

Using the HT 'Household type' variable, SILC-Belgium 2006 and 2007 distinguish between 10 different household categories. By checking the number of individuals in the household and establishing a distinction between adults and children, while also taking account of blood relationships, we were able to recalculate these categories and refine their typology.

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43 The following are deemed to be parents: stepmother/stepfather, adoptive parents and foster families.

HOUSEHOLD COMPOSITION IN SILC-BELGIUM 2006

Household types	Percentage	Cumulative
Single adult	19.05%	19.05%
2 adults (< 65), with no dependent children	19.69%	38.75%
2 adults, at least one of whom is aged over 65, with no dependent children	13.58%	52.33%
Households with three or more adults and no dependent children	11.72%	64.05%
Single adult with at least one dependent child	3.01%	67.06%
2 adults with one dependent child	10.10%	77.16%
2 adults with 2 dependent children	11.28%	88.43%
2 adults with at least 3 dependent children	5.48%	93.91%
Other households with dependent children	5.95%	99.86%
Other	0.14%	100.00%

2006 weighted figures for Belgium

We repositioned individuals within these household types, according to the assumptions explained earlier. We also refined household categories in such a way as to propose around 40. We show the main ones here, ranked in order of importance:

BGIA HOUSEHOLD COMPOSITION BASED ON SILC-BELGIUM 2006

Household types	Percentage	Cumulative
2 adults aged under 65 living as a couple, with no dependent children	17.61%	17.61%
2 adults living as a couple, at least one of whom is aged over 65, with no dependent children	12.26%	29.87%
Single woman with no children	10.48%	40.35%
Complex households with no dependent children, with one couple relationship and 2 blood relationships	8.90%	49.25%
Single man with no children	8.79%	58.04%
2 adults, 1 dependent child, one couple relationship, 2 blood relationships	8.06%	66.10%
3+ adults, with dependent children, at least one couple relationship and 2 blood relationships	4.74%	70.84%
Single woman with dependent children	2.47%	73.31%
2 adults, 1 dependent child, one couple relationship, one blood relationship	1.25%	74.56%
2 adults aged under 65, with no dependent children and one non-dependent child	1.11%	75.67%
2 adults, at least one of whom is aged over 65, with no dependent children and one non-dependent child	1.10%	76.77%
Complex households with no dependent children with one couple relationship and one blood relationship	1.01%	77.78%
2 adults aged under 65 not living as a couple, with no blood relationship	0.67%	78.45%
Single man with dependent children	0.43%	78.88%

2006 weighted figures for Belgium

SILC does not distinguish between natural children, adopted children and half-siblings. Nor is any distinction made between the nuclear family and reconstituted families. SILC enables us to identify complex households (presence of three generations, households with several adults: couple relationship or jointly-rented home) only indirectly, using the following 3 variables: RB220 'Identifier of father', RB230 'Identifier of mother' and RB240 'Identifier of spouse or partner'.

Three methods are used in the various countries covered by EU-SILC to collect data on households: complete matrix, reduced matrix (as is the case for Belgium), or collecting information, at varying levels of detail, on the relationships between the person responding to the questionnaire and the other persons making up his or her household. According to the figures given in the EU-SILC 2010 module,[44] the EU-SILC 2006 sample for Belgium showed that approximately 5% of households with 2 adults have neither a couple relationship nor a parent-child relationship linking the persons in question, and 0.7% of households are made up of 3 generations.

2.5 Checking for missing observations

The last stage prior to calculation of individualised income is checking the available data for all observations. While the income variables are virtually all complete, we do not have any data for a number of observations concerning other variables. In particular, this applies to:

- PE040 'Level of educational attainment'
- ACTSTA 'Activity status'

The observations for which we have no information are removed from the population studied (e.g. 737 observations for PE040 and 95 for ACTSTA in SILC-Belgium 2006). For data concerning couples, we remove not only the individuals for whom the data is missing, but also their partners. Thus in SILC-Belgium 2006, 518 observations were removed relating to variable PE040, and 84 concerning ACTSTA for couples comprising 2 adults of different genders.

3   Definition of income

Income represents a key concept in the definition of poverty but may be difficult to define and measure (Van Der Laan 2007). This term is sometimes used solely in relation to the main forms of monetary income (such as pay and work-related income generally). Others use it to refer to all incomes, such as those from capital or other households.

This section presents the definition of income used for the purposes of the BGIA project. We shall begin by analysing the concept of income in benchmark studies, compare this with the SILC income variables, then take these together to summarise our own approach.

3.1 The Canberra Expert Group's definition of income – Literature

In the relevant literature, three references often crop up in works dealing with income and how to define it: the 'System of National Accounts' (SNA93[45], ESA95[46]), the recommendations of the 'Canberra Expert Group' (2001),[47] and the report of the International Labour Organization (ILO, 2003).

Apart from a few differences between the ILO[48] and the Canberra group, e.g. in the treatment of transfers in kind and the classification of certain income components, there is a broad consensus around the latter's recommendations, many of which are taken up in SILC itself.[49] However, two points have been raised by Atkinson et al. (2005), concerning negative income and imputed rent:

- Negative income: as emphasised by Atkinson et al. (2005), poverty risk is evaluated in terms of quality of life, and, as a result, interpreting negative income is no easy task. Nevertheless, the BGIA study is a study of income, rather than a poverty analysis, and hence the decision was made to take negative income into account in our analysis.

- Imputed rent: Atkinson et al. (2005) also stress the fact that imputed rent is an attempt to portray the real difference in terms of living conditions between, for example, a household that pays rent and an owner-occupier household which has paid off its mortgage. In another sense, imputed rent is not, in reality, an inflow of money, and cannot be used to pay for other requirements. From the social inclusion point of view, this means that focusing solely on an income including imputed rent may distort the measurement of deprivation and social exclusion. Consequently, imputed rent is not taken into consideration for the purpose of defining individualised income. It should be noted that the variable relating to imputed rent is not available in SILC for the years prior to 2007.

Since 1996, the 'Canberra Expert Group' has compiled its recommendations into a guide (Canberra Expert Group, 2001), with a view to harmonising the statistical databases relating to income distribution and thus enhancing their comparability (Van Der Laan, 2007). Since it is not intended to create a definitive series of standards relating to income measurements, the guide presents all the conceptual and practical questions to be considered by both producers and users of statistical databases relating to income. This guide therefore constitutes a source of ideas and good practice for the purpose of reconciling the conceptual nature of income and its theoretical definition. On page 3, we read that:

'Income refers to regular receipts such as wages and salaries, income from self employment, interest and dividends from invested funds, pensions or other benefits from social insurance and other current transfers receivable. Large and irregular receipts from inheritances and the like are considered to be capital transfers because it is unlikely that they will be spent immediately on receipt and are "one-off" in nature.'

This definition thus includes all items which, in one way or another, contribute to the amount available for the individual to consume and save during the reference period, without recourse to debt or drawing on extraordinary income. This refers to the Hicksian notion of income:[50]*'... it would seem that we ought to define a man's income as the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning.'*

Three aspects come into play when attempting to define what is classed as income and what is excluded, based on the following criterion: what can be spent the same day?[51]

- Monetary income versus non-monetary income
- Regular income/irregular income
- And lastly, maintaining the net value of wealth

48 ILO, 'Household income and expenditure statistics', Report II, Seventeenth International Conference of Labour Statisticians, Geneva 2003, p.8.
49 EU-SILC is supposed to be in phase with the Canberra Group's recommendations from 2007 onwards.
50 ILO, op. cit., p. 9.
51 ILO. op. cit., pp. 13-17.

Consequently, only regular flows are taken into account (income from an inheritance, for example, is considered as a capital transfer), inflows which contribute to present or future well-being, while remaining neutral in terms of wealth. In other words, these inflows should not have a negative effect on the individual's total wealth.

The definition of income put forward by the Canberra group is structured as follows:

THE CANBERRA GROUP'S DEFINITION OF INCOME

1	**Employee income**
	Cash or near cash
1.1	Cash wages and salaries
1.2	Tips and bonuses
1.3	Profit sharing including stock options
1.4	Severance and termination pay
1.5	Allowances payable for working in remote locations etc, where part of conditions of employment
	Cash value of 'fringe benefits'
1.6	Employers' social insurance contributions
1.7	Goods and services provided to employee as part of employment package
2	**Income from self-employment**
	Cash or near cash
2.1	Profit/loss from unincorporated enterprise
2.2	Royalties
	In-kind, imputed
2.3	Goods and services produced for barter, less cost of inputs
2.4	Goods produced for home consumption, less cost of inputs
2.5	Income less expenses from owner-occupied dwellings
3	**Rentals 2.4.2.3**
3.1	Income less expenses from rentals, except rent of land
4	**Property income 2.4.2.4**
4.1	Interest received less interest paid
4.2	Dividends
4.3	Rent from land
5	**Current transfers received**
5.1	Social insurance benefits from employers' schemes
5.2	Social insurance benefits in cash from government schemes
5.3	Universal social assistance benefits in cash from government
5.4	Means-tested social assistance benefits in cash from government
5.5	Regular inter-household cash transfers received
5.6	Regular support received from non-profit making institutions such as charities

(continued)

6	Total income (sum of 1 to 5)
7	Current transfers paid
7.1	Employers' social insurance contributions
7.2	Employees' social insurance contributions
7.3	Taxes on income
7.4	Regular taxes on wealth
7.5	Regular inter-household cash transfers
7.6	Regular cash transfers to charities
8	Disposable income (6 less 7)
9	Social transfers in kind (STIK) received
10	Adjusted disposable income (8 plus 9)

Source: The Canberra Expert Group, (2001), 'Final Report and Recommendations', Ottawa 2001, p. 18.

3.2 The Canberra Expert Group's definition of income – Interpretation

The Canberra Group's definition of income is a generalisation which can be applied to the various regions of the world and allows international comparisons to be made. Since income is defined for a purpose –measurement of poverty risk, in this instance – the way in which it is defined will vary according to this purpose, a fact recognised by the Canberra Group itself:[52] *'it is important to recognise at the outset that different measures of income may be the most appropriate or the best available for different analytical purposes'*. We have therefore attempted to refine this definition of income in order to take account of characteristics specific to Belgium in particular, and to Europe in general.

Since the logic employed by the Canberra Group is a 'flow' logic, net income is measured as the sum total of all 'inflows' (pay and positive transfers) less 'outgoings' (negative transfers). We chose a different definition in order to highlight the impact of State intervention. We have therefore shown income without State intervention (income from economic activity, investment income and inter-household transfers) separately, ending up with a figure for gross income, to which State transfers must be added, and from which taxes must be deducted, in order to identify net income.

Our definitions:

1. Income from economic activity:
This is the sum total of earned income: pay, bonuses and overtime, income in kind and other benefits. This income is calculated both for employees and for the self-employed.

2. Investment income:
This is the sum total of investment income: rent derived from land or buildings, income from financial investments, plus interest and dividends of all kinds.

3. Gross income:
This comprises the sum total of income from economic activity, investment income and inter-household transfers.

[52] The Canberra Group, Op. Cit., p. 11.

4. State transfers:

These are transfers received from the authorities.

5. Taxes:

These are duties and taxes paid to the State, i.e.:

Income from economic activity = earnings of employees + income from self-employment
Investment income = income from movable property + income from immovable property
Gross income = income from economic activity + investment income + inter-household transfers
Net income = gross income + State transfers – taxes

3.3 Correspondence with SILC

Once we had established our definition of income, we compared it with the different income variables available in the SILC-Belgium database for 2006 and 2007. Here, we offer a comparative analysis between the SILC data and the Canberra Expert Group's definition of income, as well as the definition that we are using for each income type. Where there are differences between the SILC-Belgium databases for 2006 and 2007, these are emphasised under each point.

Earnings of employees

Canberra definition:

1	**Employee income**
	Cash or near cash
1.1	Cash wages and salaries
1.2	Tips and bonuses
1.3	Profit sharing including stock options
1.4	Severance and termination pay
1.5	Allowances payable for working in remote locations etc, where part of conditions of employment
	Cash value of 'fringe benefits'
1.6	Employers' social insurance contributions
1.7	Goods and services provided to employee as part of employment package

- Item '1.6 Employers' social insurance contributions' corresponds to variable PY030 'Employer's contribution to social security costs' in SILC and is not available in the database for the years prior to 2007. It is not relevant to our definition of income as it is not taken into account for the calculation of tax, as will be explained in point 3.5.

- The SILC variable concerning redundancy payments (question I96)[53] is considered as an unemployment benefit in the SILC classification (PY090 'Unemployment benefits'), whereas it appears in the 'employee income' category in our classification, which thus follows the logic of the Canberra Expert Group.

- SILC variable PY020 'Employees' income in kind' only covers company cars in 2006. The amount is calculated on the basis of the following criteria: model, make, horsepower for tax purposes and year of registration. This information is complete, but SILC-Belgium 2007 introduces the following new items:

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[53] All questions refer to the two SILC questionnaires (individual and household) used for data collection purposes, 2007 version.

- Luncheon vouchers (questions I57 to I59 of the 2007 questionnaire). 17,68 respondents declared that they had received luncheon vouchers in 2006.
  The annual average is €180, and the amount per beneficiary is €1035
- The employer's contribution to mobile phone bills, with 438 beneficiaries and €385 worth of annual income per beneficiary
- Contribution towards gas and electricity bills for the employee's main home (27 beneficiaries with €731 worth of annual income per beneficiary)
- Contribution to car insurance costs (113 beneficiaries with €668 worth of annual income per beneficiary)
- And contribution to fuel costs for the employee's car (413 beneficiaries with €873 worth of annual income per beneficiary)

Our definition:

The following table shows employees' income from economic activity. Column one indicates the code for the variable, as it appears in SILC-Belgium 2006 (e.g. PY010 for pay). The numbers correspond to questions contained in the data collection questionnaires on the various components of pay (2007 version).

Variables	Codes
Earnings of employees:	**1**
Pay (basic)	I47, I52 and I55
Casual work	I53
Bonuses, of which:	
Overtime	I61A
Commission	I61B
Tips	I61C
Sales or production bonus	I61D
End-of-year bonus	I61E
Thirteenth month	I61F
Fourteenth month	I61G
Holiday pay	I61H
Profit-sharing	I61I
Company shares, workplace	I61J
Bonuses for working abroad	I61O
Other bonuses	I61P
Additional activity	I90, I92, I93, I87 and I88
Redundancy payments	I96
Non-wage income:	
Company car	PY020
Employer's contribution to mobile phone bills	I61K
Contribution to home gas and electricity bills	I61L
Contribution to car insurance costs	I61M
Contribution to fuel costs for the employee's car	I61N
Luncheon vouchers	I57, I58 and I59

Income from self-employment

Canberra definition:

2	Income from self-employment
	Cash or near cash
2.1	Profit/loss from unincorporated enterprise
2.2	Royalties
	In-kind, imputed
2.3	Goods and services produced for barter, less cost of inputs
2.4	Goods produced for home consumption, less cost of inputs
2.5	Income less expenses from owner-occupied dwellings

- Variables '2.3 Goods and services produced for barter, less cost of inputs' and '2.4 Goods produced for home consumption, less cost of inputs' do not appear to apply to Belgium, and are not available in SILC-Belgium 2006 and 2007 (as opposed to variable PY070 'Income derived from goods produced for own consumption' in SILC).

- The Canberra Group's definition of variable '2.5 Income less expenses from owner-occupied dwellings' corresponds to SILC variable HY030 'Imputed rent'. Both definitions make use of the 'owner-occupiers'[54] category, but this variable is not available in SILC prior to 2007 and is not used in our definition for the reasons explained previously (page 8). As far as classification is concerned, this variable should be moved to the 'investment income' category.

- The Canberra Group's items 2.1 and 2.2 are combined into a single variable in SILC: PY050: 'Profits or losses resulting from self-employment'.

- Additional information is available in SILC-Belgium 2006 compared to the European SILC, concerning the following:
  - advance payments equivalent to PAYE (question I81)
  - social security contributions (question I84)

These variables are to be found under category '8. Taxes'.

Our definition:

Variables	Codes
Income from self-employment	**2**
Cash benefits or losses from self-employment	PY050

Income from economic activity

This is the sum total of '1. Earnings of employees' and '2. Income from self-employment'.

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54 For an in-depth study of the significance of variable HY030-Imputed rent, see: Frick J.R., Goebel J., Grabka M.M. (2007).

Investment income

Canberra definition:

3	**Rentals 2.4.2.3**
3.1	Income less expenses from rentals, except rent of land
4	**Property income 2.4.2.4**
4.1	Interest received less interest paid
4.2	Dividends
4.3	Rent from land

- SILC does not distinguish between rental income derived from land or property. We therefore merged points 3 and 4 of the definition of income proposed by the Canberra Group into a single category of 'Investment income'.

- Variable PY080 'Private pension savings' corresponds to private pension schemes to which individuals make voluntary contributions, repaid in the form of annuities. We regarded this as interest on investment, which is why this variable was placed in this category and not among traditional pensions. SILC-Belgium also includes life assurance benefits under this heading.

- It is possible, using the Belgian variables, to ascertain whether income is derived from renting out part of the main home or from renting out a second home (question H37).

- A proxy variable can be used to establish the identity of the property owner or the person who signed the lease: HB080 'Person 1 responsible for the home' and HB090 'Person 2 responsible for the home'.

- Variable HY030 'Imputed rent' is not available in SILC prior to 2007, but it is possible to estimate figures for 2006 using variable HH061 'Subjective rent'. However, the DGSIE warned us that this variable is of poor quality, as it is neither checked, nor corrected. Nevertheless, in view of the definition of income used in our study, imputed rent is not taken into account, for the reasons given in section 3.1. So although it is considered to be a substantial component of income in countries where there are a large percentage of home-owners (e.g. Spain and Belgium) (Smeeding et al. 1993), since the share of disposable income is used for consumption of goods and services to offset other costs (Canberra Group 2001), the fact remains that imputed rent is not actually real disposable income.

Our definition:

Our definition of investment income is shown in the following table; mortgage interest is assigned a negative value.

Variables	Codes
Investment income:	**4**
Income from renting out land or buildings	H74
Renting out part of the home for business use	H37
Income from financial investments	HY090
Amount of mortgage interest	HY100 (-)
Private pension savings	I110
Life assurance benefits	I113

Other income

The Canberra Group proposes a division between 'transfers received' and 'transfers paid'. We preferred to use another approach, separating out 'transfers received from the State', 'taxes' and 'other income'.

Our definition of other income includes inter-household transfers, charity aid and income received by persons aged under 16 within the household.

In the light of the comments made by the DGSIE, we decided not to take account of the variables concerning either the income of persons aged under 16 or charity aid. Consequently, this item will be referred to as 'inter-household transfers' in the remainder of the document. These transfers can be divided into two categories: 'maintenance payments' (received and paid) and 'other regular financial support' (received and paid).

Our definition:

Variables	Codes
Inter-household transfers:	**5**
Inter-household transfers received:	
Maintenance actually received	H86 and H86b
Amount of regular financial support received from another household	H88 and H89
Inter-household transfers paid:	**(-)**
Maintenance actually paid	H79 and H79b
Amount of regular financial support paid to another household	H81 and H82

As far as maintenance is concerned in SILC-Belgium, compared to the European SILC, it is possible to distinguish between compulsory and non-compulsory maintenance, and between the amounts payable and amounts actually paid. Information on possible recourse to debt recovery is also available from 2006 onwards.

Gross income

Gross income is made up of the sum of the three items in our definition of income:
'3. Income from economic activity', '4. Investment income' and '5. Inter-household transfers'.

State transfers

Canberra definition:

5	Current transfers received
5.1	Social insurance benefits from employers' schemes
5.2	Social insurance benefits in cash from government schemes
5.3	Universal social assistance benefits in cash from government
5.4	Means-tested social assistance benefits in cash from government
5.5	Regular inter-household cash transfers received
5.6	Regular support received from non-profit making institutions such as charities

- Variables '5.1 Social insurance benefits from employers' schemes' and '5.6 Regular support received from non-profit making institutions such as charities' are not available in SILC.

- As far as the other variables comprising this item are concerned, SILC perceives transfers differently from the Canberra Group. According to the latter's definition, transfers are divided into three categories, depending on the nature of the welfare cover provided, whereas for SILC, they are organised by transfer type depending on the beneficiary's employment situation.

Our definition of State transfers:

Variables	Codes
State transfers:	**7**
Pensions, of which:	
Retirement pension	I102B_B
Guaranteed income for the elderly	I102C_B
Guaranteed income supplement for the elderly	I102D_B
Other unknown pensions	I102E_B
Survivor's pension	I102A_B
Unemployment, of which:	
Unemployment benefit	I98B_B
Early retirement pension	I99
Career break allowances	I98C_B
Minimum guaranteed income allowances	I98D_B
Welfare fund allowances	I98E_B
Supplement received for taking a vocational training course	I98F_B
Interim allowance for school-leavers	I98A_B
Other unemployment-related allowances	I98H_B
Supplementary benefit to cover childcare costs or mobility supplement	I98G_B
Incapacity benefits, of which:	
Invalidity lasting more than 1 year	I115A_B
Accident at or travelling to/from work (permanent incapacity)	I115E_B
Occupational illness, permanent incapacity	I115G_B
Death of a family member in service	I115H_B
Permanent and essential assistance provided by a third party	I115I_B
Other sickness or accident-related benefits	I115J_B
Sick pay, of which:	
Allowance for disabled persons	I115B_B
Incapacity for work, less than a year, unrelated to work	I115C_B
Accident at or travelling to/from work (temporary)	I115D_B
Occupational illness, temporary incapacity	I115F_B
Flanders region health insurance scheme	I119
Family and child-related allowances:	
Maternity/paternity allowance	I116
Parental leave	I117
Family allowances received	H91
Birth/adoption grant received	H93
Education-related allowances:	
Student grant	H97
Other social exclusion-related allowances:	
Social integration income	I184
Housing allowances:	
Housing allowances	HY070

In SILC, allowances payable to the elderly (PY100) include several categories, including survivor's pension (PY110), which is systematically included in this item if the beneficiary is aged over 65.

The Flanders region health insurance scheme (question I119) is added to the sick pay section in SILC (PY120).

The 'Other social exclusion-related allowances' variable (HY060) primarily contains CPAS financial assistance. Although this is a 'household' variable, the direct beneficiary can be identified from 2006 onwards.

Taxes

7	Current transfers paid
7.1	Employers' social insurance contributions
7.2	Employees' social insurance contributions
7.3	Taxes on income
7.4	Regular taxes on wealth
7.5	Regular inter-household cash transfers
7.6	Regular cash transfers to charities

- Variable '7.4 Regular taxes on wealth' does not apply to Belgium, and is the equivalent of variable HY120, which is worded the same way in SILC.

- Item '9. Social transfers in kind (STIK) received' developed by the Canberra Group, is not available in SILC and was not deemed important for Belgium.

- Variable PY030 'Employer's contribution to social security costs' is not available prior to 2007 and is not relevant for the purpose of calculating taxes.

Our definition:

Variables	Codes
Taxes:	**8**
Income taxes and social security contributions	HY140
Tax adjustment:	
Additional tax paid	I130
Additional tax received	I132

3.4 Summary of the 'BGIA' definition of income

The table below presents a summary of the definition of income which we have chosen to use. Income is classified by type, with details from the variables available in SILC-Belgium 2006 and 2007. The last column indicates whether or not the variable in SILC is an individual one.

Codes	Variables	Ind.
1	**Earnings of employees:**	
I47, I52 and I55	Pay (basic)	Yes
I53	Casual work	Yes
	Bonuses, of which:	
I61A	Overtime	Yes
I61B	Commission	Yes
I61C	Tips	Yes
I61D	Sales or production bonus	Yes
I61E	End-of-year bonus	Yes
I61F	Thirteenth month	Yes
I61G	Fourteenth month	Yes
I61H	Holiday pay	Yes
I61I	Profit-sharing	Yes
I61J	Company shares, workplace	Yes
I61O	Bonuses for working abroad	Yes
I61P	Other bonuses	Yes
I90, I92, I93, I87 and I88	Additional activity	Yes
I96	Redundancy payments	Yes
	Non-wage income:	
PY020	Company car	Yes
I61K	Employer's contribution to mobile phone bills	Yes
I61L	Contribution to home gas and electricity bills	Yes
I61M	Contribution to car insurance costs	Yes
I61N	Contribution to fuel costs for the employee's car	Yes
I57, I58 and I59	Luncheon vouchers	Yes
2	**Income from self-employment:**	
PY050	Income from activity as a self-employed person	Yes
3	**Income from economic activity (1+2)**	
4	**Investment income:**	
H74	Income from renting out land or buildings	No
H37	Renting out part of the home for business use	No
HY090	Income from financial investments	No
HY100 (-)	Amount of mortgage interest	No
I110	Private pension savings	Yes
I113	Life assurance benefits	Yes

Codes	Variables	Ind.
5	**Inter-household transfers:**	
	Inter-household transfers received:	
H86 and H86b	Maintenance actually received	No
H88 and H89	Amount of regular financial support received from another household	No
(-)	Inter-household transfers paid:	
H79 and H79b	Maintenance actually paid	No
H81 and H82	Amount of regular financial support paid to another household	No
6	**Gross income (3+4+5)**	
7	**State transfers:**	
	Pensions, of which:	
I102B_B	Retirement pension	Yes
I102C_B	Guaranteed income for the elderly	Yes
I102D_B	Guaranteed income supplement for the elderly	Yes
I102E_B	Other unknown pensions	Yes
I102A_B	Survivor's pension	Yes
	Unemployment, of which:	
I98B_B	Unemployment benefit	Yes
I99	Early retirement pension	Yes
I98C_B	Career break allowances	Yes
I98D_B	Minimum guaranteed income allowances	Yes
I98E_B	Welfare fund allowances	Yes
I98F_B	Supplement received for taking a vocational training course	Yes
I98A_B	Interim allowance for school-leavers	Yes
I98H_B	Other unemployment-related allowances	Yes
I98G_B	Supplementary benefit to cover childcare costs or mobility supplement	Yes
	Incapacity benefits, of which:	
I115A_B	Invalidity lasting more than 1 year	Yes
I115E_B	Accident at or travelling to/from work (permanent incapacity)	Yes
I115G_B	Occupational illness, permanent incapacity	Yes
I115H_B	Death of a family member in service	Yes
I115I_B	Permanent and essential assistance provided by a third party	Yes
I115J_B	Other sickness or accident-related benefits	Yes
	Sick pay, of which:	
I115B_B	Allowance for disabled persons	Yes
I115C_B	Incapacity for work, less than a year, unrelated to work	Yes
I115D_B	Accident at or travelling to/from work (temporary)	Yes
I115F_B	Occupational illness, temporary incapacity	Yes
I119	Flanders region health insurance scheme	Yes

Codes	Variables	Ind.
	Family and child-related allowances:	
I116	Maternity/paternity allowance	Yes
I117	Parental leave	Yes
H91	Family allowances received	No
H93	Birth/adoption grant received	No
	Education-related allowances:	
H97	Student grant	No
	Other social exclusion-related allowances:	
I184	Social integration income	Yes
	Housing allowances:	
HY070	Housing allowances	Yes
8	**Taxes**	
HY140	Income taxes and social security contributions	No
	Tax adjustment:	
I130	Additional tax paid	Yes
I132	Additional tax received	Yes
9	**Disposable income or net income (6+7-8)**	

3.5 Transition from gross to net

Gross income comprises the sum total of income from economic activity, investment income and inter-household transfers. **Net income,** however, is made up of gross income less taxes plus State transfers. Moving from gross to net figures therefore involves measuring the incomes of individuals with or without State intervention.

In the SILC database, taxes are represented by variable HY140 'Income taxes and social security contributions'.

Income taxes are taxes levied on income, profits and capital gains. They are payable on the actual or presumed income of natural persons, actual households or tax households. They include taxes levied on ownership of property, land or real estate, where these are used to estimate their owners' income. These taxes include:

- taxes on the income of natural persons, actual households or tax households (income from employment, property, business activity, retirement pensions, etc.), including taxes deducted at source by employers, other withholding taxes and taxes on the income of directors of non-incorporated companies paid during the income reference period
- repayment of tax levied during the income reference period relating to tax paid on income received during the income reference period or in previous years. This value will be treated as a credit on taxes paid
- interest charged on tax arrears and fines imposed by the tax authorities

Social security contributions are contributions paid by employees, self-employed workers and the unemployed, and any other contributions (if applicable) paid during the income reference period, either to compulsory public social security schemes, or to compulsory social security schemes operated by employers (covering retirement pensions, healthcare, etc.).

Nevertheless, the variable relating to taxes in SILC does not enable us to distinguish between income taxes and social security contributions. This variable, moreover, relates to the household. In other words, the only figure available is a global amount for the household, and it is impossible to see what proportion of taxes is applicable to the income or social security contributions of one house-hold member in particular. To determine who pays what, it is necessary to break down the taxes paid among the various household members. To do this, we reconstituted the amount of taxes paid by the household, separating out taxes relating to individual income and contributions from those applicable to globalised household income.

Firstly, we identified taxes relating to individual income by calculating the difference between the gross and net amounts of this income. These taxes are payable on the income of employees and the self-employed, and on allowances relating to unemployment, pensions, survivor's pensions, sick pay and in-capacity benefit, maternity leave, parental leave and to any additional tax paid. These are the types of in-come used to calculate net income under the general principles governing taxation of natural persons.[55] The sum total of these taxes enables us to calculate a kind of individual tax for each household member.

Subsequently, the variable relating to 'Income taxes and social security contributions' is compared with the sum of individual taxes paid by household members and, where necessary, the difference be-tween the two (the remaining tax balance) is broken down among the various household members in proportion to their individual taxes, and according to the specific assumptions on income distribution laid down in item 4.3. It is not always necessary to perform a breakdown, as in 99% of cases the sum of the individual taxes is equal to the global tax at household level (HY140).

Variables taken into account for tax calculation purposes

Codes	Variables	Gross	Net
PY010	Earnings of employees	X	X
PY020	Non-wage income	G=N	G=N
PY050	Income from activity as a self-employed person	X	X
PY080	Private pension savings	G=N	G=N
HY040	Income from renting out land or buildings	X	-
HY090	Income from financial investments	G=N	G=N
HY100	Amount of mortgage interest	G=N	G=N
HY080	Individualised inter-household transfers received	X	-
HY130	Individualised inter-household transfers paid	X	-
PY090	Unemployment	X	X
PY100	Pension	X	X
PY110	Survivor's pension	X	X
PY120	Sick pay	X	X
PY130	Incapacity benefits	X	X
HY050	Family and child-related allowances at household level	G=N	G=N
I117	Parental leave	X	X
PY140	Education-related allowances	G=N	G=N
HY060	Other social exclusion-related allowances	X	-
HY070	Housing allowances	X	-
HY140	Income taxes and social security contributions	X	-

SILC-Belgium 2006
'X' means that the information is available in SILC,
'-' means that the information is not available in SILC, 'G=N' means that the gross amount is equal to the net amount.

The above table illustrates the variables available in SILC-Belgium 2006 which can be used to reconstruct the final variable relating to taxes. It can be seen that the difference between the gross and net amounts can be used for 9 variables only. We find that there are slight differences between the information available in SILC-Belgium 2006 and the taxation rules set out in the tax guide published by the Service d'Études et de Documentation du Service Public Fédéral Finances [the Research and Documentation Department of Belgium's Public Federal Finance Service].

Income from earnings as an employee or from self-employment:
Under tax legislation, the net amount of this income is determined in six stages: deduction of the gross amount of any social security contributions; deduction of any actual or fixed-rate business costs; exemptions of an economic nature (notably fiscal measures to promote investment and/or employment); charging of any losses; granting of the 'assisting spouse' share and the dependent spouse allowance, and offsetting any losses between spouses.
As SILC-Belgium 2006 incorporates this in the difference between the gross amount and net amount of income from economic activity, it is possible to see how individuals are taxed in relation to their earnings. However, it is not possible to distinguish between social security contributions paid and other business costs.

Pensions savings:
Pensions savings are not liable for tax under the general principles governing taxation of natural persons, since tax is deducted at the time the money is received. On the contrary, they create an entitlement to tax relief, which is why there is no difference between the gross amount and net amount of pensions savings income in SILC-Belgium 2006.

Income from immovable property:
Under tax legislation, the taxable value of income from immovable property is determined separately for each spouse, and jointly-owned property is divided equally between spouses. The amount of taxable income is determined on the basis of the hypothetical 'cadastral' income or rent. The net amount is obtained by deducting interest on borrowings and housing-related standard allowances.
However, given that SILC-Belgium 2006 only shows the gross amount of income derived from renting out land or buildings, it is not possible to determine taxes relating to income from immovable property. Consequently, this item of income is not included in the calculations of individual tax paid.

Income from movable property:
As a rule, dividends, income from savings certificates, cash deposits, bonds and other fixed-income securities are subject to the advance levy on income from securities at the time they are encashed. However, such income does not necessarily have to be declared, so no information relating to taxes on income from financial investments is available in SILC-Belgium 2006.

Mortgage interest:
Mortgage interest creates an entitlement to a deduction from total net income. This is why there is no difference between the gross and net amounts of this interest in SILC-Belgium 2006.

Maintenance payments:
Maintenance payments received during the tax period are liable for tax globally, at the rate of 80% of the amount received. Maintenance arrears are also taxable at the rate of 80% of the amount received. However, they may benefit from being taxed separately if they are paid in the wake of a judgment with

retroactive effect. Nevertheless, as SILC-Belgium 2006 only provides information relating to the gross amount of maintenance payments, the amount of this taxation is not available.

State transfers:
As defined in the tax calculation for natural persons, certain social transfers are exempt. These are:

- integration income
- statutory family allowances
- statutory birth allowances and adoption grants
- allowances granted to the disabled, which are payable by the Treasury, under the legislation relating thereto
- war pensions
- annuities granted in connection with an accident at work or occupational illness, to persons who have not suffered any loss of earnings. Such annuities are automatically exempt if the degree of invalidity does not exceed 20% or if it is paid in addition to a retirement pension. If the degree of invalidity exceeds 20%, exemption is limited in principle to this percentage

This explains why no information relating to taxation of 'education-related allowances', 'family and child-related allowances', 'social exclusion-related allowances' and 'housing allowances' is available in SILC-Belgium 2006.
Other social transfers are not exempt. SILC provides a gross amount and a net amount concerning income from pensions, unemployment benefit, survivor's pensions, sick pay, incapacity benefits and parental leave.

4 Individualisation of income

Poverty and exclusion risks are traditionally measured at household level: a person who belongs to an at-risk household is at risk of poverty. The underlying assumption is that resources are equally shared among household members, regardless of the structure of the household and the provider of these resources. This approach masks the special characteristics of and risks incurred by women. One of the many objectives of this study will be to open up the 'black box' represented by the household, and to look at who contributes what in terms of income of any kind, and who benefits from what, in terms of consumption of goods and services, and in terms of available time.

Initially we shall present the different income-related variables collected at household rather than individual level, in order to measure their importance. We shall then explain the assumptions made for the purpose of individualising these different 'household incomes'.

4.1 Importance of the variables to be broken down[56]

The different variables collected at household level have to be broken down to permit individualisation of income. Nevertheless, some of these variables affect only a minute proportion of the population, and do not perhaps need to undergo as rigorous an analysis as other more important variables. We have chosen not to take into account variables which concern less than 1% of households. In this point we describe the non-individualised variables in detail, in order to give a clearer idea of these.

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56 All figures in item 2.2.2. correspond to 2005 gross unweighted data.

Investment income

- Income from renting out land or buildings (HY040):

This is income derived from land or property rentals (not included in variable HY090 'Profit/loss of unincorporated enterprises') following deduction of costs such as mortgage interest, minor repairs, maintenance, insurance, etc.
  - Number of households benefiting from this income: 368, i.e. 7.16%.
  - Average income: €819 /month.

It is possible to establish the identity of the property owner or the person who signed the lease, thanks to variables HB080 'First person responsible for the home' and HB090 'Second person responsible for the home'.

- Income from financial investments (HY090):

This consists of interest, dividends and profits received by the owner of financial assets on his or her bank accounts, shares, bonds, investments, etc., other than financial income derived from assets relating to the company in which this person works.
  - Number of households benefiting from this income: 3,073, i.e. 59.82%.
  - Average income: €92 /month. However, it should be noted that the median is only €16 /month, indicating that a small number of very high incomes are driving the average figure upwards.

The use of data specific to Belgium does not permit individualisation of these variables.

- Amount of mortgage interest (HY100):

This consists of interest paid by the household (total gross amount) on a loan taken out in order to purchase the main home. This variable does not take account of interest payable on other loans taken out to pay for insurance or repair works.
  - Number of households 'benefiting' from this income: 1,559, i.e. 30.35%.
  - Average income: €234 /month.

This variable is not derived from a declaration made by individuals but is calculated by the DGSIE.

Inter-household transfers

- Amount of maintenance actually received (HY080):

These are maintenance payments, whether or not made voluntarily, and regular assistance from one household to another.
  - Number of households benefiting from this income: 346, i.e. 6.74%.
  - Average income: €282 /month.

- Amount of maintenance paid (HY130):

These are maintenance payments, whether or not made voluntarily, and regular assistance from one household to another.
  - Number of households paying this transfer: 447, i.e. 8.7%.
  - Average payment: €234 /month.

State transfers

State transfers are defined as financial assistance organised via collective systems.
- Transfers based on the principle of insurance are dependent on payment of contributions;
- A means test is applied for social assistance.

- **Family and child-related allowances (HY050):**

This is financial assistance for households with dependent persons, whether or not these are children.
- Number of households benefiting from this income: 1,837, i.e. 35.76%.
- Average income: €245 /month.

Certain subvariables are individualised:
- B_HY050G_3 'Maternity allowance'
- B_HY050G_5 'Career break allowance linked to parental leave'
- B_PY090G/N_17 'Supplementary benefit to cover childcare costs'

Others are not:
- B_HY050G_1 'Amount of family allowances received'
- B_HY050G_2 'Amount of birth/adoption grant received'

There is a small difference between the gross and net figures, because maternity/paternity benefits and parental leave allowances are taxed, whereas the remainder (family allowances) is not.

- **Other social exclusion-related allowances (HY060):**

This variable refers to assistance provided to households which are 'excluded' or 'at risk of social exclusion', and to persons in receipt of CPAS benefits. These payments are made periodically to people on the basis of their income, as well as other factors, such as nationality and age.
- Number of households benefiting from this income: 117, i.e. 2.28%.
- Average income: €509 /month.

This income is given on an individual basis from 2006 onwards, although the amount takes account of the beneficiary's family situation.

- **Housing allowances (HY070):**

These are payments made by the authorities to help households meet their housing costs.
- Number of households benefiting from this income: 41, i.e. 0.8%.
- Average income: €136 /month.

This variable takes account of the share of the rent borne by the CPAS and of insurance against loss of income in the case of home owners insured by the State. However, it does not take account of renovation grants.

Just 0.8% of households receive this type of income, and we chose to disregard this variable.

Taxes

- **Income taxes and social security contributions (HY140):**

These are taxes on income, profits and capital gains (income derived from employment, allowances and property), and include taxes deducted by the employer (pay-as-you-earn) and other withholding taxes, and also taxes levied on the self-employed and business owners. This variable also contains

information on tax repayments and interest charged on late payment of tax.

Social security payments are also included under this heading, in respect of employees, the self-employed, and others, if applicable.
- Number of households paying these taxes: 4,445, i.e. 87%.
- Average payment: €1,015 /month.

Total tax is not 'calculated' but measured using the difference between gross data and net data, plus any additional taxes paid or received.

4.2 Assumptions concerning the breakdown of household income

SILC uses several categories of household, i.e. so-called 'simple' households, comprising 2 adults or a single person, with or without a dependent child or children, and 'complex' households containing more than 2 adults, with or without a dependent child or children.

In SILC, the various categories of 2 adults with or without children do not systematically correspond to couples, since these categories include single parents with children who are deemed to be adults, according to SILC assumptions. Complex households, too, contain family nuclei (e.g. a couple with 1 child who is no longer dependent, and is deemed to be an adult).

Assessing individual income requires an in-depth analysis of the various household types. It is important to identify dependent/non dependent children, adults, parents, grandparents, etc. To do so, we followed the same procedure as SILC to define the various household categories, but we also analysed couple relationships and blood relationships. This reconstruction of household types is useful in helping us to refine our categorisation, since we can, for example, distinguish between a couple and a parent with a non-dependent child (which is not the case in SILC). The variables we use are presented in item 2.4, concerning assumptions made for households.

Assumptions concerning income distribution

Disposable household incomes are broken down as follows:

- Family allowances are assigned to the parents present in the household, 50% for each.

- Taxes were broken down in two stages. Firstly, taxes relating to individual incomes were identified by calculating the difference between the gross and net amounts of this income. Secondly, the taxes for which SILC-Belgium 2006 and 2007 do not provide any individual information are divided between the various household members, based on the amount of individual taxes calculated previously. Several scenarios may arise here:

  - If the amounts of the individual taxes payable by adult household members are zero but the household's taxes represent a positive amount, each adult contributes an equal amount to the payment of these taxes.
  - If the amounts of the individual taxes payable by all adult household members are negative, the proportional rule is applied inversely. Each person progressively contributes more as their individual tax bill becomes relatively less negative.

- If one household member's individual tax bill is negative and another member's bill is positive, the latter will pay the household's entire tax bill.
- If the tax bill is negative, the tax credit will be applied in proportion to each person's individual tax bill.

- The remaining types of household income are divided equally among the adults in the household.

TABLE SUMMARISING INDIVIDUALISATION OF INCOME VARIABLES:

Variables		Individualisation
	Variables	**Individualisation**
1	**Income earned by employees**	Individual variable
2	**Income earned by the self-employed**	Individual variable
3	**Earned income (1+2)**	Individual variable
4	**Income from capital**	
	Income from land or building rentals	Variable divided by the number of adults
	Income from financial investments	Variable divided by the number of adults
	Private pension savings	Individual variable
5	**Other income**	
	Inter-household transfers received	Variable divided by the number of adults
	Inter-household transfers paid	Variable divided by the number of adults
6	**Gross income (3+4+5)**	
7	**State transfers**	
	Unemployment allowances	Individual variable
	Allowances payable to the elderly	Individual variable
	Survivor's pension	Individual variable
	Sick pay	Individual variable
	Incapacity benefits	Individual variable
	Education-related allowances	Individual variable
	Family and child-related allowances	Variable divided by the number of adults
	Other social exclusion-related allowances	Individual variable
8	**Taxes**	Some individual, some individualised on the basis of individual taxes
9	**Disposable income or net income (6+7-8)**	Individualised variable

5   European comparison

To make a comparison of incomes at European level, a harmonised definition of income must be chosen for all countries, regardless of specific national characteristics. For this purpose, we use EU-SILC 2006, which contains data for 26 countries. It is true that the data available in SILC-Belgium 2006 is more comprehensive than that available at European level, which is why the definition of 'European individual income' differs slightly from 'individual income for Belgium'. Nevertheless, the assumptions relating to individualisation of variables remain identical for Belgium and Europe (see item 4.2).

Some variables had to be abandoned at European level as they were not available for all the countries studied. The variables and data discussed for the purpose of establishing an individual income at European level are as follows:

- Negative income: as emphasised by Atkinson et al. (2007), poverty risk is evaluated in terms of quality of life, and, as a result, interpreting negative income is no easy task. Nevertheless, the BGIA study is essentially a study of income, rather than a poverty analysis, and hence the decision was made to take negative income into account in our analysis.
- Non-monetary work-related income (company car): information relating to this income is not available in many European countries (Austria, Cyprus, the Czech Republic, Germany, France, etc.). To ensure that we obtain comparable results, this information is not used in the calculation of individualised income.
- Income derived from goods produced for own consumption: this variable is applicable only to a minority of cases in a small number of countries. It is not available in many countries (Cyprus, Denmark, Spain, Italy, etc.) and has therefore not been used in the calculation of individual income.
- Mortgage interest: the variable relating to mortgage interest on the household's main home is not available in many European countries (Austria, Cyprus, Germany, Spain, Greece, Luxembourg, Lithuania and Poland). To ensure that we obtain comparable results, this information is not used in the calculation of individualised income.
- The income of individuals aged under 16: given that the analysis relates to the individual income of persons deemed to be adults, this variable was not used in the calculation of individual income.

The final definition of income is as follows:

Income from economic activity: income earned by employees + income earned by the self-employed

Investment income: income from individual private pensions + income from property/land rentals + income and interest on capital and financial investments

Income from inter-household transfers: regular inter-household transfers received - regular inter-household transfers paid

Gross income: income from economic activity + investment income + income from inter-household transfers

Income from State transfers: unemployment allowances + pension allowances + death-related allowances + sickness-related allowances + disability-related allowances + education-related allowances + family-related allowances + social exclusion-related allowances + housing allowances

Taxes: wealth taxes (if applicable) + income taxes and social security contributions

Net disposable income with State intervention: gross income + income from allowances – taxes

i.e., using the terminology of the SILC variables:

Income from economic activity: PY010g + PY050g

Investment income: PY080g + HY040gi + HY090gi

Income from inter-household transfers: HY080gi – HY130gi

Gross income: Income from economic activity + investment income + income from inter-household transfers

Income from State transfers: PY090g + PY100g + PY110g + PY120g + PY130g + PY140g + HY050gi + HY060gi + HY070gi

Taxes: HY120gi + HY140gi

Net income: Income from economic activity + investment income + income from inter-household transfers + income from State transfers – taxes

The 'i' at the end of the code for certain items of income means that the variable has been individualised on the basis of the assumptions explained earlier.

6   Construction of inequality indicators

This section sets out the stages that we followed in order to construct the inequality indicators proposed as part of our study, starting from individualised net income.

- Once the financial dependence threshold has been determined (this is equal to 60% of median individualised income), the percentage of individuals beneath the threshold in relation to the total population gives the financial dependence rate. This rate is calculated separately for women and for men.
- The ratio of men's to women's dependence rates is another indicator expressing the number of women in a situation of financial dependence for every one man. For example, this ratio is 3.1 for Belgium in 2007.
- The ratio between the relative probable deviations of women and men: each relative probable deviation is calculated as follows:

$$\text{Relative probable deviation of women (men)} = \frac{\text{Financial dependance threshold - Median of women (men) beneath the threshold}}{\text{Financial dependance threshold}}$$

- The ratio between the intensity of women's and men's financial dependence: the intensity of financial dependence is obtained via the following calculation:

Intensity of the financial dependence of women (men)	=	Relative probable deviation of women (men)	x	Financial dependence rate of women (men)

The following two indicators are derived from decomposition of the Gini coefficient. Using the Dagum method (1997), which we have chosen for our study, the Gini index is decomposed as a function of gender into three elements, each of which explains part of the inequality between women and men observed in the total population.

The tool used is a VBA macro developed by Mussard et al. (2002)[57] which we apply to individualised net income. The total population is divided into two groups according to the gender variable [RB090].

- Relative economic affluence: this is the first component given by the decomposition. Its value lies between 0 and 1 and the closer it is to 1, the greater the inequality between the two income distributions.
- The ratio between transvariation and gross intergroup inequalities: in addition to intragroup inequalities rated as G^w, the decomposition technique also identifies the share of total inequalities represented by the Gini index which is attributable to inequalities between women and men (intergroup inequalities rated as G^{gb}). What is different about the Dagum method is that it divides these intergroup inequalities into two parts: firstly, the share of inequalities due to the intersection of the two distributions, referring to the notion of transvariation[58] (rated as G^t), and, secondly, the remaining intergroup inequalities, rated as G^b.
  The ratio between transvariation and gross intergroup inequalities (G^t/G^{gb}) expresses the degree of overlap between the two income distributions. The higher this ratio, the more the two distributions merge. Where the value of this ratio is 0, there is no area of intersection.

57 The file is available on the Montpellier1 University website by following the link: http://www.lameta.univmontp1.fr/online/gini.html
58 Mussard et al. (2003), p. 4.

This part provides a detailed presentation of the stages followed in defining and calculating the five time inequality indicators proposed by the BGIA project.

The first section presents the database used, i.e. the Belgian Time Use Survey for 2005. The second section describes the selection of the sample and the creation of new variables. Finally, the last section describes the time inequality indicators calculated within the framework of BGIA.

1   Presentation of the 2005 Time Use Survey

The purpose of the Time Use Survey is to identify the various daily activities that occupy people's time. Respondents must therefore write down all their activities in a diary, in 10-minute segments, and the time at which they carry them out, both on a weekday (Monday to Friday) and at weekends (Saturday or Sunday). They describe their activities in their own words, and these are then encoded using a list (see above).

This is not an annual survey but one conducted from time to time, with the latest two surveys dating from 2005 and 1999. In 1999, over 8,000 respondents aged 12 or over took part in this survey, compared to 6,400 in 2005, representing almost 3,500 households.

This survey consists of 5 different files:

1) the individual file
2) the activities file
3) the weekday file
4) the weekend file
5) the fictitious week file

Individual file: general personal data

The first part of this survey covers a variety of general personal information on employment, income, household characteristics, etc.

Personal data

This covers variables such as:
- blood ties with the household's main respondent
- gender
- marital status (married, single/never married, widow/er, divorced)
- nationality
- level of educational attainment (no qualifications, lower/upper secondary education, post-secondary/university, specific education)
- employment status (self-employed, employee, unemployed, pensioner, etc.)
- state of health (self-assessed, ranging from very good to very poor; presence of a chronic disease/disability or other, etc.)
- etc.

Employment data

A whole series of employment-related variables are available:
- type of profession (managerial, intellectual and scientific occupations, white-collar workers, service sector workers and sales staff, unskilled manual workers, etc.)
- type of sector (agriculture and fisheries, manufacturing industry, hotel and catering, financial services, healthcare, etc.)
- number of hours worked per week
- number of days of paid holiday
- seeking employment
- etc.

Income data

The following monthly incomes (stated as net amounts) are available:
- pay (including bonuses, benefits in kind, etc.)
- income from self-employment
- income from movable property (interest, dividends, etc.)
- income from renting out property
- income from retirement/widow(er)'s pensions
- income from early retirement pensions
- unemployment benefits
- work/sickness-related incapacity benefits
- family allowances
- other social security benefits

Household data

Some information concerning the household is also available:
- household type (one person aged over 54 / between 30 and 64 / under 30, lone parent with one child aged under 17, couple aged over/under 64 without any children, couple with 1/2/3 or more child(ren) aged under 17, lone parent or couple with one child aged over 16, other)
- number of persons in the household
- number of children in the household and their age
- place of residence (region and municipality)
- level of urbanisation (low, average, high)
- etc.

Other data

A variety of information is also gathered in respect of the person's activities, and their subjective assessment:
- the feeling of being overburdened (on a self-assessment scale ranging from never to every day), the feeling of not having enough time to do what one wants, activities to which the person would like to devote more time
- frequency of certain leisure activities (cinema; ballet, concerts, opera; visits to museums and exhibitions; libraries; sports events; etc.)

- frequency of certain sports activities (jogging, swimming, gym, ball games, etc.)
- frequency of, and time spent on, certain voluntary activities (sports clubs, religious communities, charitable organisations, political parties/trade unions, etc.)
- frequency of commissioning assistance from someone outside the home (e.g. for childcare, preparation of meals, upkeep of the house and garden, etc.)
- frequency of assistance provided to certain persons outside the household (parents/parents-in-law, children, grandchildren, etc.).

Activities file

In this questionnaire, respondents have to note down a series of pieces of additional information concerning their various activities, e.g. where the activity takes place, the person with whom it is undertaken, the mode of transport used for this activity, etc.

Weekday file

This file contains a variety of highly detailed information concerning activities undertaken during the week (Monday to Friday). Time use is listed in the form of over 272 different activities, grouped together into 31 subcategories and the following 10 main categories:
- sleeping/eating
- personal and medical care
- social activity
- housework
- purchasing and use of services
- unspecified use of time
- work (paid and voluntary)/study
- recreational and relaxation leisure activities
- sport, culture and travel

Weekend file

The weekend file is structured in the same way as the weekday file, the only difference being that it shows the activities undertaken on Saturday or Sunday.

Fictitious week file

The information contained in the week files and weekend files is then merged to form a picture of time use covering a fictitious week. Weekday time is multiplied by 5 and weekend time by 2, to obtain a representative week comprising 5 weekdays and 2 weekend days.

2   Selection of the sample and creation of variables

In this section, we describe the variables used and the reconstruction of some of these variables in order to create the sample. The databank is created from the individual file and the fictitious week file, which are merged. Time data is expressed in seconds per week (but then converted into hours per week to make the results easier to read).

2.1   Definition of adults

For the purpose of identifying adults, we applied the same conditions as those used in the SILC methodology and for calculating other BGIA inequality indicators (see Part One):

1) individuals aged 25 and over
2) individuals aged 18 to 24, who meet both of the following conditions:[59]
    a. there is no father or mother in their household[60]
    b. if the above condition is not met, these persons must be actually working or actively seeking employment

Any individuals who do not meet these conditions are deemed to be 'children'. The variables used and their code in the 2005 Time Use Survey are as follows:
- AGE for age
- PAR to identify a blood tie
- Q23 for activity status
- Q19 and Q20 for seeking work and availability for employment

2.2   Assumptions concerning households

The TYPMEN variable enables us to identify 11 different household categories. In order to harmonise these categories as far as possible with the household categories available in the SILC survey and those used for other BGIA inequality indicators (see Part One), we reconstructed the variable as follows:

Household composition	Calculation
1 single adult	TYPMEN=1 + TYPMEN=2 + TYPMEN=3
2 adults (< 65), with no dependent children	TYPMEN=6
2 adults, at least 1 of whom is aged over 65, with no dependent children	TYPMEN=5
1 single adult with at least 1 dependent child	TYPMEN=4
2 adults with 1 dependent child	TYPMEN=7
2 adults with 2 dependent children	TYPMEN=8
2 adults with at least 3 dependent children	TYPMEN=9
Single person or couple with children	TYPMEN=10
Other	TYPMEN=11

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59 In SILC, the lower age limit is 16, but here it is 18, because the data used only cover the population aged 18-99.
60 The following are deemed to be parents: stepmother/stepfather, adoptive parents and foster families.

2.3   Level of educational attainment

Variable Q27 shows the highest-level diploma obtained by the individual, divided into 6 categories. We reconstructed the variable in order to obtain 3 categories: primary or lower secondary education, upper secondary education and post-secondary education.

LEVEL OF EDUCATIONAL ATTAINMENT

Level of educational attainment	Calculation
Primary or lower secondary	Q23=1 + Q23=2
Upper secondary	Q23=3
Post-secondary	Q23=4 + Q23=5

2.4   Activity status

Variables Q14 and Q23, showing the number of hours worked and activity status respectively, were used to reconstruct a new variable indicating whether the individual works full-time, part-time, is unemployed, has taken early retirement, is a pensioner or comes into another category.

ACTIVITY STATUS

Activity status	Calculation
Full-time worker	Q23=1 or Q23=2 and Q14 ≥ 30
Part-time worker	Q23=1 or Q23=2 and Q14 ‹ 30
Unemployed	Q23=6
Early retirement/pensioner	Q23=7 or Q23=8
Other	Q23=3 or Q23=4 or Q23=5 or Q23=9

2.5 Total disposable income

Variable Q37 shows the individual's various types of net monthly income. To enable us to create a variable indicating whether or not the individual is in a situation of monetary poverty, we first create a variable showing (net monthly) total disposable income, as follows:

TOTAL DISPOSABLE INCOME

Total disposable income	Calculation
Total disposable income	Q37=Pay + Q37=Earnings from self-employment + Q37=Income from property + Q37=Income from immovable property + Q37=Pension + Q37=Early retirement + Q37=Unemployment + Q37=Widow + Q37=FamAllow + Q37=SickAllow + Q37=Autoalloc++ + Q37=Revac2 + Other

2.6 Monetary poverty

Based on the variable relating to disposable income, we create a further monetary poverty variable as follows:

MONETARY POVERTY

Monetary poverty	Calculation
Poor	TOTAL DISPOSABLE INCOME < 60% MEDIAN TOTAL DISPOSABLE INCOME
Not poor	TOTAL DISPOSABLE INCOME ≥ 60% MEDIAN TOTAL DISPOSABLE INCOME

2.7   Total working time

Based on variables FICTW1 (paid working time), FICTW2 (domestic working time) and FICTW3 (parenting working time), we construct a variable indicating the individual's total working time.

TOTAL WORKING TIME

Total working time	Calculation
Total working time	FICTW1 + FICTW2 + FICTW3

2.8   Unpaid working time

Based on variables FICTW2 (domestic working time) and FICTW3 (parenting working time), we construct a variable indicating the individual's total unpaid working time.

TOTAL UNPAID WORKING TIME

Total unpaid working time	Calculation
Total unpaid working time	FICTW2 + FICTW3

2.9   Time poverty

We create a new variable indicating whether the individual is time-poor, taking the view that any individual whose total working time (whether for paid or unpaid activity) is more than 1.5 times the average total working time observed among the total population, is time-poor.

TIME POVERTY

Time poverty	Calculation
Poor	TOTAL WORKING TIME > 1.5 AVERAGE TOTAL WORKING TIME
Not poor	TOTAL WORKING TIME ≤ 1.5 AVERAGE TOTAL WORKING TIME

2.10   Remaining time

We create a new variable indicating the individual's remaining time, i.e. the time that can be devoted to physiological needs (meals, relaxation, etc.) and to personal activities (leisure, cultural and social activities, etc.), as follows:

REMAINING TIME

Remaining time	Calculation
Remaining time	$604,800$[61] – TOTAL WORKING TIME

3   Construction of time inequality indicators

As part of the BGIA project, we constructed 5 indicators of inequality between women and men, concerning the time use of individuals.

3.1   Time poverty

The first indicator is based on the TIME POVERTY variable (created previously, based on variables FICTW1, FICTW2 and FICTW3, see above). This shows whether an individual is time-poor, i.e. if his or her total working time (whether for paid or unpaid activity) is more than 1.5 times the average total working time observed among the total population.

This indicator shows the difference in levels of time poverty between women and men, since it is constructed as the ratio between the percentage of women and men experiencing time poverty. The higher (lower) this ratio, the greater the extent to which time poverty applies to women (men).

$$\text{Indicator 1} = \frac{\text{\% of time-poor women}}{\text{\% of time-poor men}}$$

NB: time-poor if total working time › 1.5*average total working time of the population

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[61] As total working time is expressed in seconds per week, we use the time constituting one week (of 7 days), expressed as a number of seconds, to calculate the remaining time, i.e. 7 days x 24 hours x 60 minutes x 60 seconds = 604,800.

3.2 Intensity of time poverty

Although the first indicator provides information on the difference in the proportion of women and men affected by time poverty (and the extent to which women are more or less concerned by this type of poverty), this indicator does not provide any information concerning the scale of time poverty disparities between the genders.

We have therefore developed a second indicator (based on the REMAINING TIME variable constructed previously, see above) to measure the extent of differences in time poverty between the genders. This indicator is calculated as the ratio between the average remaining time of women and men. The lower this indicator and the further it is below 1 (higher and greater than 1), the more women (men) have less time available for relaxation, leisure activities, etc. than do men (women).

$$\text{Indicator 2} = \frac{\text{average REMAINING TIME of women}}{\text{average REMAINING TIME of men}}$$

NB: remaining time = total time-paid work-domestic work-parenting time (hours/week)

3.3 Paid working time

The previous two indicators are based on remaining time, which is itself defined as a function of paid working time. If an individual devotes more time to paid work, all other things being equal, this means that they have less time available as 'remaining' time (given that time is restricted and limited to 24 hours per day) and are therefore more likely to find themselves in a time-poverty situation.
As time poverty is therefore dependent on paid work, we have tried to see whether time poverty disparities can be explained by disparities in paid working time (or conversely whether they are explained by disparities in unpaid working time, see below).

We have therefore constructed a third indicator to show differences between women and men in terms of the amount of time they spend on paid work (based on FICTW1). We wish to see how far the different socioeconomic characteristics influence this time and to examine the link between it and the risks of poverty of time and income.
It is calculated as the ratio between the average paid working time of women and men (in hours per week). The lower (higher) this ratio, the more women (men) work less than men (women) in return for payment.

$$\text{Indicator 3} = \frac{\text{average FICTW1 of women}}{\text{average FICTW1 of men}}$$

3.4   Unpaid working time

The fourth indicator measures gender inequalities in respect of unpaid working time, i.e. time devoted to domestic tasks and to bringing up children. In general, women devote more time to unpaid work than do men, and more so when there are children in the household (Maron and Meulders, 2007). Very often, this is to the detriment of paid activity, but it may also mean less time for leisure activities, relaxation, etc., and may therefore have an impact in terms of both income poverty and time poverty. We therefore seek to establish here whether time poverty disparities observed between women and men are attributable to differences in the amount of time devoted to unpaid work.

We have therefore developed the following indicator (based on the previously created UNPAID WORK-ING TIME variable, see above) as the ratio between the average unpaid working time of women and men (in hours per week). The higher (lower) this ratio, the more women (men) devote more time to domestic work and parenting than do men (women).

$$\text{Indicator 4} = \frac{\text{average UNPAID WORKING TIME of women}}{\text{average UNPAID WORKING TIME of men}}$$

3.5   Cumulative income poverty and time poverty

The last indicator is calculated to show the extent to which the persons experiencing time poverty are also those experiencing income poverty. Here we examine whether the two types of poverty are cumulative or whether, on the other hand, they do not affect the same groups of individuals.

This indicator, like the others already mentioned, is calculated in such a way as to reveal gender inequalities in cumulative poverty, i.e. as the ratio between the percentage of women and men experiencing poverty of both time and income (based on the TIME POVERTY and MONETARY POVERTY variables created previously, see above).

$$\text{Indicator 5} = \frac{\text{\% of women poor in time and income}}{\text{\% of men poor in time and income}}$$

NB:
- time-poor if total working time › 1.5*average total working time of the population
- income-poor if disposable income ‹ 60% median disposable income of the population

4   Annex: list of components of individualised income and their definitions[62]

4.1.   Income from economic activity
This is the sum total of income earned by employees: pay, bonuses and overtime, income in kind and other employment-related benefits.
Income from economic activity also includes income from self-employment.

4.1.1 Income from employment
This consists of pay, income from casual work (e.g. seasonal work, sporadic temporary work), bonuses and allowances, income from additional activity and redundancy money (or severance pay).
>   4.1.1.3 Bonuses
>   These consist of:
>   4.1.1.3.1   Holiday pay
>   4.1.1.3.2   End-of-year bonus
>   4.1.1.3.3   Thirteenth month
>   4.1.1.3.4   Paid overtime
>   4.1.1.3.5   Profit-sharing
>   4.1.1.3.6   Other additional income
>   4.1.1.3.7   Commission
>   4.1.1.3.8   Tips
>   4.1.1.3.9   Sales or production bonus
>   4.1.1.3.10   Fourteenth month
>   4.1.1.3.11   Company shares, employee's place of work
>   4.1.1.3.12   Bonuses received for working abroad, or in particular locations or circumstances (i.e. not expenses allowances but additional work-related allowances)

4.1.2 Non-wage income
This corresponds to variable PY020 'Employees' income in kind', which, in the case of SILC-Belgium 2006, only covers company cars. The amount is calculated on the basis of the following criteria: model, make, horsepower for tax purposes and year of registration. Other types of income in kind will be available from 2007 onwards (e.g. private phone bills paid by the employer, etc.).

4.1.3 Income from self-employment
This represents income earned in connection with self-employed activity. A single variable in SILC-Belgium 2006 shows this income: PY050 'Profits or losses resulting from self-employment'.

4.2.   Investment income
This is the sum total of investment income, and comprises income from property or land rentals, income from financial investments, plus interest and dividends of all kinds. Life assurance benefits and income from private pension savings schemes, based on voluntary contributions repaid in the form of annuities, are deemed to be interest on investment and are therefore classified under this heading.

4.3.   Inter-household transfers
In the light of comments made by the DGSIE, we decided not to consider either income received by persons aged under 16 or charity aid. Consequently, this item only includes maintenance-related transfers (received and paid) and regular financial support (received and paid) to and from other households.

4.4. State transfers
These are transfers received from the authorities, and include all types of allowances:

4.4.1 Pension

4.4.2 Unemployment benefit
4.4.2.1   Unemployment benefit as such
4.4.2.2   Early retirement pension
4.4.2.3   Career break allowance (time credit)
4.4.2.4   Minimum guaranteed income benefit (part-time working while seeking a full-time job)
4.4.2.5   Welfare fund allowance (e.g. temporary lay-offs in the building sector)
4.4.2.6   Supplement received for taking a vocational training course / completion bonus
4.4.2.7   Interim allowance for school-leavers
4.4.2.8   Other unemployment benefits

4.4.3 Incapacity benefit
4.4.3.1   Invalidity lasting more than a year: invalidity resulting from illness or accident, dating back more than a year, and unrelated to work
4.4.3.2   Permanent incapacity for work: accident at or travelling to/from work, resulting in permanent incapacity for work
4.4.3.3   Permanent occupational illness: occupational illness resulting in permanent incapacity for work
4.4.3.4   Death of a family member in service or travelling to/from work
4.4.3.5   Permanent and essential assistance provided by another person; additional allowance covering assistance from a third party
4.4.3.6   Other sickness or accident-related benefits.

4.4.4 Sick pay
4.4.4.1   Incapacity for work resulting from illness or accident, dating back less than a year, and unrelated to work
4.4.4.2   Allowance paid to disabled persons (income replacement allowance, additional allowance, integration allowance)
4.4.4.3   Accident at or travelling to/from work, resulting in temporary incapacity for work
4.4.4.4   Occupational illness resulting in temporary incapacity for work
4.4.4.5   Flanders region health insurance scheme

4.4.5 Student grants

4.4.6 Maternity allowance

4.4.7 Survivor's pension

4.4.8 Career break allowance linked to parental leave

4.4.9 Social integration income (e.g. Minimex)

Taxes:

These correspond to income taxes and social security contributions, any additional tax paid or received, advance payments by the self-employed (income tax) and social security contributions paid by the self-employed.

Gross income:

This corresponds to income from economic activity + investment income + inter-household transfers

Net income:

This equals: gross income + State transfers – taxes

NOTES

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