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Chapter 1: The socio-economic conditions of women in contemporary societies and their economic well-being: theories, concepts and hypotheses

1.1. Introduction

Some decades ago the gender movement faced a challenging goal: protesting for more gender equality, the feminists pushed for woman's education and paid work. Women were looking for knowledge, the right for economic independence and career, the equal opportunities and the appreciation of their potentials. And since the 'female revolution' began in the early 1960's, a changing role of women has become one of the greatest achievements of the economically developed modern society: modern women get better education that leads to better career opportunities (Blossfeld and Drobnic 2001), they accrue their own salaries and maintain their financial independence, their decisions increasingly depend on their preferences so they can opt to either fully commit to their jobs, fully commit to their families or take one of the solutions in between (Gerson 1985, 2009; Hakim 2000). Finally, marriage has also become a woman's personal choice rather than a pure economic necessity (Esping Andersen 2002a:2).

However, there is something quite special about 'female revolution'; even though all women have benefited largely from it, the biggest beneficiary have been the married women. Not long time ago, married women's main aspirations were associated with a 'cosy family nest'- raising children and providing emotional support for the whole family while today their employment is not only possible but it is regarded by many a precondition for fertility and motherhood, and crucial to financially sustain aging societies (Esping- Andersen 2009:83). In other words, earnings and the labour market participation of married women have exceeded the original feminist connotation and have become more present on the agenda of politicians and social scientists.

Last but not least, changes in woman's life opportunities have also brought the need for a different form of partnership between men and women

where specialization is being replaced by similar partner roles. This means that marriage is changing but also there has been a leap in other forms of unions which are increasingly socially acceptable. Here we also refer to cohabitation as a new living arrangement that favours equality of gender roles.

Of course, these changes are not universally considered positive or successful and there are sceptics who underline the problems and challenges in woman's new role rather than achievements. Some of them argue that woman's labour market participation has not been as successful as expected because female working patterns are still quite atypical, and vary in type and scope from men's (Blossfeld and Drobnic 2001:6). Others add that economic dependency of women is very persistent as wives are still secondary earners (Sorensen and McLanahan 1987; Bernhardt 1993; Blossfeld and Drobnic 2001). Also, there are some who support the view that female labour participation will lead to lower fertility and will negatively impact family life instead of reforming it (Becker 1981; Sorensen 1995).

But, independently of the perspective, the three important factors which among others reflect the overall change in the role and behaviour of women outside of the family (women's earning capacity via human capital accumulation, woman's employment and new way of partnering) are likely to influence in one way or another, the women's behaviour within family, in terms of bargaining power, decision making and their welfare. In other words, societal change resulting from 'female revolution' has perhaps had its implications on micro intra-household relations. Indeed, the economic and sociological literature confirms the positive link between macro developments in women's employment with their life opportunities and well-being at the micro-level. For instance, economists largely find that the better the married woman's earnings capacity, the better her bargaining stance and individual welfare (Pollak and Lundberg 1996). Sociologists are interested in the positive impact of particular employment patterns, future career prospects and commitment to personal occupation for married woman's welfare (Hochschild and Machung 1989; Gerson 1993). But from another angle, the expansion of opportunities for women comes also with some costs especially if we consider the housework burden and the total number of hours that married women dedicate to paid and unpaid work. Important studies

(Brines 1993, 1994; Greenstein 2000; Bittman et al. 2003) have shown that economic exchange determines the negotiations of housework but domestic responsibilities remain unfairly attributed more to women. In this respect, woman's well-being might be negatively influenced by the 'female revolution', also because society has failed to completely adapt to woman's new role. The new study of Stevenson and Wolfers (2009) provides empirical evidence in this direction, claiming that woman's well-being (measured in happiness¹) today has declined in comparison to the past, as authors explain, also due to the overburden and high personal expectations and pressures that modern women face.

However, while we focus on the ambivalent direction of the relationship between wider macro change and well-being of married women, the impact of income, work and cohabitation on woman's well-being will also depend on what happens to 'female revolution' in the distinctive national contexts that mediate their impact on an individual. The literature suggests that the transition from breadwinner to the dual earner model resulting from woman's changed role is closely associated with the dominant model of welfare (Blossfeld and Drobnic 2001; Blossfeld and Hofmeister 2008). For instance, the prevalence of female employment varies through welfare regimes: in the Socio-democratic and liberal block of countries, women participate in the labour market in large numbers either as full-time employed or part-time workers, while in Mediterranean and Conservative model, their exit to work appears more limited. Welfare regimes are partly responsible also for dealing with the issues such as gender wage gap, occupational segregation, state support to mothers, opening to the new forms of civil unions and so on, which are important for understanding the individual well-being of married women.

The goal of this work is to analyse the economic dimension of well-being of a married woman and intra-household decision making in relation to rising earnings, variety of employment opportunities and formation of new partnerships, all as distinct outcomes of gender revolution. We ask whether contemporary changes in woman's role strengthen the economic well-being of a married woman and analyse if and how various welfare regimes influence the observed relations.

¹ Happiness is another term for subjective well-being.

The thesis is organized as follows: in the first chapter we introduce the topic, define its theoretical framework, choose the adequate concept of well-being and review the relevant empirical literature. Finally, we propose our hypotheses and research questions. In the second chapter, methodological framework is outlined. We explain our motivation for the choice of the data and techniques. In the third chapter, we empirically analyse the impact of woman's income on her economic well-being. Fourth chapter explains the association between woman's employment and career prospects with her economic well-being whereas in the fifth chapter we deal with the implications of the type of union for women. Finally, in the last chapter, we present our concluding remarks.

1.2. Earnings, employment and cohabitation over time: the consequences for woman's well being

Earning dependency of women has been a norm in the relationship between husband and wife for centuries. Zelizer (1997), who describes economic dependency of women in an industrial society at the turn of the 20th century and its implication for woman's life and well-being, gives a historical overview. In many examples, she provides evidence of the financial hardship that women faced for the lack of control over household income and for the men's legal ownership over the household resources. Her research emphasized the variety of means, which were available to women to get hold of household money: doles and household allowances were the dominant practice, then the joint accounts were regarded the best model for equal sharing. But, the study concludes that the outcomes of woman's economic dependency changed little even when woman's supplementary income started entering household finances, because wife's income was never high enough to balance out the husband's contributions. And even if it was high enough, it came to be seen as of a different 'value' for the family due to the dominant breadwinner notion.

So, the woman's dependency was acknowledged in the literature but till recently, it was not seriously studied. The mainstream view in science and politics was that dependency was not problematic for equal economic position of spouses: the assumption that premised for years social stratification research was that the head of the family translates equally his employment relations and corresponding

material benefit to all family members including his wife (Goldthorpe 1983; Sorensen and McLanahan 1987). This view followed the dominant economic model of family, introduced first by Talcott Parsons and then sustained by Gary Becker, where family appeared as a single unit without intra-household inequality.

But, what were the reasons for disregarding the importance of woman's earnings for their economic well-being? The economic and philosophical theory suggests that an individual income is an important precondition for a life control and a full participation in society because an individual needs a minimum command over resources to be able to claim certain civic and political rights. If women's income was considered minor for their well-being and if the women's needs were set equal to the family needs, a serious gender-structured inequality might have been the reason.

In addition, what is the situation today? Economic dependency of woman is steadily decreasing but it persists. For instance, Hakim (1996) reflects on woman's current earning dependency despite them being engaged in formal employment. She argues that gender occupational segregation and wage gap, accompanied with the spread of part time employment keeps woman's earnings lower than men's, and maintains certain level of woman's economic dependency in marriage. This view is shared by Sorensen and McLanahan (1987) who found the persistence in married women's economic dependency from 1940-1980, despite woman's employment, acknowledging though that some change occurred with more hours that women spend in paid employment. However, the view of woman's economic dependency has changed significantly. There are varieties of approaches who instead of focusing purely on households, adopt an individual perspective. The unitary models of households of Becker and Parsons are challenged by resource bargaining perspectives. Also, the stratification theory has allowed for alternative approaches. For instance, the class position of the household is alternatively obtained using the dominance principle, that is, the class position of the household member who is more attached to the labour market (Erikson 1984; Erikson and Goldthorpe 1992). Moreover, household class measures based on social classes of both partners have become more common (Leiulfstrud and Woodward 1987). Finally, woman's economic dependency comes

to be seen as 'essential force in maintenance of gender inequality' (Sorensen and McLanahan 1987) or a direct form of female subordination (Smith 1984).

Many factors have influenced this new interest in social science and women's exit to the labour markets is definitely one of the most important ones: Work for women meant more power equilibrium in family and women's freedom outside of the family. Yet, analysing families through centuries, we realize that work for women is not a modern invention because women participated in agriculture and in household production even before the industrial revolution. What was different then was not so much the woman's involvement in production, but rather the way it was perceived and appreciated. In other words, the main difference lied in the valorisation of woman's individual contributions to production, which was missing. In the time after the industrial revolution up to now, women passed through different stages: from working mostly in the low paid jobs, to staying at home as a primary caregiver for the husband and the children during the dominance of breadwinner model, to the final return to work as a highly educated labour force. Thus, the woman's exit into the labour market in the late 1970's was innovative for two main reasons: first, because it enabled individualization of women's work in the form of income, second, because highly educated women led it.

Nevertheless, thirty years later we still study woman's employment. Why? First, the reality of work has changed since 1970's; Women are offered a variety of employment options: for instance, full time jobs are a standard but part-time or occasional jobs are also widely available. Besides, the choice of occupation and employment sequence further add to the understanding of woman's employment. Thus, we can no longer study the impact of woman at work in general, but we need to encompass the variety of work choices that are offered to them. Second, the tendency of course is that married women's labour market participation is increasing everywhere but certain issues are still at work- mostly occupational segregation and gender wage gap. In other words, although women compete better with men, some earnings and other differentials within labour markets remain (Blau 1999; Huber 1988) and the impressive educational attainment has not been adequately translated into career prospects and earnings. Lastly, woman's employment has not been equally distributed across countries. There are more or

less progressive societies in terms of woman's integration into labour markets, and even in the countries where woman's involvement is in its prime, problems like unequal pay are common. It is important to understand the role of institutions for different paces of woman's employment.

Woman's greater economic autonomy relates, without doubts, to the transformation of institutions such as marriage or family: falling marriage rates, more children out of the wedlock and new forms of unions coincide with rising woman's independence. However, various theories have their own interpretation of that relation; the independence hypothesis of Gary Becker (1981) suggests that rising female labour participation and higher earnings lead to marriage dissolutions and lower fertility rates, due to high opportunity costs that women bear when entering a marriage based on traditional specialization. In this view, woman's education has its role in transforming marriage from traditional to modern, with respect to the division of domestic work and equality, and contributes to the rise of unmarried cohabitation as an alternative to marriage with a more egalitarian connotation (Sorensen, 1995). Thus, as Bernardi (2003) suggests, following Becker, the reason for popularity of cohabitation among the young women is the lack of the pre-established rules about the gender roles or, as put in Kiernan and Lelievre (1995:148) 'women may be anxious that the legal contract might alter their balance of power in their partnership arrangement and make the relationship less equitable'. The second view represented by Oppenheimer (1988, 1995) argues that the economic logic of marriage for both men and women has changed but this does not undermine its popularity: one might postpone marriage but one still marries eventually because marriage is a source of emotional support and real companionship. In this context, unmarried cohabitation occurs because of increased uncertainty in the labour markets², which affects the decision of young women in the process of family formation.

In sum, both perspectives claim that marriage is being reformed and that the reformed marriage is at risk. However, they underline different reasons for the changes: Becker and the followers blame woman's paid employment (Becker

² In order to marry, women are waiting to have stable employment, better financial conditions etc. Modern times increase uncertainty of employment affecting, thus, the woman's decision to form a family.

1981), whereas Oppenheimer (1995) highlight global uncertainty. Both sources of change, though, affect the interdependence of labour and emotional relations in marriage and give rise to new forms of unions such as cohabitation.

Cohabitation, however, is an old phenomenon whose presence can be traced to several centuries back. Here we talk mostly about a leap in modern cohabitation, which increasingly takes the form of an alternative union to marriage favoured by the youth. In the past, this form of union rose among the poor in Britain, France and Germany and Scandinavia (Kiernan 2004), and later was a common choice after separation when legal divorce was impossible.

Today cohabitation is studied and compared to marriage for the potential differences between the two. The definition of cohabitation is still quite vague: cohabitation is seen as a short-lived union, as an occasional relationship, an introduction to marriage, an equal alternative to marriage, with a range of possible consequences for joint investments in a relationship and provision of long-term security. For this reason, cohabitation is also of importance for the economic well-being of women. Importantly, as the effect of cohabitation on economic well-being of women depends on its meaning, and the meanings vary over countries, it is also valuable to look at country differences in woman's economic well-being because of cohabitation.

1.3. The economic well-being of women in theory: five theoretical approaches

Several approaches in the rational choice economic theory and sociological literature study the effects of income, work and unions on economic well-being of women.

1.3.1. Unitary approaches

The first models of family behaviour that reflected on economic well-being of women were unitary models and in the literature, we find their different variations, depending on whether they were written by sociologists or economists. The two most important examples are Parsonian model of family (Parsons 1956) and the model of Gary Becker (1981), the father of so-called "new home

economics". Both models see an individual behaviour inseparable from the experience of the partner: the family operates on the basis of common goals to which all the members contribute with different means.

The core of the Parsons' theory was the sex role aggregation or better, the role specialization between spouses. He suggested that women should play an "expressive" role in the family, offering an emotional support to both the husband and children, while men are given an "instrumental" role, providing the means for living. The woman's employment was welcome only to the extent that it did not change the standard allocation of formal obligations within it. However, the reasoning here was that the economic well-being of woman was not in danger since one of the main norms that regulated the interaction between the family members of the Parsonian ideal model of family was equal access to family finances by both husbands and wives (Cheal 2000). Thus, for Parsons, family was "one" rather than "two" and decisions were made to benefit all equally.

The concept of collective well-being as explained by sociologist Talcott Parsons was, to some extent, further developed in economics: Gary Becker contributed to the economic theory with an introduction of the joint welfare function, which is maximized by the rational family members. In other words, individuals make rational decisions on their role specialization based on relative productivities with a goal of increasing the household utility. Becker also assumes that the time dedicated to housework is exchangeable to the time dedicated to market work as long as it benefits the interest of all. The fundamental aspect of the theory is that household preferences are equal to the preferences of the head of the family, who is assumed to be altruistic in his distribution of family resources, guaranteeing equal well-being for all family members. Thus, problems like inequality or conflict within the family are largely ignored in Becker's view, also because Becker believed that specialization should minimize potential conflicts within family by creating dependencies between wives and husbands and by stimulating efficiency. Furthermore, another issue of great importance here is the neglect of the concept of methodological individualism in the real sense of the word since the individual preferences of family members are substituted and modeled with a family preference.

In sociological stratification literature following Becker and Parsons, family was also the central unit of analysis, and individual class position was associated with the class position of their families (Goldhorpe 1983). It was assumed that the benefits of the employment relations of the family head influenced the living standard of all family members. But, the fact that the unit of analysis was not an individual but family had a major implication for the status of women, given that the heads of the family were mostly men. For instance, women were either attributed the class of their father when living with their parents, or the class of their husbands, once married, on the basis of the assumption of equality of sharing within household. Thereby, a major limitation of this approach, as well as the models of Parsons and Becker, is a black box view of reality: a total lack of interest for intra-household relations and decision-making.

1.3.2. *Resource bargaining perspective*

The unitary family models offer a scenario for family behaviour that emerged when women participated little in the labour market and male breadwinner was the most common type of family model. As each theory largely reflects reality or at a least perception of such reality, it is not surprising that female emancipation and higher participation in the labour market coincided with an increased interest in theme of economic dependency, which led to the development of a recourse bargaining perspective.

Until the resource bargaining perspective emerged in both economics and sociology (Manser and Brown 1980; McElroy and Horney 1981; Blood and Wolfe 1960), a family was mostly viewed as an institution with equilibrium between rights and duties on one side, and an exchange of power on the other (Therborn 2006:2). The resource bargaining theory however made it apparent that family can also be without equilibrium, because there are those with less power and more duties than rights, along with those, whose power matches their rights (ibid.). This theoretical approach assumed that options outside of the marriage lead the well-being of spouses within the marriage or more specifically, that income sources, or education and employment determine behaviour and outcomes of partners (husband and wife). In other words, women are allowed to actively

negotiate in the family, rather than be passive observers of the decisions of the head of the household.

When explaining the intra-household relations, economists rely on several game theoretic models, namely cooperative, non-cooperative and collective models. The cooperation is central in the cooperative models where partners reach an enforceable agreement as a result of a cooperative game. In these models, the bargaining stance of each partner is determined by the external conditions that influence the individual's utility in the threat point, which is one's best alternative to a cooperative marriage. Manser and Brown (1980) and McElroy and Horney (1981) introduce the cooperative model with divorce as a threat point, whereas Lundberg and Pollack (1993) suggest an alternative specification where the divorce threat is replaced by the non-cooperation threat. A second group of game theoretic models (Kanbur and Haddad 1994; Browning and Lechene 2001; Lundberg and Pollack 2003) rely on the principle of non-cooperation and self-binding agreements between partners. Each spouse maximizes their personal utility given the behaviour of the other partner, deciding on the amount of public good that is willing to provide and share. Pareto efficiency of outcomes here is not a requirement. The last group of models (Chiappori 1988, 1992) encompasses all the previous ones regarding them a special application of the collective approach. The basic assumption of this model is an efficient allocation of resources between spouses, which is reflected in the negotiation of the sharing rule.

The economic bargaining models address the criticisms of unitary framework in several ways: first, they acknowledge men's and woman's separate view of reality by modelling their individual utility functions; second, the models follow better the logic of methodological individualism which was misspecified in unitary models; third, the models explain economic well-being of individuals and inequality within family by individual external opportunities. Several bargaining theories are also in line with the feminist literature, which suggests that economic well-being of women cannot be identified with the economic well-being of the family because what fulfills family needs is not necessarily sufficient for women (Brenner and Ramas 1984; Smith 1984).

In sociology, the stratification literature has developed an alternative to the conventional approach (Goldthorpe 1983). The new approach relied on the dominance hypothesis which meant that the person with the strongest attachment to the labour market determined the social class of the family (Erikson 1984). However, there has been a stream of literature that regarded also this strategy insufficient, asking for a measure which uses the data on both partners in the family (Leiulfsrud and Woodward 1987). It was argued that increasing labour market participation of women made this topic important so that the class position of the family should be obtained as a combination of the individual social classes (ibid).

Sociological theory further encompasses varieties of approaches for economic well-being of married women and intra-household sharing. The Bargaining view in sociology as a direct sociological equivalent to the economic theory, takes the form of resource theory of power and was first found in writings of Blood and Wolfe (1960) who underlined that the exchange of power in marriage draws on the individual financial contributions of spouses. The authors show in their study that woman's economic resources, their employment and the length of employment gave women more power in decision-making process. Blumstein and Schwartz (1984) reached similar conclusions when looking into the role of wife's income contributions for the balance of power between spouses. Finally, Sorensen and McLanahan (1987), developing so called 'economic dependency' sub-approach also suggest that the power structure of the family is a function of married woman's economic dependency with its wider implications for societal gender relations. To sum up, the resource theory focuses on negotiations that take place within the family, and where the household members exchange their education, earnings or unearned income from social security benefits and state transfers, for the power in intra-household relations.

The resource theory of power in sociology found its major application in the research on housework as a measure of welfare, where one of the dominant views, so called exchange theory (Brines 1994; Greenstein 2000) is that economic exchange determines the negotiations of housework between partners. The essence of this approach is that the difference in the amount of housework between partners originates in the economic dependency of one partner on

another, and the partner who earns less is overall more prone to help in doing housework. As the resource theory suggests, the factors that may explain the negotiation of housework range from education, unearned income or social security benefits apart from rewards from employment. The exchange theory is thus a very straightforward approach because it attributes the changes of negotiating power regarding housework almost instantly to the rise or fall of earnings. This is however, the major source of its critique as well, which exceeds the framework of housework and applies to other subgroups of resource theory. The question is: is the economic exchange indeed neutral?

On the example of housework, many empirical studies (Hochschild and Machung 1989; Brines 1994; Bittman et al. 2003; Breen and Cooke 2005) show that economic exchange is not neutral in its character because the gender of partner adds independently to the outcomes of negotiations. This is perhaps the reason why the economic exchange is often referred to as ‘quasi economic’ exchange. In essence, women are more financially dependent on men and therefore, it is more difficult to understand men’s patterns in doing housework if they were economically dependent on women. If the economic exchange indeed happens, unemployed men or those that majorly rely on the finances of their wives should do most of the housework. Still, there are examples in the literature that this scenario is not fully realistic. On the contrary, it has been often found that women breadwinners do relatively more housework to make up for men’s loss of masculinity- this is a concept acknowledged as “doing gender” (Hochschild and Machung 1989; Brines 1994) which explains the role of traditional gender stereotypes in everyday life between sexes. Esping Andersen (2010:4) points that ‘since domestic work symbolizes traditional feminine responsibilities, it also becomes an important arena for displaying and reaffirming ‘proper’ gender identities, perhaps especially when they are threatened’. Clearly, when it comes to the sociological explanation of the division of housework money does not always “talk” (Bittman et al. 2003) and reality seems to be additionally explained through the lens of factors other than pure money.

But this is not the logic which applies only to the exchange of housework as a measure of welfare. As we enlarge our perspective, we see that gender roles do change the meaning of economic exchange also in other aspects of woman’s

life. The classic study of Zelizer (1989, 1997) demonstrated that female earners were always treated differently in the household from their husbands, their money used to have a different meaning attached to it and a different value created by the societal norms. Basically, the meaning of money originated in the idea of male breadwinning, and as long as the society pictured the ideal family as a single earner family, woman's money was placed in the corner: its perceived value was relatively low. This consequently influenced the economic well-being of women.

Apart from cultural and ideological factors, the power based on exchange of economic resources depends also on the characteristics of the system in which women and men exercise their right to work (Vogler 1998). For example, gender discrimination is present in many areas of work, and women are not equally paid as men for the same jobs they do. The effects of unequal pay are further translated into the household where regardless of the employment outside of the family, women may bring less money into the household. Moreover, even if women work, they might be segregated to certain professions that are more 'convenient' for women but less paid, which again adds to the problem of economic dependency. Lastly, the pure economic information on the amount of money do not often suffice in explaining the bargaining power because we need to rely on many other socio-economic characteristics to analyse the intra-household relations between a man and a woman. In the literature, many authors (Gerson 1985, 1993; Hochschild, 1989; Hakim 1991, 1996, 2000) mention the role of woman's career prospects and work trajectories for the process of negotiation in the family and woman's well-being. Furthermore, how particular forms of labour market participation decrease the woman's dependence on men was also acknowledged (Hakim 1991, 1996; Hakim and Blossfeld 1997). Accordingly, there might be a difference between part-time work, low-paid non-career jobs even if fulltime and career jobs in their impact on economic well-being of women. And some sociologists (Safilios-Rothschild 1976; Hakim 2010) even focus on factors such as love, affection and sexuality for the decision making and well-being of women as wives may compensate for the lack of earnings with more emotions and care. In sum, for economic well-being of women and intra-household negotiation, sociologists regard relevant a complex set of their

intellectual, physical and affective characteristics rather than pure material achievement.

1.3.3. *Gerson and Hakim: The emergence of the theory of preference*

Two complete sociological explanations arose from the existing literature on economic well-being of women. These views diverged from pure resource based approach. One is developed in United States from the 1980's in the work of Gerson (1985, 1993, 2009) whereas the other one grew in Europe from early 1990's expressed in the work of Hakim (1991,1996, 2000). Both theoretical approaches are based on the principle of woman's preference to choose one particular life path. In Gerson's 'Hard choices' (1985) we find for the first time the idea of 'subtle' revolution in woman's roles. Following the new reality of American society from 1970's and on, Gerson defines domestic and nondomestic women as two possible female pathways. Domestic women are those whose focus is on family, homemaking and children, and they have a possibility to work, mostly in female professions while nondomestic women are oriented towards career and full employment, with or without children. She elaborates on motivations and factors influencing female decision to choose between career, homemaking and motherhood, outlining reasons that are related to past as family environment or present, in the form of opportunities. The two groups are further divided into working mothers, childless women, career committed women-the classification that was later taken over and further developed by Hakim (2000). The initial idea of woman's preferences is touched upon in the next study of Gerson (1993) but only to the extent that she analyses what helps women best to share more and have power in the household negotiations with husbands. These factors will also have direct implications for woman's well-being. She finds that equal sharing and egalitarian relationships are more common when men are in a relationship with a career-oriented woman. In principle, the study demonstrates the importance of woman's career for all types of sharing in family. In 'Unfinished revolution' (2009), Gerson continues her research on modern couples implying that women have faced many changes, but the categories of women have not changed much: She similarly distinguishes between three groups of women, self-reliant, egalitarian and neo-traditional women that correspond to her first

classification (Gerson 1985) . Modern women choose between various options but self-reliance is still seen as the best way to protect from dependency on husband and maximize woman's well-being.

The European equivalent of the Gerson's approach is characterized by the idea of woman's preference for work career or domesticity and is found in Hakim's 'Work-life style choices in the 21st century' (2000). The common feature with Gerson's work is the presence of choice and preference to describe the various options that are offered to women. Both theories have a similar standpoint to feminist theories in the sense that are concerned with individuals rather than the family, with women themselves who choose their own best interest. However, Hakim's view is somehow more radical. She believes that modern times have already brought a change in woman's position because women can work if they want to and can build a career if they are in favour of such path. The theory is, however, partly controversial due to Hakim's idea of already highly achieved equality, whose further developments depend only on women themselves. She regards men and women different when it comes to life goals but she no longer sees the main frontier between men and women but between the three groups of women that she identified as: home- centered, adaptive and career- oriented women. It is, however, important to point the geographical placement of her theory, which is the Anglo-Saxon area of influence, and more notably two countries, which are argued to have achieved the highest level of liberalization and individualization: The United States and The United Kingdom. Yet, it is possible that this classification is not equally potent in other environments.

While speaking about life choices and variety of life styles, Hakim also regards the different options equal to each other since she believes, there are no superior or inferior life styles: 'The fact remains that women can do as well from marriage careers as do men from employment careers. More importantly, women today have a choice between using the marriage market or the labour market to achieve social status, self-expression and material well-being' (Hakim 2000:161). In her writings, she suggests that many women work only because they have to, in order to provide the resources for their families. This statement also implies that some women have no particular desire to achieve full financial freedom and correspondingly, they work in less prestige jobs and professions. However, in

explanation of the theory, Hakim emphasizes another factor that adds to intra-family equality instead of personal finances and that is education. Her thesis is that educational equality in marriage along with cultural capital, are equally likely to protect a woman from unequal sharing within household, having the impact similar to personal earnings or career. This is perhaps because the theory of Hakim is a product of an era in which educational equality between genders was one of the most important achievements and as such valued highly. However, as a difference from Gerson's work, Hakim's theory is not tested by the author, and she does not provide evidence on whether only education and cultural accumulation suffice to eliminate other forms of intra-family inequality as well as which preference is best for economic well-being of women.

In her other work (Hakim 1991, 1996; Hakim and Blossfeld 1997) she examines the weights of different forms of employment such as part time, low-paid full time, career oriented full time, etc. for women's economic dependency on men. However, her overview of potential work choices for women and their impact is often confusing, also due to an unclear typology of work-oriented women. Hakim (1996) recognizes that woman's labour participation is not homogenous, and as such might have a range of economic and social consequences. She then broadens the definition of work by dividing it on part time and full time with possible different applications on work attachment; she examines both woman's continuity of employment and flows into and out of the labour force and accounts for woman's occupational choices with the idea that certain professions imply higher work commitment. However, it is difficult to understand whether she believes that various woman's choices matter only at the macro level or also play a significant role for the real economic well-being of women and intra-household relations, that is to say, at the micro level.

To conclude, comparing the two theories, we see different stances when it comes to the explanation of female well-being despite the same basic preference approach. While Gerson seems to imply that career orientation of women is beneficial for their economic well-being more than the other options, Hakim relies more on equality of the choices, without attaching any particular label concerning intra-household sharing and woman's economic well-being. However, the theoretical stance of Hakim is also problematic as she adds a range of life and

work possibilities for women, linking their impact only to the societal level and leaving a gap in the theoretical explanations of micro processes caused or influenced by woman's choices.

1.3.4. *Vogler and Pahl: The theories of money management*

Another important theoretical stance, which diverges from resource theory, is money management approach. The theories of money management enrich the resource theory of power with one important dimension, that is, the way in which money is managed and organized once it enters the household. Here we talk about executive control over money management, which was first studied by sociologists Pahl and Vogler (Pahl 1983; Vogler and Pahl 1994; Vogler 1998). The resource theory of power assumes that economic characteristics of partners influence their common decision-making. As a result, the theory predicts that the more women earn, the more control over decision-making they will be able to exercise. But, one confusing point in the resource theory is in its definition of power. Does power mean the ability to influence important decisions? Or any decisions? Is there any similarity with the economics where power relates more to control of household resources? To avoid confusion in their theory, Vogler and Pahl define two types of power: power over executive decisions and power over strategic decisions. The latter is used as a proxy of power relations within household, but according to this theory, the power in strategic decision-making will also depend largely on the power over executive decisions apart from economic characteristics of partners. That is, systems of money management are related to differences in power and living standards between partners in addition to all other socio-demographic characteristics of partners. In addition, gender inequalities could derive even more from woman's access to money than woman's relative income.

In their major study (Vogler and Pahl 1994), Vogler and Pahl identify the differences in allocative systems³ among couples. The authors analyse heterogeneous systems of money management: female whole wage system, male whole wage system, housekeeping allowance system and three types of joint

³ Terms allocative systems and financial management systems are interchangeably used.

pooling system- a female managed pool, a male managed pool and a joint managed pool. They further explain the characteristics of each: first, the female whole wage system is characterized by a full female executive control of all income except from husband's personal spending money; second, in the male whole wage system, the executive control is in the hands of the husband; third, the housekeeping allowance system allows for the wife's housekeeping allowance even though the rest of the money is managed by the husband; finally, in the joint system, couples pool and manage their money jointly. After the initial analyses, the authors conclude that the classification goes down to the four types of money management, as female and male managed pool turned to be very similar to a female or a male whole wage system. The authors conclude that the inequality is least present when resources are jointly managed whereas it reaches its maximum in housekeeping allowance system.

However, what are the factors that influence the executive control of money? It has been argued that ideological and cultural values of men rather than women's play an important role in the choice of management system and balance out (increase or decrease) husband's initial economic power. An example of such ideology is the notion of breadwinning. Indeed, the theory on money management relies on Lukes' three-dimensional model of power as a more general theory of power in the household that takes into account the ideological factors in decision making, so called Lukes' third dimension of power. Certainly, the advantage of this theory is that it provides us with an explanation why the resource theory does not depict the reality in some households where women have little power in decision making despite their own earnings.

The first classification of allocative regimes did not, however, incorporate separate spheres management as more 'individualized' forms of money management. But, newly emerging forms of relationships favour also new ways of controlling money, and introduce separate management in the standard financial organization. Lately, the dominant division of management systems is instead between the systems in which the couple is a single economic unit (female whole wage system, male whole wage system, housekeeping allowance system and joint pooling system) and systems in which individuals are separate units (independent management systems and partial pool). On the latter, in the

independent management system, individuals have separate responsibility over personal finances whereas in the partial pool, some money is collectively owned and some is private. Several points about the new systems are worth mentioning: It has been argued that new relationships are associated with more gender equality (Giddens 1992) and consequently, the management systems that characterize the new unions are expected to bring more balance of power in the relationship. Indeed, the new individualized model of money management arose from the dual earner relationships, which are quickly replacing the once dominant breadwinner model. Still, empirical confirmation that the new systems are associated with more equality of power did not arrive. On the contrary, several studies (Vogler, Brockmann and Wiggins 2006, 2008; Vogler, Lyolette and Wiggins 2008) found that the separate management is similar to many traditional systems because the higher earner still exercises more control and its principle of partners' equal financial contributions is more harmful for women who traditionally earn less. By and large, according to the management theory, pooled regimes maintain their position as the most egalitarian management practice.

Importantly, systems of money management are a sociological theoretical approach, which share, however, two arguments with bargaining approach in economics. First similarity we find in the use of term 'pooling' which appears in sociology to mean joint executive control over money, and in economics to show that consumption is independent of who actually brings income (Bonke and Browning 2009a). Obviously, it is possible that joint control over money equals joint control of consumption but as Bonke and Browning argue, the definition can also diverge, since couples can jointly manage money while still the higher earner controls the consumption, or alternatively, the couples may apply separate management regime but still exercise equal control of consumption. More empirical research attempts to show the relation between the two use of 'pooling' in order to help eliminate confusion between economic and sociological theory and some of the latest work (Bonke and Uldall-Poulsen 2007; Bonke and Browning 2009a) confirms that pooling in economics, so called 'Beckerian pooling' corresponds to joint pooling system in sociology. In these studies, relative incomes are found to affect the individual control over consumption sharing only in the households where joint money management is not a practice.

The second argument of money management on borderline with economics concerns the concept of efficiency. So, what is efficiency in money management and what in family economics? Apart from various factors above mentioned, the motivation for choosing one type of money management over another is also related to the minimization of transaction costs (Treas 1993). Couples prefer organizational forms that help them coordinate better their relationship, and any type of financial management may fulfil that role, depending on the particular interest of the couple. Treas explains the reasoning behind when a couple opts between a 'joint pool' (collective system) and a 'separate purse' (privatized system):

'The common pot of the collectivized marriage has an edge over privatized marriage when income pooling requires less coordination, leads to fewer disagreements, and makes monitoring of the many exchanges of married life easier... Couples who do not pool their resources say their arrangements are more efficient and less conflicted because neither partner is affected by the spending that benefits the other spouse alone' (Treas 1993:724).

Thus, the right choice of financial organization means more relationship efficiency. For this reason, couples with high relationship investments, children and common property often choose pooling regimes, to facilitate transactions (Bonke and Uldall-Poulsen 2007).

In Economics, Pollak (1985) recognizes that marriage as a 'governance structure' is likely to influence the behaviour of the family members, adding a non- market dimension to the market based intra-family bargaining. In his view, family features a business organization where also for the sake of efficiency business units merge, in the same way as two individuals who opt to form a family. He further argues that relationship investments directly contribute to better efficiency of union through their effect on transaction costs.

1.3.5. *Collective factors in bargaining: Transaction cost approach*

In the economic and resource bargaining view to household behaviour, spouses are treated as independent members who are able to negotiate their own

position. Their interests are often conflicting and these conflicts are resolved by means of market based bargaining that takes place after the marriage is formed. As we saw in previous explanations, partners exchange their individual achievements, from incomes to career experiences, for more bargaining power. However, pure bargaining does not always represent well the real household behaviour. While bargaining is a feature of individualism, the union formation relies on collective investments: when people marry, they combine 'individualism' with 'collectivism', and they not only negotiate, but also invest in a new relationship. This is the dimension of human behaviour that easily relates to profit oriented-organizations which operate on the basis of common investment and efficiency. And indeed, the concepts of the economics of organization, namely transaction costs approach, serves as a model for explaining family behaviour in addition to resource bargaining perspective.

Transaction cost approach was launched in the early eighties within the organizational theory (Chandlers 1962; Feller 1973; Macneil 1974; Williamson 1981).The concept was different from other organizational theories, because it dealt with how firms generate efficiency by minimizing the costs of each individual transaction. Williamson (1981) initially suggested that the concept was meant for profit-oriented organizational environment but he did not exclude some other possible specifications given the concept's potential to adapt. Still, the transaction costs approach was extended to non-commercial settings only by R. Pollak (1985) whose work on bargaining models was essential in explanation of intra-household distribution of resources. He recognized the importance of union for the behaviour of family members, explaining that it helps to minimize the transaction costs of family life. In other words, bargaining within household takes place but, thanks to the collective character of investments in relationship, it becomes more 'social'. Consequently, economic well-being of women is a result of both individual and collective factors.

As already mentioned, the transaction costs approach in sociology is used to explain efficiency gains in relation to the choice of the money management system.

1.4. The mediation of the welfare regimes

The economic well-being of women in the context of their economic dependency, employment and the choice of union is also related to the institutional framework to which individuals belong (Stier and Yaish 2008; Gornick and Mayers 2003; Esping Andersen 2002a). In other words, country institutions often serve as ‘filters’ in the effect of various factors on woman’s decision to work and their bargaining position.

For simplicity, countries are often grouped in various categories for the similarity of their institutions. Esping-Andersen (1990, 1999) launched the most cited typology ‘Three welfare regimes’ which divides countries according to the prevalence of state, market or family in the combination of individual welfare inputs. This classification includes: Social-Democratic regimes, characterized by individual and universal entitlements for all citizens and the primary role of state, Liberal regimes that rely on the primary role of market, and the Conservative regimes, which place main value on family. Clearly, these regimes have their representation in Europe where Scandinavian countries belong to the socio-democratic block, UK and Ireland form a part of Liberal group, and finally, the most numerous group are Conservative countries: France, Germany, Italy, Spain and Greece. Later some authors (Lessenich 1995; Ferrara 1996) made a strong case for the inclusion of Mediterranean countries as a separate block for they often appeared different from other conservative countries. Thus, the ‘modified’ regime typology takes also into account a fourth category that is the Mediterranean block of countries

Certainly, the existence of typology of welfare does not mean uniformity: country might be a part of one welfare regime and diverge in certain aspects from it. For that reason, there are also other useful classifications and for instance, Berthoud and Iacovou (2004:17) propose classifications according to geography and religion. It is known that neighbouring countries share many common characteristics because of their common history and geographical position, so the geographic typology of Berthoud and Iacovou divides Europe on Scandinavia, North-West islands, Continent and Southern Pensinsula. They consider also religion a strong predictor of country policies distinguishing between protestant,

mainly protestant, catholic/orthodox and mainly catholic countries. Interestingly, this typology places Ireland in the same group with Italy, Spain and Greece which is in line with many empirical studies which confirm similarity between some southern countries and Ireland. For many, the strongest case in favour of variety of typologies is the possibility to find the one, which represents best the dimensions of interest.

The economic well-being of women, woman's economic dependence and employment, along with the ideal model of union, depend on the existence of breadwinner and dual earner model in society. In some countries, dual earner model is already dominant while others are still in transition towards the dual earner model. In the explanation of differences between countries, the literature of welfare regimes points that welfare regimes are responsible for fact that transition to dual earner model varies among countries. The explanation derives from the broad concept of welfare, which, in practice, reflects history, policy and culture of the countries. Moreover, the welfare regimes, as different as they may be, often converge in certain policies, and several regimes are conducive to dual-earner model. In other words, it is possible to identify subgroups in the regimes, as alternative policies may serve for the same goal (Blossfeld and Drobnic 2001:40).

So what are the predictions of the theory of regimes for the economic dependency of women, their employment, or choice of marriage?

Regimes are supposed to influence the patterns of female employment and economic dependency. They also can favour one type of relationship, like traditional marriage, to more modern types of unions. The policies that favour wives' economic dependence and the male breadwinner wage are found, for instance, in conservative welfare regimes. The conservative model has the power to discourage more active labour participation of women because of the tax policy that discourages dual earner families along with lack of child care. In the Mediterranean model, family has central role that impedes women in their effort to work and be economically independent of their husbands. Both conservative and Mediterranean regimes also help traditional marriage with some possible exceptions. On the other hand, socio-democratic regimes are formed on the principle of egalitarianism, decommmodification, universal benefits and state help

to family, and these regimes help woman's integration into the labour markets, and decrease economic dependency of women, also through the employment in public sector. Finally, even though liberal regimes start from a series of different postulates from the socio-democratic block, and do not stimulate women to be economically independent per se, this regime impacts the decrease of male breadwinners wage, so that the woman's income becomes essential for the family living standards. Therefore, Liberal and Democratic regimes are very different but through either market or state, they manage to achieve the same goals: the growing dual earner concept.

Comparing countries based on welfare regimes, we can reach only broad conclusions since the exact factors: policies, culture, tradition, etc. cannot be individualized. On the other hand, changes are more visible when comparing the whole context than the effects of single macro factors. In addition, the welfare typology may also be tested and critically assessed in the context of predictions that the theory offers, for there might be other typologies that explain better the country effect on economic well-being of women. Another concern when applying welfare typology is whether welfare policies reflect existing gender relations or cause them (Esping –Andersen 2010).

1.5. The definition of the concept of (economic) well-being

In measuring human welfare, standard economic research for the whole last century relied on objective and observable outcomes. In other words, economics and other positivistic social sciences considered only 'serious' subjects leaving subjective measures behind any possible consideration. For instance, human well-being was studied on various individually assignable outcomes, from individual income and consumption to leisure time and housework, with the idea to objectively capture individual conditions. Well-being of a nation was similarly studied though the national product so that it was possible to objectively compare living standards between the countries. In addition, social indicators such as life expectancy and school enrolment have also played a role in explaining human welfare as they sometimes provide with more information than the standard national product because of their non-material character. All in all, throughout the

20th century utility in economics was reflected in revealed behaviour and measured with a simple number (Frey and Stutzer 2002b:20).

Some exceptions to this trend were reflected in the work of economists Van Praag (1968) and Easterlin (1974) who understood that individual preferences and real human well-being may diverge from each other. So, their work rather focused on human happiness, which was a broad term to encompass various subjective outcomes. However, subjective measures of human well-being attract real public and scientific interest in economics and social science only with interesting studies of Clark and Oswald (1994), Frey and Stutzer (2000) who, with their alternative approach, show that material achievements, income and economic growth are not necessarily the most important determinants of human well-being. They suggest 'reported happiness is one step closer than objective variables like income or goods to the subjective states real people experience' (Konow 2003:286). For these exact reasons, there has been a leap in the empirical research on subjective well-being in both micro and macro socio-economic research (Oswald 1997; McBride 2001; Pradhan and Ravallion 2000; Van Praag et al. 2003).

Thus, growing economic and social literature, recognize that there are many reasons to study subjective outcomes. For instance, subjective measures have the potential to add new knowledge by capturing human well-being directly, which is rare if not impossible using the standard positivistic approach. After all, there is no one who gives a better judgment on one's well-being than the person involved (Frey and Stutzer 2002a). Also, subjective outcomes account for various economic and non-economic factors which might have strong influence on individuals in addition to income; various studies show how employment situation, public policy, the perception of discrimination are equally important for one's well-being. In addition, well-being subjectively expressed is also 'richer', because individuals evaluate their personal welfare considering past, present and future, for which objective measures do not allow. In sum, subjective measures, while being closely related to objective conditions, offer some additional advantages in measuring human welfare.

But what is really intended by subjective human welfare? And what does it consist of? As we already mentioned, the definition of human welfare in positivist sciences is rather straightforward as a direct response to observed conditions such as goods, services or leisure. Subjective well-being instead, defined in psychology as one's own evaluation of personal well-being, is interchangeably used with various terms, from happiness, satisfaction to subjective welfare, although each term may also have a separate meaning. Therefore, subjective well-being is a rather broad concept and often contains more than one dimension or, how some social scientists describe it, domains, which is rarely the case when measuring objective conditions. This means that it is possible to specify whether subjective well-being refers to overall well-being, or it refers to well-being with regards to finances, health conditions, housing conditions, family life and etc. Certainly, the aspect considered narrows the operational definition of subjective well-being.

Van Praag et al. (2003) suggest the following function to describe the overall satisfaction:

$GS = GS(DS_1, \dots, DS_J; z)$ where general satisfaction GS is a function of domain satisfactions DS_j and unobserved characteristics z .

And the domain satisfaction is expressed through the following function:

$DS_j = DS_j(x_j, z) \quad j = 1, 2, \dots, J$ where x_j is a selection of observable objective variables that influence domain satisfactions and z is unobservable.

When it comes to the economic well-being of married women, previous research mostly relied on objective outcomes and woman's economic conditions were explained by the levels of their consumption. But the same research⁴ points that economic well-being measured through consumption is often one sided, and does not offer a full picture of conditions which women face. That is, the use of subjective measures to explain economic well-being of married women offers a clear advantage of incorporating also non-material components important for women such as career prospects and the type of work. As we saw in the previous section, financial considerations have been historically of great significance for married women, and that motivated the interest in their economic well-being. On

⁴ More explanations on this follow in the third chapter.

the other hand, financial satisfaction as a subjective economic well-being is often found the most important determinant of overall satisfaction and human well-being (van Praag et al. 2003) because of its power to influence other domain satisfaction. For these reasons, the concept chosen to represent married woman's well-being is subjective economic well-being in the form of financial satisfaction. The issues that regard the operationalization of the concept and measurement are touched upon in the next chapters.

1.6. Building the research stance: Brief review of empirical literature

The theoretical frameworks mentioned in the previous section point to different conclusions for economic well-being of married women. First approach comes from early economic and sociological work (Durkheim, Parsons, Becker) and considers the economic well-being of women inseparable from family life, that is, woman's economic well-being necessarily equals her partner's economic well-being. The other newer approaches consider woman's personal achievements and individual characteristics when explaining the woman's economic well-being. This group contains resource bargaining perspective and various theories that diverge from it. Then, the transaction costs approach introduces the importance of collective factors, namely union, for woman's economic well-being in addition to the individual features. Finally, welfare regime perspective filters the initial theoretical approaches by viewing woman's economic well-being in the context of the country welfare regimes; it assumes that the predictions of the theories on woman's economic well-being will be modified in specific country contexts.

Thus, in line with the previous theoretical elaborations, this thesis covers three different perspectives:

We start from economic resources, which are considered crucial in a life of an individual, having also an important effect for one's bargaining power. In other words, the more one earns the higher one's bargaining power, with the consequences for their economic well-being. Relative incomes are thus a useful way of testing the existence of the unitary framework that, as we know, suggests that only common resources matter for an individual. Indeed, the unitary models of economic behaviour are largely tested in the empirical research with various measures of income such as income contributions (relative income), unearned

income, earnings etc. However, researchers also operationalize bargaining power in other ways, testing the role of education, assets or wage rates for the economic well-being of women. In addition, the empirical tests are carried out on various datasets and national contexts, in single country studies or in a comparative perspective.

When testing the theory, many studies found that unitary models do not adequately represent the reality of everyday life, so these models were often rejected against one of the bargaining approach alternatives. Obviously, the focus of empirical evidence is mostly on economic well-being of women and children, and woman's relative resources or other relative characteristics serve as proxies of bargaining power. The examples of such studies are numerous; for instance, in one of the most cited study, Lundberg, Pollak and Wales (1997) examine a policy change in the UK that shifts the right to child allowance from men to women. They provide evidence that both women and children benefit from this state transfer through an increase in personal spending and reject Becker's income pooling hypothesis. In his classic study Schultz (1990) use the Thai data from 1981 to test whether woman's unearned income affects her labour supply differently than her husband's unearned income. This study also shows that economic well-being of woman is more sensitive to woman's own resources. Attanasio and Lechene (2002) link woman's higher personal consumption to the increase in her relative share of household money, on the data from Mexico.

Lately, more studies have been using alternative measures for woman's well-being, opposing the dominant economic stance to use observable conditions to explain well-being. The most recent examples are Bonke and Browning (2009b) who provide evidence against unitary framework on a Danish sample, using financial satisfaction as a proxy for economic well-being. The same author (Bonke 2008) performs similar analysis on cross sectional data, testing the unitary models in a comparative perspective. He finds mixed results depending on the national contexts and dominant welfare regimes. Alessie, Crossley and Hildebrand (2006) also find that woman's subjective economic well-being improves the more she contributes to the household finances.

All told, empirical evidence does support the bargaining framework in many instances and this leads us to argue against unitary models in explaining the economic well-being of women. Thus, in our first considerations of economic well-being of married women, we apply the resource bargaining perspective and assume the important role of individual factors, such as relative income, for married women's financial satisfaction. However, given the importance of institutional factors for individual choices, and consequently for woman's economic well-being, it is also assumed that welfare regimes may alter the results in various national contexts.

However, economic theory, and also, as we saw, resource bargaining approach in general, does not provide us with a full understanding of the relations and processes related to woman's economic well-being⁵. Income is very useful in explaining some aspects of woman's life, but does not fully suffice (Goldthorpe 2009). It is valuable to enrich the starting economic perspective with social concepts developed and explained in the theories of Gerson (1993) and Hakim (1996, 2000). Both sociologists suggest that a broader concept of work and career needs to be incorporated into the research on woman's economic well-being, even though the two theories actually differ in the way they perceive the role of woman's career. For instance, Gerson assumes positive role for woman's career prospects, whereas Hakim does not seem to have a clear stance on it. Moreover, in some of her studies (Hakim 2000:161) it is implicit that all woman's choices are equal for woman's well-being, from homemaking to the choice of working career.

The available empirical knowledge on the role of woman's career on her economic well-being does provide us with some answers but also leaves unanswered questions. Some examples from the empirical work include also Gerson's study 'No men's land' (1993) where she examines the changing role of men but also looks at the changing possibilities for women. She argues in favour of woman's work career for her well-being. Boye (2009) analyses career through the lens of hours of work, and finds that more hours of work mean higher woman's well-being. But, she also allows for differentiated results according to

⁵ See the previous section

the welfare regimes. As already mentioned, K. Hakim contributed to the literature by developing the concepts of career, but she produced little empirical evidence for micro-relations in the family. Also, there is a stream in the literature on well-being that instead of directly focusing on career effects, rather investigates how overall employment status changes well-being. In addition, many of these studies (Winkelmann and Winkelmann 1998; Frey and Stutzer 2002a; Bonke and Browning 2009b) report how negative is the impact of unemployment on well-being (and also woman's well-being).

Therefore, our further considerations regard the role of woman's employment and career prospects on woman's financial satisfaction, as well as, the mediating role of welfare regimes in it.

Lastly, as we already argued in the previous section, the approach based only on individual achievements is rather incomplete (Pollak 1985), given that bargaining within household mostly adopts a nonmarket form. This means that union as a 'governance structure' is likely to add to the process of intra-family bargaining, and the more so, if the investments in the relationship are abundant. The problem arises when we need to compare different unions. Obviously, the idea of relationship in the last decades has evolved and there are various types of unions which are quickly replacing marriage. For instance, one can be either married or living in a consensual union. So, the question is whether these two unions have the same effect on woman's economic well-being, or better, whether they have the same 'weight' as unions. Also, the review of the money management theory pointed that cohabitation and marriage potentially differ in the way in which the household money is managed. And different money organization might have various consequences for efficiency of the union and also, for woman's economic well-being.

Many empirical studies consider the differences between marriage and cohabitation. The prevalent opinion is that the two unions are different (Waite 1995; Brown and Booth 1996; Winkler 1997) but authors divide on whether the differences come from individual and relationship characteristics, or are due to superiority of one relationship over another, also reflected in their unequal legal treatment. Waite (1995) believes in the institution of marriage, and regards it

ultimate goal for every woman. In her view, marriage brings higher (economic) well-being to women than cohabitation. Though there are others (Willetts 2006) who oppose this view, and find no qualitative difference between the two. In other words, Willetts finds that both unions equally bring higher well-being. When it comes to money management, there is a bunch of recent empirical work (Oropesa, Landale and Kenkre 2003; Heimdal and HouseKnecht 2003; Vogler 2005; Vogler, Brockmann and Wiggins 2008) which confirms the lack of income pooling in cohabiting couples. And the lack of income pooling often means lower economic well-being for women (Vogler 2005, Vogler, Brockmann and Wiggins 2008). Lastly, it has been also argued that national differences in the meaning of cohabitation and its legal acceptance may be important for the impact of cohabitation on (economic) well-being (Heimdal and HouseKnecht 2003).

Finally, we build on the previous knowledge on the impact of union on economic well-being of women, and consider how the type of union changes income pooling and woman's financial satisfaction in various welfare regimes. Union is a collective factor in family bargaining and its consideration represents the third research interest of this thesis, the first two being woman's income and woman's career prospects as individual bargaining factors.

1.7. The summary of hypotheses and organization of the thesis

Following the previous review of theoretical and empirical literature, in this study we develop a set of general hypotheses regarding the role of woman's income, career prospects and the type of union to which she belongs on her economic well-being in various welfare regimes. In addition, each of the general hypotheses may be followed by a set of subject specific hypotheses that will be discussed elsewhere in the thesis. As already explained, we use the concept of financial satisfaction to measure woman's economic well-being.

The first set of hypotheses derives from the economic bargaining theories and can be summarized as follows:

1. The financial satisfaction of a married woman is positively related to her economic contributions to the family.

2. The positive impact of woman's economic contributions on her financial satisfaction will vary by the welfare regime.

The next set of hypotheses relies on the theoretical stance of Gerson and Hakim who introduce the role of woman's employment and career prospects. The hypotheses are the following:

1. Woman's financial satisfaction is positively related to her work commitment and bright career prospects.
2. We expect that the positive relation between woman's career and her financial satisfaction will differ among countries that belong to various welfare regimes.

Based on the transaction cost approach and the existing evidence on the differences between marriage and cohabitation, we develop a third set of the hypotheses. It is hypothesized that:

1. Cohabitation is negatively related to the woman's financial satisfaction.
2. There is a differential impact of cohabitation on woman's financial satisfaction based on the country context and welfare regime.
3. Cohabiting women are less likely to pool the money with their partner within the household.
4. Lack of money pooling within household among cohabiting couples will vary with the country context and welfare regime.

In order to test the theories and explain the determinants of woman's economic well-being, this thesis applies the perspective of unified social science, which overcomes the divisions between traditional economic and sociological fields. Indeed, the three distinctive theoretical approaches mentioned in the previous lines come from both economics and sociology. Moreover, the outlined hypotheses are tested using the techniques of multivariate analysis common in both social sciences, namely fixed effects and multilevel models. The hypotheses are examined in the longitudinal comparative framework: the economic well-being of women is compared between five countries, which despite some common characteristics show variation in institutional systems and policies, and

belong to four different welfare regimes. These countries are UK, Italy, Denmark, France and Ireland. Each group of hypotheses is tested in one of the three empirical chapters that are organized as follows:

In the first empirical chapter, we investigate how economic well-being of women changes with the presence of their personal income. Economics suggests various theories that explain the way family performs its functions and determine the well-being of its members. The theory of Gary Becker idealizes family seeing it as a rational unit where both wife and husband aim at the maximization of family resources. On the other hand, the bargaining perspective highlights that the households' behaviour depends largely on family dynamics and bargain between the family members. There is large empirical evidence against unitary models of household behaviour and this chapter presents another contribution to the empirics using financial satisfaction as a concept of economic well-being. We further enrich the analysis by: 1) incorporating the social context in explaining the bargaining between partners and woman's economic well-being, 2) testing the unified model of household at different household income levels.

The second empirical chapter goes beyond the current studies on woman's economic independence. Economic theory is often limiting in its scope because it relies only on income in explaining the economic well-being of women. The sociological perspective broadens the economic view because it encompasses the employment patterns, future career prospects and commitment to personal occupation in economic well-being of women (Gerson, 1993, Hakim, 2000). We employ diversity of work choices and career orientation in the analysis of woman's economic well-being and her financial position within family. Career stability and attachment to work are analysed and compared to a choice of a more flexible path in various European countries. Flexibility is popular in globalized labour markets and is a frequent choice for women because it offers the opportunity to balance work and family. Nevertheless, how much is it beneficial for women themselves? We hypothesize that it is not relative incomes or pure employment that matter the most for woman's economic well-being but more likely the choice of relatively continuous and full-time work careers. We also analyse the value of a full time homemaking as a career, so called 'marriage

career' for woman's well-being. Again, the results are commented considering the potential intra-household dynamics.

Finally, in the third empirical chapter economic bargaining perspective is enriched with the transaction costs approach (Pollak, 1985) and the theories of money management (Pahl 1983, Treas 1993) to deal with the differences in income sharing between married and cohabiting unions. There is a growing tendency to see cohabitation as an equivalent alternative to marriage and we investigate how different these two unions are when it comes to efficiency. The type of union as a governing structure is a collective determinant of woman's economic well-being that adds to the bargaining process.

However, before moving to the empirical section of this thesis, we first provide information on the operationalization of the concepts in use, then we describe the characteristics of our dataset and explain the econometric techniques relevant for our analyses.

Chapter 2: The operationalization of the concepts, data and methods

2.1. Operationalization of financial satisfaction

Various doubts and concerns are linked to the operationalization behind the concept of subjective well-being. Frey and Stutzer (2002b:25) outline several ways to capture subjective well-being such as in the form of psychological and neurobiological indicators, observed social behaviour, nonverbal behaviour and finally, surveys. However, the most used method to get to the core of subjective well-being is the last one, so called self-reported survey questionnaire because people are able to report and self-evaluate their well-being. Other methods, although acknowledged, face many issues, either because they are not sufficiently developed or because they are unreliable. On one hand, psychological and neurobiological indicators are rare due to their complex functioning and on the other, observed social behaviour and nonverbal behaviour may often be misleading for there is often a discrepancy between behaviour and happiness as the same non-verbal and social behaviour might be seen in happy and unhappy persons. As a result, satisfaction or better reported satisfaction questionnaires are developed mostly by psychologists to measure the subjective individual well-being. The individuals are asked to self-report the evaluation of their life, satisfaction or happiness depending on the purpose of the questionnaire. Thus, psychologists rely on more or less detailed questions on one's well-being and consequently, happiness can be reported in a single or multiple item questions. For certain analysis, it suffices to have a straight answer on overall satisfaction with life, while multi-item questions add more reliability to the measurement. Nowadays several world standard surveys such World value survey and European barometer survey provide us with information on individual well-being for various countries.

However, unlike other questionnaires on well-being that regard objective conditions, the self-reported satisfaction questionnaires are criticized for additional issues: for instance, the individual responses may depend on the order of questions, type of explanations, the mood of the respondent, social and cultural

norms etc. (Frey and Stutzer 2002a). Moreover, one's satisfaction is also relative and depends on achievements of reference groups (Easterlin 1974, 1995, 2001) and these characteristics all together might undermine the reliability and validity of the measures of subjective well-being. In relation to these issues, the concept of subjective well-being relies on two essential assumptions, namely ordinal comparability and cardinal utility (van Praag 1991). On the first, the scores of satisfaction are assumed directly comparable which means that individuals who respond similarly also enjoy similar levels of satisfaction. On the latter, the assumption of cardinal utility refers to the equal distance between the satisfaction scores. This, in practice, means that for instance the distance between those largely satisfied and satisfied is no different from the distance between those unsatisfied and largely unsatisfied.

In sum, there has been a criticism on the way subjective well-being is defined and measured, mostly in economics, but also in other social sciences which rely on the dominant positivist ideology. Still, as Kahneman (1999) argues, many of these issues are resolvable because they are less of a problem at the practical than theoretical level. Indeed, most of these concerns have been clarified and explained by previous research and are treatable with adequate research design and econometric approach (Frey and Stutzer 2002a). Finally, there are various empirical confirmations that satisfaction measures are adequate representatives of individual utility and as such can be used instead of the objective measures of well-being (Diener 1984; Van Praag, Frijters and Ferrero-i-Carbonell 2003; Senik 2005).

As previously mentioned, the questions on subjective well-being may refer to one principal dimension or several dimensions. For example, single item questionnaire might be suitable for overall life satisfaction or some specific domain of satisfaction. But subjective well-being is rarely one dimensional and can be decomposed in many dimensions which are mostly treated with multi-item questionnaire. As Van Praag et al. (2003) suggest 'satisfaction with life as a whole can be seen as an aggregate concept, which can be unfolded into its domain components'. These dimensions can be related to labour market, family or health and so on or can be simply regrouped into personal and public domain. This thesis, for the reasons already explained in the previous chapter, relies on the

financial aspect of satisfaction and uses a question that directly uncovers this dimension.

The first standard question for happiness was applied by the University of Michigan's survey research centre (Frey and Stutzer 2002b:26). The question asked to the respondents was the following:

'Taken all together, how would you say things are these days-would you say that you are very happy, pretty happy and not too happy?'

Individuals could respond how happy they are in one of the three modalities. Similarly, the question, which operationalizes the concept of well-being in this thesis, is not far from the first formulation of Michigan's survey center. The ECHP uses the following formulation to reveal one's individual financial satisfaction:

'How satisfied are you with your present financial situation? 1. Not at all satisfied; 2. Largely unsatisfied; 3. Mildly unsatisfied; 4. Mildly satisfied; 5. Largely satisfied; 6. Fully satisfied'

Unlike the ECHP, the wording of questions and number of modalities is different in the British part of the ECHP. The relevant question in British sample is:

'How well would you say you yourself are managing financially these days? Would you say you are: 1. Living comfortably; 2. Doing alright; 3. Just about getting by; 4. Finding it quite difficult; 5. Finding it very difficult; 6. Don't know' with the five categories.

To sum up, the questions on subjective well-being from the ECHP and BHPS (for the British sample) form the base for operationalization of the financial subjective well-being in this study. In addition, for the sake of various analyses, the modalities of these questions are further regrouped so that the question is often treated as binary. We refer to previous studies for the further explanation of potential disadvantages and advantages of the concept and chosen operationalization (Easterlin 1974; Frey and Stutzer 2002a, 2002b). Finally, the term financial satisfaction is interchangeable used with the term subjective

economic well-being and subjective financial well-being.

2.2. Data

2.2.1. *Why longitudinal data?*

Some of the problems that arise from the use of subjective data are resolvable through better data collection and well-thought questionnaires. This is essential when measurement errors are correlated with the individual characteristics like, for instance, in case of distorted responses of satisfaction due to age of the respondent (Frey and Stutzer 2002a). Also, certain theoretical issues with subjective data disappear at the practical level, especially with regards to random errors due to wording and order of questions. But, when it comes to unobserved individual characteristics, they are a source of systematic bias in subjective data (Bertrand and Mullainathan 2001), and need to be treated with the use of longitudinal framework. As Frey and Stutzer (2002a) explain, a longitudinal analysis allows for a baseline well-being for each person and helps mitigate the effect of spurious relationships.

Thus, to study woman's subjective economic well-being, in this thesis, we use the data at the individual level with repeated observations on the same individuals, or better, longitudinal data. These data are also known as panel data, repeated measures or cross-sectional time series data (Rabe-Hesketh and Skrondal 2008:179). There are different types of panel data, such as cohort surveys and retrospective data, but here we apply household panel survey where the respondents are interviewed each year for several years with the same questions. The use of longitudinal data here is important to give a dynamic view of woman's economic well-being and help understand the effect and process of change. Indeed, unlike cross-sectional data that provide a snapshot of events in one particular moment in time, longitudinal frameworks show their timing and order. This characteristic makes longitudinal data, although observational, similar to the experimental data and, accompanied with the adequate techniques, they might be used for making causal inferences.

Related to the causal inference, the advantage of having longitudinal data is also in partially treating endogeneity of variables by controlling for the omitted individual characteristics. Endogenous variables are dependent on the previous processes, preferences and choices, and might influence the real picture of a studied phenomenon, in this case, woman's financial satisfaction. So, longitudinal data, with adequate econometric models, model unobserved characteristics as individual random effects and add them to the linear predictor, this way avoiding the misleading results.

2.2.2. *Cross country comparison*

In the longitudinal settings, the differences observed in people are smaller given that the same people are followed in several occasions. And if the longitudinal data is international, some of the differences between people may also be result of the institutional differences between countries. With a cross country comparison, it is possible to distinguish these institutional differences.

Patterns across countries differ for cultural, economic and broader historical reasons, and as we saw in the previous sections, these different influences are reflected also through the country welfare regimes. In this study, the modified welfare regime typology (Esping-Andersen 1990, 1999; Lessenich 1995; Ferrara 1996) will be used. Accordingly, countries are classified into four groups: Countries with conservative welfare state regimes, Southern European countries with familialistic regime, countries with liberal welfare regimes and countries with socio-democratic regimes. Here we select several countries due to their belonging to specific welfare regimes: Italy for the Mediterranean model, Denmark for Socio-Democratic model, UK and Ireland for liberal model and France for conservative model. In other words, even though our sample of countries is selected, there is enough of regime variation for the purpose of comparison. Therefore, we compare individuals from four welfare regimes in the period of seven to eight years.

2.2.3. *The ECHP*

The thesis uses longitudinal micro-data that are drawn from the eight waves of the European Community Household panel (ECHP), from 1994-2001. The ECHP is one of the first panel surveys to represent EU-15 which is why it is often seen as ‘golden age for comparative analysis’ (Berthoud and Iacovou 2004:11). It includes more than 73000 households and 153 000 individuals across Europe that annually participated in the questionnaire. All the questions in the questionnaires are direct as they do not contain retroactive information on individuals.

The dataset was chosen due to its multi-dimensional approach as it contains substantive information about income, employment status and relations, education, poverty measures, subjective indicators of well-being such as satisfaction with finances, housing, work and leisure, etc. In addition, the ECHP is especially advantageous with respect to income data since missing information is minimal and it was also imputed by the EUROSTAT, so that the survey found its wide use in economic research. Also, statistical office of the European community (EUROSTAT) coordinated the data collection and guaranteed the homogeneity of questionnaires adopting an ‘input oriented’ approach (ECHP 1994). As a result, the data were collected in individual and household questionnaires with minimal country differences, which is essential for the sake of our comparisons.

Still, there are some differences in the questionnaire among countries chosen for this analysis. The survey is standard for four out of five countries: Denmark, Italy, France and Ireland whereas the UK version differs because the ECHP was carried out in the UK for three years from 1994-1996, but then the rest of the data for the following years were derived from the British household panel and later dated to 1994, resulting in two data-sources in the UK sample. Consequently, this caused some problems in the data availability for the British section of the ECHP as well as with the interpretation of differently formulated questions. Among indicators that face different formulation is also the question on financial satisfaction, which has been already explained in the section ‘Operationalization of the financial satisfaction’. For the British data in this study,

we rely on the British sample derived from British household panel for it covers without interruptions the whole period of eight years

In sum, this data set is attractive for our research questions and hypotheses for two main reasons: first, because it allows us to study the dynamic relationship between characteristics of women and financial satisfaction. In other words, it provides detailed information on micro relations within family and their change in time, which was unavailable in this form in any other panel questionnaire. Second, the survey questions and structure enable straightforward comparison of social statistics between selected five European countries. And this direct comparability adds more precision to the conclusions on the role of welfare regimes for economic well-being of married women.

2.2.4. Characteristics of the sample

We restricted the sample only to the individuals from Italy, Denmark, Uk, France and Ireland, who at the moment of the interview were cohabitating (either as divorced, widowed or never married) or were married. We drop from the sample multi-generation households as well as the same sex couples given that our interest is a nuclear heterosexual union. We restrict the age for women from 18 to 50 years whereas the age for men is 18 and above. This age selection was made for several reasons: first, the minimum age is set at the age of 18, as the legal entrance to adulthood; second, the upper age limit for women was made to exclude the women in retirement age in all the countries of interest as the European retirement policies are characterized by the different age limits; third, we also choose a time span in which the most of the woman's productive life takes place which is relevant to study the effect of woman's income, work choices and type of union for woman's economic well-being; fourth, the upper age limit was not defined for men as the married and cohabiting women are central unit of analysis and the interest for men's characteristics is of a limited character.

The panel is unbalanced and the real sample size varies in the analysis depending on the primary topic of interest. Each empirical chapter provides more detail on this. The maximum sample size totals 53776 observations on couples with the largest subsample of Italian data with 17582 observations. Other

countries are represented in the following order: France (13567), UK (10407), Ireland (6345) and Denmark (5875). The minimum sample size totals 37087 observations on couples and it ranges from 4197 observations for Denmark, 4623 for Ireland, 5715 for UK, 9334 for France and 13218 for Italy.

We use information on individual financial satisfaction, income and employment data, socio-demographic characteristics of men and women and household characteristics (the number of children, household income etc). However, the relevant variables and the motivation for choosing them will be elaborated in more detail in each empirical chapter.

2.3. Techniques

We use longitudinal models, which contain random term, as well as fixed effects models to explain the factors influencing financial satisfaction of married women. The models with random term are known as random effects models in econometrics, and multilevel and mixed models in statistics. Alternatively, they are also called conditional models because individual responses are conditional on the random term, which represents modelled unobserved features. In the fixed effect models, unobserved features are treated as fixed parameters that can be either estimated or eliminated from the model. Indeed, the treatment of the unobserved parameters as fixed gives the name to the model.

We use several variations of random effect and fixed effect models in this study. The choice of model depends on the character of the dependent variable, which can be here either binary or ordinal. The variable financial satisfaction is turned into binary for reasons of parsimony in the first two empirical chapters, but we treat it as ordinal in the third empirical chapter for giving more precision to the results. Consequently, the three models in use are: fixed effect logit models, logistic random intercept model and random intercept proportional odds model.

2.3.1. *Fixed effect (or conditional) logit*

The important reason for choosing fixed effect models was to control for the unmeasured woman's and men's characteristics which can create bias in the

effect of other variables on woman's financial satisfaction. In the fixed effect models, individuals are their own control because only within individual variation is observed in time and averaged across persons. Thus, these models enabled us to use causal inference in our dataset and minimize problems such as endogeneity of the variables.

The following table taken from Hesketh and Skrondal (2008:124) summarizes the differences between random intercept and fixed effect models for the linear case.

Tab. 2.1: *Overview of features of fixed effect and random effect approaches*

Questions:	Answers	
	Fixed effects	Random effects
Inference for population of clusters?	No	Yes
Minimum number of clusters required?	Any number	For estimating ψ , at least 10 or 20
What assumptions are required?	None for distribution of fixed intercepts α_j	Random intercepts ζ_j normal, constant variance ψ , exogenous covariates, etc.
Can estimate effects of cluster-level covariates?	No. Because cluster level covariates are replaced with dummies.	Yes.
Inference for clusters in particular sample?	Yes.	No, not for β_s . Yes, for ζ_j by using EB
Minimum cluster size required?	Any sizes if many ≥ 2 , but large for est. α_j	Any sizes if many ≥ 2
Is the model parsimonious?	No, j parameters α_j but can eliminate α_j	Yes, one variance parameter ψ for all J cluster
Can estimate within-cluster effects of covariates?	Yes.	Yes, by including cluster means.

When the dependent variable is categorical, fixed effect models are in the form of logistic fixed effect regression models. When the scores on financial satisfaction have either value 1 or 0, fixed effect logit model estimates the probability that financial satisfaction is 1. The specification of the model is the following:

$\Pr (Y_{ij}=1) = F (\alpha_0+z_i\alpha+x_{ij}\beta+\zeta_i)$ where $F (.)$ is the logistic function, z_i are time invariant characteristics, x_{ij} are time-varying covariates and ζ_i is unobserved individual effect.

Similarly to the linear models, fixed effect logit model works on the following principle:

It calculates the differences in time varying characteristics of the persons and disregards all the individuals whose responses (dependent variable) do not change over time. So, information on individuals who show no changes in responses is sacrificed.

But, its difference to the linear model is that fixed effect logit uses instead conditional maximum likelihood estimation which is why it is often called conditional logistic regression. Another term for it is Chamberlain fixed effect logit (1980).

On the relation to random intercept (random effects) logit, the main advantage of conditional logit is in more robustness to model specification, because it does not depend on stable individual characteristics, and thus we do not have to assume anything about the unobserved traits. On the other hand, the major disadvantages of the fixed model logit is that we cannot estimate the time invariant coefficients so we need to be careful when making inferences to the wider population: the results refer only to the subjects present in the analysis.

In sum, the decision to choose one method over another mostly depends on the weight that we give to control of individual unmeasured characteristics over the estimate of the measurable stable characteristics (Allison, P. 2005:5). For this reason, in this study we employ parallelly fixed effect and random effect methods.

The fixed effect logit models have been estimated using the stata command xtlogit, fe.

2.3.2. *Logistic random intercept model*

Longitudinal data are regarded a type of multilevel data, or more specifically, two level data where occasions represent the first level, and subjects are the second level. However, unlike other clustered frameworks, the special feature of longitudinal data is that the first level units are occasions which are ordered in time and as such cannot be exchanged. As we already mentioned in the previous explanations, given the clustered nature of longitudinal data, the models used to treat them are known in statistics as multilevel models and they also measure within unit, in this case, within subject dependences. In this thesis we accept the statistical terminology and call the models in use random intercept models instead of random effects.

Multilevel generalized linear models derive from multilevel linear models and encompass a series of specifications, among others random intercept logit model and random intercept proportional odds model. The distinct feature of multilevel generalized linear models is that the distribution of outcomes given the random effect is extended from normal to the exponential: binomial, multinomial, gamma, etc. They also differ from the linear multilevel models for the link function that can be log, logit, probit, defining the type of multilevel model (Rodríguez 2007:341,342)

If we denote occasions i for level 1 and subjects j for level -2, we build the following simplified logit model⁶ for dichotomous responses formulated as generalized multilevel linear model:

$$\text{Logit} \{ \Pr (Y_{ij}=1 | X_{ij}, C_j) \} = \beta_1 + \beta_2 x_{2j} + \beta_3 x_{3ij} + \beta_4 x_{2j} X_{3ij} + C_j$$

⁶ In this simplified specification, we include a time varying and a time invariant variable and their interaction term.

where random intercept is $C_j | X_{ij} \sim N(0, \psi)$, and independent among couples. X_{ij} are time varying characteristics, X_j are time invariant characteristics (Rabe-Hesketh and Skrondal 2008:247).

The random intercept logit model was chosen for several reasons: First, to control and model unobserved heterogeneity in our data. For instance, the model gives us also intra-class correlation which is a percentage of the variance of the dependent variable that is due to individual unobserved characteristics. Second, it allows for subject specific interpretations and inferences. However, as already mentioned, we are aware that this model is sensitive to possible subject level confounding causing inconsistent estimates.

Different approaches are used to estimate multilevel generalized linear models. For the random intercept logit, we use the stata command `gllamm`, which relies on adaptive quadrature procedure.

2.3.3. *Random intercept proportional odds model*

When the dependent variable is ordinal, we apply cumulative models for ordinal responses. These models have multinomial conditional distribution of outcomes and use a cumulative logistic link function. Basically, here we have a cumulative probability that a response is in higher category from the previous one instead of expectation or mean of the response.

To specify this model, we use a simplified generalized linear model formulation⁷ from Rabe-Hesketh and Skrondal (2008:303). :

$$\text{Logit} \{Pr(Y_{ij} > s | X_{ij}, C_{1j})\} = \beta_2 x_{2ij} + \beta_3 x_{3j} + \beta_4 x_{2j} X_{3ij} + C_{1j} - k_s$$

where the random intercept of the cumulative logits is $C_{1j} | X_{ij} \sim N(0, \psi)$ and is independent across subjects. S are ordinal response categories, k_s represents thresholds, x_{ij} are time varying and x_j time invariant characteristics.

⁷ In this simplified specification, we include a time varying and a time invariant variable and their interaction term.

These models have the property of proportional odds, which means that odds ratios are the same whatever category on the ordinal scale is considered and compared to. This gives the name to the random intercept proportional odds models.

We use the stata command `gllamm` to estimate the random intercept proportional odds model.

Chapter 3: The colour of money: How income shapes economic well-being of married (and cohabiting) women.

3.1. Introduction

The women's shift from homemaking to the labour markets has certainly influenced the percentage of income that women contribute to the household finances. The higher woman's income contributions might also result from more equality in the wages between men and women or specifically targeted welfare measures that help woman's financial position. In this first chapter, we attempt to understand the link between woman's economic independence and her economic well-being. We ask the old economic question, that is, if woman's bargaining power is influenced by the individual financial resources she owns, but we try to analyse it in a modern way, employing the subjective measures of economic well-being. That is our first interest. Another one is to test the role of institutions in bargaining between partners and family equilibrium. From a sociological point of view, institutions matter because they influence individual behaviour and we would like to place them in the context of our main research question. We choose to apply a welfare regimes typology to study the effect of institutions on micro behaviour. The economic well-being of women is also in relation to the position of their family in the income distribution. An interesting question is whether the control of household resources and equal income sharing are any different at different household income levels. And if so, who does better or share more, the 'poor' or the 'rich' women?

In the effort to answer the above research questions, this chapter is organized as follows: the first section reviews the theory on economic bargaining, the second part deals with the empirical contributions, the operationalization of bargaining power and the choice of individual welfare measures. In the third section, we present our hypotheses, empirical framework and discuss the results.

3.2. Intra-household bargaining from an economic perspective

3.2.1. *Models of household dynamics*

Since the early 1960's economists have been trying to explain the distribution in marriage; From Samuelson and Becker (Samuelson 1956; Becker, 1981) we learned how in a relationship of love and altruism such as marriage, resources are equally shared in a way that individual ownership of material resources does not change the distribution of benefits in the family. This interest has been reflected also in the work of sociologists, for instance Talcott Parsons (1956) who similarly believed in the sex role aggregation for the interest of the whole family. Thus, in a unitary economic model of household, the interest and preferences of all the family members are reflected in a common utility function and their well-being depends only on collective family income; so, who brings the income is of no importance. Family life also takes the form of specialization: women often specialize in home and men in paid work as an outcome of their mutual decision to benefit the utility of family.

However, since the mid 1980's the divorce became more common, possibly because more women participated in the labour market and perhaps because people started to expect a 'higher standard of human happiness' (Hochschild 1989:167) from a marriage. As a result, new developments in economic theory of family followed. Indeed, the economic theory attempts to model the changes in life and what was neglected by the unitary model of household-the resources and power of each family member, became central in the bargaining theory (Manser and Brown 1980; McElroy and Horney 1981). The bargaining approach to the family behaviour argued that control can be transferred among family members and that the external factors which alter individual opportunities outside of the family, change the individual negotiating power within it. In this context, even the unitary model of Gary Becker could be seen in a bargaining perspective- as 'a two-stage bargaining in which the altruist moves first and confronts other family members with take-it-or-leave-it choices' (Pollak 1994).

The bargaining approach proposed several new models of distribution between a husband and a wife: cooperative models (McElroy 1990; Lundberg and

Pollak 1993), which are based on Nash bargaining framework and efficiency, non-cooperative models (Kanbur and Haddad 1994; Browning and Lechene 2001; Lundberg and Pollak 2003), which allow for either efficient or inefficient outcomes and collective models (Chiappori 1988, 1992) which rely on Pareto efficient sharing rule. For instance, in the cooperative models the negotiation power is highly dependent on the position of individual in so called 'threat point' that is reached when members have difficulty in finding an agreement. So, the threat point as a point of disagreement is often determined externally and as such mostly related to divorce of partners; the group of models with this specification is known as divorce threat bargaining models (Manser and Brown 1980; McElroy and Horney 1981). But the threat point may also be internal to the marriage and determined by a simple non-cooperative union. In this case, when the threat point is reached each member may contribute to the household public good by personal choice leading to the low-functioning marriage with separate spheres. Lundberg and Pollak (1993) defined this scenario as separate sphere model and argued that it represents better the reality of everyday intra-family interactions: the threat of divorce is not realistic each time the spouses have an argument. To sum up, if there are opportunities that would lift woman's position in case of divorce or offer her a protection for setting up her own self-enforced agreements in case of harsh intra-family disagreements, she will be more likely to negotiate her way up and influence the allocation of resources. Empirically the determinants of the threat point are related to the control over financial resources such as unearned income, earnings, wage rate or household production.

The second group of economic bargaining models- the non-cooperative models, question the efficiency of the family behaviour and Pareto optimality. In these models, family agreements are based on self-interest of the family members and do not necessarily lead to the efficient family outcomes. The presence of inefficiency in family encourages the research on factors and conditions that lead to efficiency, including the analysis of the social factors such as gender and social norms, or culture. These factors shape the individual power within and outside of the family and might alter the way individuals interact. Indeed, this framework allows 'power' to be defined more broadly as it is treated in sociology and political science, bringing economics closer to both of the disciplines. However, this is also regarded the main weakness of the framework: there are too many

alternatives to study and model the complexity of human interactions which complicates the practical implementation of the approach. In these models, the individual bargaining power is reflected in one's ability to influence the partner's self-enforced agreement and his/her supply of shared goods. Bargaining power is also operationalized through individual resources such as various forms of income.

Advances in economic bargaining research include also the development of collective models which unlike other bargaining approaches leave space for more than one outcome in negotiation, although always efficient; thus, common preference models and cooperative framework are also some possible outcomes. These models work on the bases of a "sharing rule" which is a proportion of the household expenditure attributed to different household members. The "sharing rule" will be determined by different distributional factors through which the negotiating power is exercised. For instance, income is one distributional factor. However, due to the lack of any formal guidance in modelling, the determinants of 'sharing rule' are not a clear cut and largely depend on modeling preference. An extensive empirical literature constantly adds to the current theory of collective models (Bourguignon, Browning, Chiappori and Lechene 1993; Browning and Chiappori 1998; Pezzin, Pollak and Schone 2004).

3.2.2. *Bargaining power in empirical research*

Bargaining models require operationalization of the concept of 'bargaining power' in order for them to be empirically tested and compared with one another. The empirical measures of bargaining power vary from total income (Phipps and Burton 1998), income share (Attanasio and Lechene 2002; Bonke and Browning 2009a, 2009b), earnings (Browning 1995), non-labour income (Thomas 1990; Schultz 1990), assets (Doss 1996) and social transfers (Lundberg, Pollak and Wales 1997; Attanasio and Lechene 2002), to household production and wage rates. Measures can also be human capital-labour participation (Zamora 2008) and education (Konrad and Lommerud 2000; Thomas 1994). Lately the tests of the bargaining theory are also provided using macro variables, just like legislation (Oreffice 2007), tax benefit systems (Orsini and Spadaro 2005) and so on. In practice, the empirical test of bargaining is performed through a tricky procedure

of testing against the unified model of household behaviour and income pooling. Therefore, the significant influence of the above reviewed individual resources on the distribution of welfare means that income is not pooled, or better, it is not equally controlled by husband and wife. The bargaining power is exercised either through the effect on the threat point (cooperative models), self-enforced agreements (non-cooperative model) or the sharing rule (collective model).

Still the empirical specification of bargaining power has many challenges; The most common measure of bargaining power is income, but lately it has been suggested that ambiguity of income can be a problem for the research because not all of the sources of income are exogenous. For instance, the income related to work is thought to represent well bargaining power because partners mentally link individual consumption to the current contributions. However, actual earnings may reflect the individual preferences for work over leisure, and may also depend on a broader setting in which the decisions are taken (e.g. the welfare system, the incentives for women to work, and etc.). As such, they may actually be endogenous. Thus, the results are disputable when income pooling hypothesis is rejected only on the base of this measure, because the effect of bargaining power may be confounded with the change in relative prices and opportunity costs of woman's time. In addition, income that contains earnings is misleading also because it reflects the current allocation of labour in the family that might be very different if the conditions change. For instance, in the cooperative models 'earnings at the observed cooperative equilibrium are a poor proxy for earnings at the unobserved non-cooperative equilibrium' (Pollak 2005:20). The same applies to the case of divorce. This is especially problematic for homemakers who might decide to work after the marriage dissolves. On the other hand, woman's choice of homemaking instead of work may also indicate certain bargaining power and better starting position in decision making, which gives the woman the option not to work. The reasons could be good opportunities in the marriage market, good looks, attractiveness, intelligence or social skills (Hakim 2010). If this is the scenario, when testing the pooling hypothesis, we face a selection problem by considering only the bargaining power of women who were "disadvantaged" from the beginning of their married life.

In response to the measurement problems related to earnings, different authors suggest various solutions; the use of exogenous unearned income is one popular option: for instance, Schulzt (1990) tests the relevance of the source of non-earned income for the woman's labour supply and finds significantly different outcome when non-earned income belongs to the male partner. The allocation of resources and spending on children is found to vary depending on the ownership of child benefits in the analysis of UK couples (Lundberg, Pollak and Wales 1997). Similar conclusions are reached by Attanasio and Lechene (2002), using the data from Mexico. Still, unearned income is often only a small part of overall income and may be in relation to the previous achievements in the labour market⁸. So, the wage rates, which are based on the real value of human capital (Pollak 2005) or other (from the economic point of view) exogenous factors from the macro setting are lately employed as a more advanced proxy of bargaining power. Importantly, the new measures do not disqualify the old ones that are still being implemented, only with more caution and acknowledgement of the potential measurement issues. Indeed, much empirical research still relies on total income to measure bargaining power.

3.2.3. *Noneconomic factors in economic bargaining*

The topic that is relatively neglected in the bargaining theory is the role of institutions, culture, societal norms, gender norms and attitudes in determining the individual bargaining power. Economists often assume that bargaining takes place in the household, leaving all the institutional factors such as labour and marriage markets aside as exogenous. But what if the economic models do not represent the real game because 'the "real action" is elsewhere: in the game before the game' (Pollak 1994)? Indeed, a growing number of economists and social scientists (Pollak 1994; Sen 1990; England and Kilbourne 1990) acknowledge the endogenous character of institutions and norms from a societal perspective. In other words, individual preferences and human behaviour might be already shaped by external factors, leaving only a little space for a real bargaining outcome modeled in economics. When it comes to women, the opportunity costs

⁸ This does not apply if the unearned income originates from a purely exogenous source such as lottery or unexpected social transfer from one partner to another.

of their choices and acceptable behaviour are innate to the gender socialization and national institutions.

To conclude, the social science critique on the definition of power in bargaining derives partly from the neglect of noneconomic factors that are believed to influence family equilibrium. The challenge for the future bargaining research will be to encompass these factors when modelling the complex household dynamics.

3.3. Individual welfare: from objective to subjective outcomes

The formal tests of income pooling infer that bargaining in the household takes place if the income distribution impacts individual welfare after we control for joint income. In the economic empirical research the individual welfare is mostly measured through consumption of goods and leisure time or labour supply due to its connection to leisure. In socio-economic research, housework is also one of the popular outcomes of individual welfare. Lately, the concepts of well-being receive much attention as they tend to be broader than before and encompass more than one dimension of what is known as individual welfare. Consequently, the research in economic bargaining recently followed up with the inclusion of outcomes such as subjective well-being to counteract the previously dominant objective indicators.

Earlier research on intra-household behaviour analysed the impact of income distribution on private assignable goods. Each household member is assumed to be an exclusive user of certain goods while he/she shares the public goods with other family members. For instance, clothes items, tobacco and alcohol can all be assignable to one member which is not the case for aggregate food expenditures. Men's and women's clothing, girls' and boys' clothing are used in various studies as outcomes of welfare: Lundberg, Pollak and Wales (1997) find evidence of a shift of expenditures towards woman's and children's clothing when child allowance in the UK was transferred to wives. Attanasio and Lechene (2002) show that higher proportion of wife's income is associated with higher expenditure on children's clothes and lower expenditure on food items on the case of Mexico rural areas. Similarly, Phipps and Burton (1998) analyse the childcare expenditures. Other examples include the expenditure approach in the

context of collective models: Bourguignon et al. (1993), Browning and Chiappori (1998) and so on.

Leisure time is another attractive option for private goods if we assume that person's leisure is independent of the leisure of the partner in the broader sense of the word. Chiappori (1992) is one of the first to propose labour time to calculate leisure time of individuals within family but he neglects the presence of household production (housework). To avoid the misunderstanding in defining the leisure time, Couprie (2007) obtains pure leisure time by subtracting the time spent on housework and market work from the total amount of one's time. Others (Lundberg 1988; Shultz 1990; Chiappori et al. 2002; Oreffice 2007) focus on pure labour supply due to its link to the consumption of leisure.

Ultimately, the bargaining research is directed towards more explicit outcomes in order to understand the intra-household situation, so outcome variables are often the direct questions of who is charge of the household decision process (Attanio and Lechene 2002) and how the expenditures are assigned to each member (Bonke and Browning 2006).

Moreover, there has been a growing interest in subjective outcomes of welfare in both microeconomics and sociology (McBride 2001; Senik 2004; Bonke and Browning 2009b). Easterlin (1974) introduced the concept of satisfaction to measure individual well-being challenging the dominant notion in traditional economic research that implied the exclusive relationship of individual welfare with goods. He argued that focus on pure goods conceals the complex set of psychological, social and economic conditions which may influence human welfare. The concept of subjective well-being, which has its origins in philosophical distinction between the needs and wants (Allardt 1993), is taken from psychology and allows the self-evaluation of one's own life and one's own assessment of objective conditions. Therefore, despite some measurement problems, subjective questions on satisfaction more often present well-being in economic and social research, for their capacity to reveal the real individual conditions. Even though, the concept itself was initially criticized for its ambiguity, today it is utilized, also because many empirical studies find its high correlation to utility (Frey and Stutzer 2002b; Van Praag, Frijters and Ferrero-i-Carbonell 2003; Senik 2005). This is even more so when specific aspects of well-being are considered, e.g. Financial satisfaction, satisfaction with leisure time, job

satisfaction, health satisfaction and so on. Another feature of the concept that made it more popular in economic welfare research is its direct assignability to the individual in question.

3.4. **Income distribution and financial satisfaction: Hypotheses**

As we saw, the effect of income distribution on individual bargaining power is analysed in the economic literature on various outcomes of welfare. In this chapter, we employ subjective economic well-being in the form of individual financial satisfaction as a measure of welfare. Previous research on the link between woman's financial resources and her financial satisfaction as an outcome variable, has generally found that unified model of household behaviour is not supported. In other words, the woman will be more financially satisfied the more income she brings to the household after controlling for family income. Bonke and Browning (2009b) test the effect of wife's income share on her financial satisfaction in Denmark rejecting the hypothesis of income pooling. Newman et al. (2008) also find the evidence of intra-household bargaining in the study on Irish data while Alessie, Crossley and Hildebrand (2006) demonstrate that sharing rule changes in favour of the woman the more she contributes to the household finances.

In this chapter we primarily analyse the following question: Does the individual income influence and change the bargaining power and financial position of a woman in a family? In other words, how is the family equilibrium influenced by woman's financial contributions to the family finances? Following the review of theory and empirical evidence, we hypothesize:

H1: The higher the woman's financial contributions to the household finances, the higher her financial satisfaction, net of the household income.

However, literature suggests that there are various factors, which might influence the level of sharing in the household. One possible factor is also the absolute level of household resources: there might be a relation between the position of household in income distribution with the level of intra-household inequality. This question is important because there are some members of non-poor families who are actually poor because they get only a part of financial resources. On the other hand, there might be family members in poor families who are actually not poor because they control most of the financial resources

(Phipps and Burton 1996). Doss (1996) finds that woman's income contributions matter in the lower expenditure quartiles, but she finds no impact of woman's income in better off households. This might imply higher intra-household inequality of poorer households. Kanbur and Haddad (1994) suggest that inequality in the households first increases and then decreases with higher household resources. However, there are also authors which instead show that members in the low income households share better (Pahl 1983).

In this chapter we also investigate if the woman's income share is equally important at all household income levels. As we saw, the empirical evidence on this is mixed and we test the view that:

H2: Wife's income contributions in high-income families matter less than in low-income families.

Social context in which family bargaining takes place is increasingly considered influential for family equilibrium. Countries differ in terms of their culture, institutional framework, labour and marriage markets equilibrium so it could be that there are also cross-country differences in the relationship between woman's income share and her financial satisfaction. In this chapter we apply the modified welfare regime typology (Esping-Andersen 1990, 1999; Lessenich 1995; Ferrara 1996) as we regard it relevant for the impact on woman's employment, and consequently, the share of woman's income in total household finances. We compare five countries Italy, Denmark, Ireland, France and Uk which belong to Mediterranean, Socio-Democratic, Conservative and Liberal welfare regime. To our knowledge, there is only one study which empirically tests the unified model in different welfare regimes using the data on financial satisfaction. Bonke (2008) compares liberal, conservative and socio-democratic regimes using individual financial satisfaction data and he concludes that in countries that are more egalitarian and where women contribute substantially to the household income, female income share is less of a bargaining instrument because it is seen as threat for dual earner model. On the other hand, he finds that in Southern Europe, which is characterized by a breadwinner model, female income is more of a straightforward bargaining instrument. Having in mind the differences in welfare regimes in terms of their impact on woman's employment⁹, in this chapter we also

⁹ This is elaborated in more detail in the introductory chapters.

ask whether they shape differently the behaviour of household members and add to the individual choices. We follow the view of Bonke (ibid) and hypothesize:

H3: The positive impact of woman's economic contributions on her financial satisfaction will be higher in Conservative and Mediterranean than in Liberal and Socio-Democratic welfare regime.

3.5. Data and design

3.5.1. Data

The data employed in this study are taken from the European community household survey from 1994-2001. This data set is attractive to answer the research questions for several reasons: first, it provides useful information on micro relations within family and their change in time, and second, the survey questions and structure enable comparison among a number of European countries. The analysis is restricted to heterosexual couples (married and cohabiting) where women are 18-50 years old and men 18 years old and above. The final sample of couples contains 53776 observations with the largest subsample of Italian data (17582) and other countries represented in the following order: France (13567), UK (10407), Ireland (6345) and Denmark (5875). The actual sample may vary due to the particularities of the techniques in use.

Our analysis includes one main dependent variable: woman's individual financial satisfaction which answers the question: 'How satisfied are you with your present financial situation?' The variable is coded into binary: 1 is satisfied with financial situation and 0 is unsatisfied with individual financial situation. We assume comparability of scores of financial satisfaction across individuals and countries. Relative woman's share is the percentage of woman's contribution to the family finances (woman's income/10xfamily income). Because investigation of the link between woman's income share and individual financial satisfaction requires controls for a number of demographic characteristics and fertility, our analysis include the following additional variables: Education levels of partners based on ISCED classification¹⁰, joint family income¹¹, birth cohorts for women¹²,

¹⁰ The variable education is based on the Isced classification: Isced 0-2- lower secondary education and below, Isced 3-upper secondary education, 5/7-post-secondary (non tertiary) and tertiary education.

the variable of financial hardship¹³, the age of partners¹⁴, the civil status (marriage versus cohabitation)¹⁵, the number of children and wave dummies to control for the period effects. To analyse the role of income quartiles on the patterns of income sharing, we divide households in four groups based on per capita income adjusted by the modified OECD scale (Hagenaars and Zaidi 1994) to take into account the economics of scale in consumption. This classification assigns the value of 1 to the household head, an additional value of 0.5 goes to the partner and 0.3 to each child.

3.5.2. *Techniques*

A number of factors may be correlated with the woman's financial satisfaction and relative income contributions, and we should choose these factors well in order to extract the impact of bargaining power; Any omission of important variables can create bias in results. But, there are also motivation, preferences, expectations and other individual traits we cannot observe in the data at all. Thus, our main concern here is to control for the unobserved heterogeneity and employ techniques that provide maximum reliability of results. For this reason, we test the impact of woman's income share on her financial satisfaction in a longitudinal framework with fixed effects and random intercept models. The first technique fully controls for time invariant characteristics by examining the within individual differences and measures only the effect of time variant characteristics. It also enables us to detect potential causalities due to its similarity to the experimental design. On the other hand, random intercept models are more parsimonious because they model unobserved differences as random variable. Unlike fixed effect models they allow for the estimates of the individual effect

¹¹ Household income is a sum of all entrances including earnings, state benefits, non-private incomes and collective entrances. The incomes are logged and matched to refer to the current year as the ECHP gives information on the income obtained in the previous year.

¹² There are five birth cohorts: 1. women born from 1944-1955, 2. women born from 1956- 1965, 3. women from 1966-1976 and 4. Women born from 1977-1983.

¹³ Financial hardship is a binary variable that shows difficulty to make ends meet and it is 1 when family feels financial hardship and 0 when family does not feel financial hardship.

¹⁴ Age is a continuous variable.

¹⁵ Marital status shows individual civil status in the moment of interview. It is a dichotomous variable coded 1 when woman is married and 0 when a woman is cohabiting.

which is also important for our analysis. To diminish the trade off-s of each technique we analyse the estimates obtained from both of them.¹⁶

3.6. Results

The analysis is divided into three parts: the first part deals with the descriptive statistics of the main dependent and independent variable, the second part explains links between women's income share and financial satisfaction in the pooled sample with all the countries and for each country independently, the third part introduces the household income quartiles in the analysis. The relation between woman's income share and her financial satisfaction is analysed in four household income quartiles.

3.6.1. *Descriptive statistics*

The table 3.1 shows the income distribution in couples in five studied countries. We observe unequal income contributions of partners in all the five countries, although there are significant country differences: Italian women contribute only a quarter of the household income as well as Irish women, whereas French and British women contribute around one third of the household income. The most equal distribution is present in Denmark where women contribute on average 45% of income. In terms of welfare regimes, the socio-democratic regimes is the most equal when it comes to household income distribution, followed by liberal and conservative regimes, and finally, the Mediterranean block. However, Ireland is here an outlier: despite being a part of liberal welfare regime, it is the most similar to Italy. The table also shows that there is not great variation by age groups.

¹⁶ The main issue of fixed model is their efficiency; they take the differences within individuals and average them over sample. If there is little variation for each individual, the standard errors are large and estimates lose precision. The problem of random intercept model is bias; The model assumes that error term is not correlated with the explanatory variables, which is questionable due to unobserved heterogeneity. So, the random intercept models give us more efficiency but could lead to more biased results.

Table 3.1: *Woman's relative income share by country (by age groups)*

	Average(s.d)	Age			N
		18-30	31-40	41-50	
Denmark	44,86 (12,94)	44,25 (12,45)	45,96 (12,02)	43,99 (14,29)	5901
France	32,18 (20,19)	35,72 (19,09)	32,10 (19,80)	30,02 (20,98)	14080
Ireland	25,11 (21,48)	31,13 (19,90)	25,89 (21,17)	21,62 (21,82)	6423
Italy	23,84 (26,36)	23,19 (26,74)	24,41 (26,40)	23,52 (26,11)	17947
UK	35,10 (18,74)	37,06 (17,32)	34,59 (19,37)	33,90 (19,05)	10577

The table 3.2 shows the difference in average woman's financial satisfaction across countries. On average the highest proportion of financially satisfied women is in Denmark (80%), followed by the Uk (70%), France and Ireland (58%) and Italy (45%). Again the Mediterranean model is on the bottom of the classification.

Table 3.2: *Individual financial satisfaction (married/cohabiting women) by country (by age groups)*

	Average (s.d)	Age			N
		18-30	31-40	41-50	
Denmark	0,81 (0,39)	0,72 (0,44)	0,81 (0,39)	0,87 (0,33)	5901
France	0,58 (0,49)	0,59 (0,49)	0,58 (0,49)	0,58 (0,49)	14080
Ireland	0,57 (0,49)	0,57 (0,49)	0,56 (0,50)	0,60 (0,49)	6423
Italy	0,45 (0,50)	0,41 (0,49)	0,46 (0,50)	0,46 (0,50)	17947
UK	0,69 (0,46)	0,71 (0,45)	0,68 (0,46)	0,69 (0,46)	10577

3.6.2. Does woman's income share affect her perceived economic well-being?

We examine estimates from two specifications that in a different way control for the unobserved heterogeneity in order to test for the existence of the unified model of the household behaviour. The odds ratios and the standard errors for the fixed and random intercept model are presented in the table 3.3.

Table 3.3: *The effect of woman's income share on her financial satisfaction: Estimated odds ratios from logistic fixed effect and random intercept models (pooled regression)*

	Model 1		Model 2	
	Fixed effects	Random intercept	Fixed effects	Random intercept
Woman's income share	1.045*** (0.013)	1.032*** (0.008)	1.112** (0.055)	1.136*** (0.042)
Family income	1.598*** (0.074)	2.472*** (0.087)	1.608*** (0.074)	2.478*** (0.088)
Age(f)	1.031*** (0.008)	1.014* (0.008)	1.030*** (0.008)	1.013* (0.008)
Financial hardship	0.203*** (0.007)	0.095*** (0.003)	0.202*** (0.007)	0.095*** (0.003)
Tertiary education (f)	1.183 (0.129)	1.249*** (0.067)	1.179 (0.128)	1.255*** (0.068)
Secondary education (f)	0.950 (0.069)	1.175*** (0.049)	0.951 (0.069)	1.175*** (0.049)
Tertiary education (m)	1.215 (0.148)	1.163*** (0.062)	1.222 (0.149)	1.162*** (0.062)
Secondary education (m)	1.100 (0.077)	1.147*** (0.047)	1.100 (0.077)	1.148*** (0.047)
children	0.989 (0.031)	0.933*** (0.016)	0.989 (0.031)	0.930*** (0.016)
married (re.cohab.)	1.085 (0.117)	1.364*** (0.077)	1.085 (0.117)	1.359*** (0.077)
Ukxshare (ref. Denmark)			0.970 (0.058)	0.915* (0.039)
Francexshare			0.926 (0.052)	0.880*** (0.036)
Irxshare			0.949 (0.058)	0.873*** (0.037)
Itxshare			0.927 (0.049)	0.921** (0.036)
Age (m)		0.992* (0.004)		0.992* (0.004)
Coh_f1 (1944-1955)		0.820 (0.111)		0.822 (0.111)
Coh_f2 (1956-1965)		0.874* (0.069)		0.877* (0.069)
Coh_f4 (1977-1983)		0.728* (0.123)		0.727* (0.123)

Table 3.3: *continued*

wave2		0.960 (0.041)		0.961 (0.041)
wave3		0.800*** (0.036)		0.803*** (0.036)
wave4		0.822*** (0.040)		0.821*** (0.040)
wave5		0.960 (0.050)		0.960 (0.050)
wave6		0.961 (0.054)		0.961 (0.054)
wave7		0.897* (0.054)		0.898* (0.054)
UK		0.635*** (0.050)		0.952 (0.187)
France		0.349*** (0.026)		0.596*** (0.112)
Italy		0.336*** (0.026)		0.501*** (0.093)
Ireland		0.622*** (0.053)		1.064 (0.207)
ψ		1.95 (0.07)		1.95 (0.07)
Log Likelihood	10023.56	-25416.63	-10021.92	-25408.72
N	28822	53776	28822	53776

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

The pooled model without any country dummies interacted with income share provides evidence that the woman's income share affects woman's economic well-being. The coefficient is small but statistically significant. For the entire sample, the more the woman contributes to the family finances, the higher the odds that she will be satisfied with her financial situation. This contradicts the unified model and points to the percentage of household income share as a measure of woman's bargaining power. Thus, our first hypothesis is confirmed in the data.

The model includes various controls such as age and education of partners, financial hardship, the number of children and civil status. For instance, we would expect that the presence of children lowers woman's financial satisfaction due to financial hardship and this is exactly what we observe in the random intercept model. However, the coefficient in the fixed model is not significant, perhaps due to small within individual variation. In addition, the link between financial satisfaction and financial hardship is straightforward. The odds that women are

financially satisfied when they face financial hardship are only around 10-20 % as large as the odds for those women that do not face financial hardship. Explanatory variables that do not vary over time are excluded from the fixed effect model but are included in the random intercept model: cohort effects, period effects and country dummies. In this first stage, we observe a significant country effect in the sample: the odds that a married/cohabiting woman is financially satisfied is several times higher in Denmark than in other present countries, though Italy and France show different pattern from the UK and Ireland.

Our third hypothesis on welfare regime differences suggests that positive impact of woman's economic contributions on her financial satisfaction will be higher in Conservative and Mediterranean than in Liberal and Socio-Democratic welfare regime. In the next step, we estimate a model with the country dummies interacted with woman's income share and expect them to be significant. However, the estimates of the interactions show quite mixed evidence: They are significant in the random intercept model but not in the fixed effect model, although of the similar magnitude. In the random effect pooled model, with every 10% of increase in the woman's financial contributions within the family, the odds of financial satisfaction increase around 13% in Denmark, 4% in the UK, 5% in Italy while the odds ratio for Ireland and France is around 1.

To see whether the effect of income distribution on woman's financial satisfaction remains the same in a single country study, we also run a separate fixed effect and random effect regression for each country and compare them with the pooled regression. Here in the table 3.4, we see a similar pattern to the results obtained in the pooled regression although, this time, the estimates from fixed effects and random intercept model converge. The models reveal positive and significant coefficient of woman's income share in Denmark, UK and Italy, and insignificant coefficients for France and Ireland, confirming as well the previous results. One interesting result is obtained for the UK sample: in the fixed models, the effect of woman's income is strengthened in comparison to the random regression. The common expectation would be that unobserved characteristics such as motivation or preferences would push the results in a positive direction but this is not the case. In other words, the bias due to unobserved heterogeneity in random intercept models for UK is downward.

Finally, these results also point to the conclusion that our hypothesis on the role of welfare regimes is not confirmed, as countries do not group together as expected. We hypothesized that the effect of woman's income would be stronger in Italy and France, than in the UK, Ireland and Denmark. Instead, we observe that there is no effect of woman's income in France at all, and the effect of woman's income share is the strongest in Denmark.

Table 3.4: *The effect of woman's income share on her financial satisfaction:
Estimated odds ratios from logistic fixed effect and random intercept models, by country*

	Denmark		Italy		UK		France		Ireland	
	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random intercept
Woman's income share	1.113** (0.056)	1.135*** (0.044)	1.031* (0.018)	1.052*** (0.011)	1.167*** (0.052)	1.079*** (0.028)	1.039 (0.029)	1.007 (0.018)	1.058 (0.038)	1.002 (0.022)
Family income	1.701** (0.387)	3.110*** (0.544)	1.262*** (0.071)	2.078*** (0.100)	4.812*** (0.874)	3.916*** (0.443)	1.786*** (0.210)	2.590*** (0.219)	1.846*** (0.265)	3.054*** (0.309)
Age(f)	1.023 (0.032)	1.069*** (0.027)	1.038*** (0.013)	1.024* (0.014)	0.961 (0.030)	0.946*** (0.020)	1.008 (0.019)	1.001 (0.016)	1.016 (0.026)	1.031 (0.023)
Financial hardship (yes=1)	0.213*** (0.028)	0.109*** (0.012)	0.361*** (0.020)	0.171*** (0.009)	0.038*** (0.004)	0.014*** (0.001)	0.177*** (0.014)	0.075*** (0.005)	0.436*** (0.045)	0.221*** (0.019)
Tertiary education (f)	1.386 (0.433)	1.572*** (0.266)	1.457 (0.511)	1.343** (0.171)	0.940 (0.202)	0.957 (0.111)	0.811 (0.255)	1.002 (0.114)	1.004 (0.368)	1.204 (0.205)
Secondary education (f)	0.792 (0.217)	1.390** (0.205)	1.125 (0.158)	1.355*** (0.092)	0.954 (0.203)	1.151 (0.161)	0.848 (0.111)	0.939 (0.079)	0.921 (0.212)	1.315** (0.143)
Tertiary education (m)	1.063 (0.376)	0.835 (0.147)	1.712 (0.999)	1.574*** (0.192)	1.455 (0.355)	0.991 (0.113)	1.623 (0.670)	1.044 (0.121)	0.927 (0.416)	1.395** (0.224)
Secondary education (m)	1.261 (0.393)	1.083 (0.166)	1.216 (0.155)	1.371*** (0.089)	1.317 (0.335)	1.164 (0.175)	1.044 (0.127)	1.058 (0.087)	0.853 (0.169)	1.044 (0.110)
children	0.826* (0.085)	0.894* (0.052)	1.086 (0.058)	1.010 (0.032)	0.732*** (0.070)	0.783*** (0.038)	1.245*** (0.078)	0.988 (0.035)	0.855** (0.064)	0.868*** (0.031)
married (ref.cohab.)	0.802 (0.173)	1.343** (0.179)	2.028 -1.104	1.110 (0.231)	1.181 (0.290)	1.390** (0.182)	1.426* (0.287)	1.464*** (0.144)	1.170 (0.609)	1.085 (0.257)
Age (m)		1.014 (0.014)		0.991 (0.008)		1.009 (0.010)		0.982** (0.008)		0.993 (0.013)
Coh_f1 (1944-1955)		0.484* (0.213)		0.779 (0.171)		1.792 (0.708)		0.843 (0.236)		0.668 (0.246)
Coh_f2 (1956-1965)		0.693 (0.174)		0.815 (0.105)		1.553** (0.344)		0.790 (0.130)		0.834 (0.185)
Coh_f4 (1977-1983)		1.115 (0.431)		0.578 (0.229)		0.801 (0.278)		0.591 (0.222)		1.179 -1.122

Table 3.4: *continued*

wave2		0.738** (0.110)	1.032 (0.073)		1.196 (0.153)		0.829** (0.070)		0.994 (0.106)	
wave3		0.652*** (0.104)	0.755*** (0.057)		1.024 (0.136)		0.842* (0.075)		0.828 (0.095)	
wave4		0.846 (0.145)	0.623*** (0.050)		1.141 (0.164)		0.939 (0.091)		0.947 (0.119)	
wave5		0.604*** (0.107)	0.947 (0.079)		1.413** (0.219)		0.944 (0.100)		0.800 (0.112)	
wave6		0.526*** (0.099)	0.966 (0.087)		1.373* (0.228)		0.912 (0.106)		0.729** (0.116)	
wave7		0.415*** (0.083)	0.926 (0.091)		1.020 (0.183)		0.982 (0.122)		0.656** (0.116)	
ψ		1.79 (0.23)	1.80 (0.11)		2.71 (0.23)		2.15 (0.15)		1.89 (0.19)	
Log Likelihood	-806.87	-2205.04	-3863.59	-9283.61	-1149.48	-3471.75	-2534.76	-6465.94	-1361.50	-3438.42
N	2359	5875	10346	17582	5203	10407	7334	13567	3580	6345

* significant at 10%; ** significant at 5%; *** significant at 1%

3.6.3. *Is the effect of woman's income share the same at all income levels?*

Our second hypothesis was that the effect of individual woman's resources on woman's financial satisfaction would vary across income quartiles: we expect that wife's income contributions in high income families matter less than in low income families. We divided the each country sample in four (per capita) household income quartiles in order to take into account the various living standards in Europe. To obtain per capita income, the modified OECD equivalence scale was used.

The figure 3.1 shows the mean scores of woman's income share by income quartile for each country.

Figure 3.1: *Woman's income share by quartile, by country*

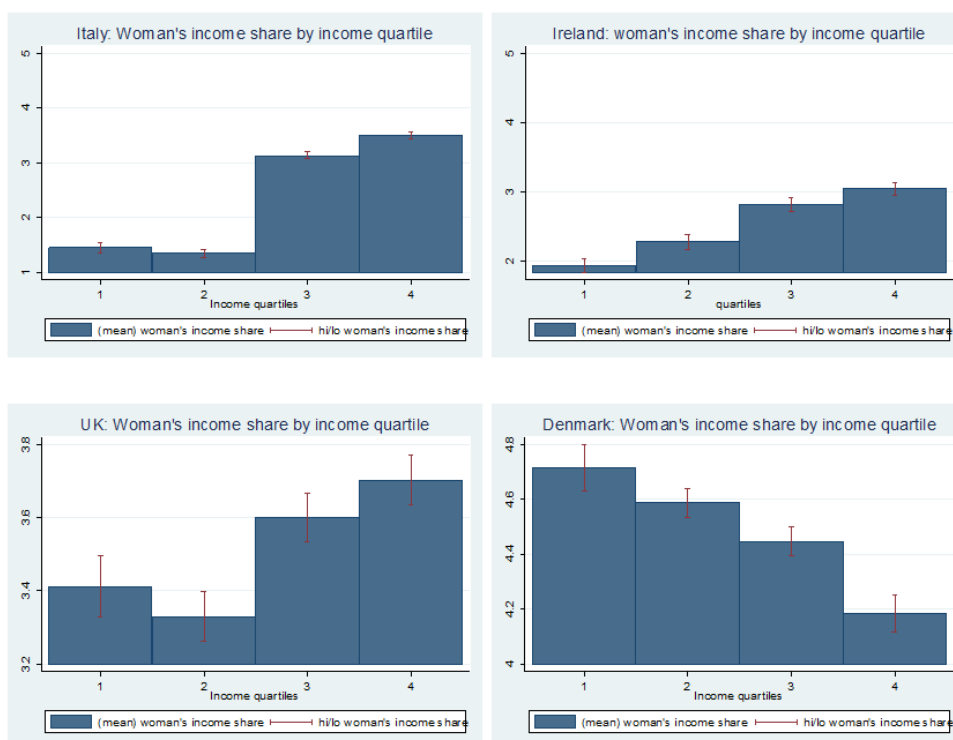
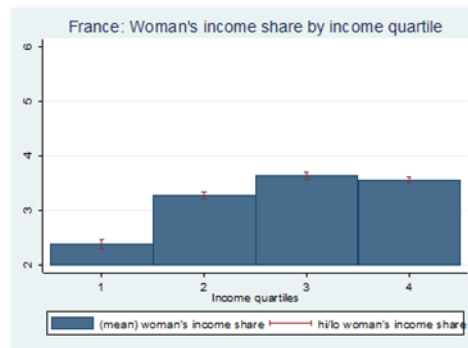


Figure 3.1: *continued*



The largest is the difference in trend between Denmark and all the other countries: the mean percentage of woman's income share in Denmark becomes (slightly) lower with each next quartile, while in the other four countries, the pattern is clearly different: the highest is the woman's income share in the top two quartiles. This might mean that the families in the bottom of income distribution are often one-earner families except from Denmark. In addition, the lowest mean income shares in general and especially in the bottom two quartiles, are in Italy and Ireland, reflecting among other factors, a very low level of female labour force participation.

The separate country regressions present a good way of estimating the role that income quartiles play in different country contexts. Again, in the table 3.5 we compare the fixed effects and random intercept models for more precision. Overall, the results offer evidence that there is no a different path in income sharing in various income quartiles because the interactions are not significant. The only exceptions are Uk and France where, on the contrary to our hypothesis, we observe that women seem to share better at lower income levels. In other words, woman's individual income plays a more important role in higher income quartiles than in lower income quartiles in these two countries. Comparing the fixed effect and random intercept estimates points to the same conclusion. Here,

in both France and UK, we also identify unobserved individual characteristics that decrease the likelihood of financial satisfaction: the estimates of woman's income share are lower in magnitude in the random intercept models.

Table 3.5: *The effect of woman's income share on her financial satisfaction:*

Estimated odds ratios from logistic fixed effect and random intercept models for four income quartiles, by country

	Denmark		Italy		UK		France		Ireland	
	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random intercept	Fixed effects	Random effects
Woman's income share	1.128* (0.070)	1.204** (0.105)	1.061** (0.029)	1.059** (0.027)	1.327*** (0.086)	1.167*** (0.070)	1.197*** (0.053)	1.074* (0.042)	1.063 (0.059)	0.947 (0.044)
Family income	1.829* (0.590)	2.697*** (0.781)	1.204*** (0.073)	1.394*** (0.093)	3.633*** (0.792)	2.293*** (0.407)	1.339** (0.169)	1.393*** (0.161)	1.577*** (0.254)	1.550*** (0.262)
Age(f)	1.026 (0.032)	1.069*** (0.027)	1.039*** (0.013)	1.022 (0.014)	0.951 (0.030)	0.947*** (0.020)	1.004 (0.019)	0.998 (0.016)	1.024 (0.027)	1.032 (0.024)
Financial hardship (yes=1)	0.214*** (0.028)	0.109*** (0.012)	0.361*** (0.020)	0.176*** (0.009)	0.038*** (0.004)	0.014*** (0.001)	0.181*** (0.014)	0.079*** (0.005)	0.427*** (0.044)	0.222*** (0.019)
Tertiary education (f)	1.401 (0.438)	1.565*** (0.266)	1.454 (0.511)	1.250* (0.159)	0.930 (0.201)	0.935 (0.108)	0.804 (0.254)	0.883 (0.101)	0.943 (0.346)	1.203 (0.208)
Secondary education (f)	0.794 (0.217)	1.389** (0.205)	1.122 (0.158)	1.295*** (0.089)	0.948 (0.202)	1.151 (0.162)	0.832 (0.109)	0.894 (0.075)	0.905 (0.208)	1.259** (0.138)
Tertiary education (m)	1.042 (0.369)	0.819 (0.145)	1.752 -1.026	1.507*** (0.184)	1.504* (0.370)	0.965 (0.111)	1.634 (0.675)	1.017 (0.120)	0.945 (0.424)	1.321* (0.215)
Secondary education (m)	1.245 (0.388)	1.074 (0.165)	1.210 (0.154)	1.335*** (0.087)	1.374 (0.353)	1.180 (0.178)	1.073 (0.131)	1.058 (0.088)	0.863 (0.171)	1.027 (0.109)
children	0.818* (0.090)	0.923 (0.066)	1.091 (0.059)	1.082** (0.036)	0.767*** (0.076)	0.860*** (0.046)	1.316*** (0.084)	1.100** (0.042)	0.877* (0.066)	0.951 (0.040)
married (ref.cohab.)	0.793 (0.172)	1.341** (0.179)	2.003 -1.089	1.140 (0.237)	1.190 (0.294)	1.405*** (0.185)	1.420* (0.287)	1.469*** (0.145)	1.194 (0.618)	1.083 (0.257)
quart1xshareq	0.996 (0.062)	0.932 (0.092)	0.941* (0.030)	0.960 (0.029)	0.836*** (0.057)	0.868** (0.060)	0.803*** (0.037)	0.888** (0.042)	0.910 (0.059)	1.015 (0.059)
quart2xshareq	0.969 (0.049)	0.976 (0.118)	0.982 (0.026)	0.974 (0.030)	0.871** (0.047)	0.948 (0.067)	0.915** (0.034)	0.884** (0.043)	1.056 (0.052)	1.106* (0.061)
quart3xshareq	0.946 (0.042)	0.872 (0.105)	1.004 (0.021)	1.014 (0.031)	0.895** (0.040)	0.894 (0.065)	0.953* (0.028)	1.001 (0.048)	1.054 (0.041)	1.019 (0.054)
Age (m)		1.014 (0.014)		0.995 (0.008)		1.010 (0.010)		0.984* (0.009)		0.996 (0.013)

Table 3.5: *continued*

Coh_f1 (1944-1955)	0.488 (0.215)	0.808 (0.177)	1.847 (0.730)	0.864 (0.242)	0.659 (0.244)					
Coh_f2 (1956-1965)	0.689 (0.173)	0.818 (0.105)	1.549** (0.343)	0.775 (0.128)	0.811 (0.180)					
Coh_f4 (1977-1983)	1.109 (0.430)	0.564 (0.223)	0.874 (0.304)	0.631 (0.237)	1.174 -1.122					
quartileq1	1.087 (0.540)	0.426*** (0.065)	0.589 (0.202)	0.441*** (0.100)	0.292*** (0.088)					
quartileq2	0.855 (0.483)	0.668*** (0.085)	0.536** (0.166)	0.790 (0.166)	0.463*** (0.109)					
quartileq3	1.497 (0.816)	0.751** (0.094)	0.875 (0.262)	0.630** (0.124)	0.773 (0.161)					
wave2	0.735** (0.109)	1.048 (0.075)	1.207 (0.154)	0.826** (0.070)	0.986 (0.106)					
wave3	0.648*** (0.104)	0.756*** (0.057)	1.034 (0.138)	0.823** (0.074)	0.823* (0.096)					
wave4	0.845 (0.145)	0.619*** (0.050)	1.113 (0.160)	0.915 (0.089)	0.927 (0.117)					
wave5	0.599*** (0.106)	0.939 (0.079)	1.388** (0.215)	0.923 (0.098)	0.778* (0.109)					
wave6	0.519*** (0.098)	0.949 (0.086)	1.324* (0.221)	0.869 (0.101)	0.703** (0.113)					
wave7	0.408*** (0.082)	0.910 (0.089)	0.942 (0.170)	0.933 (0.116)	0.637** (0.113)					
ψ	1.80 (0.23)	1.78 (0.11)	2.70 (0.23)	2.15 (0.15)	1.90 (0.19)					
Log Likelihood	-805.46	-2203.37	-3860.73	-9252.63	-1145.46	-3459.33	-2521.35	-6431.34	-1354.35	-3423.26
N	2359	5875	10346	17582	5203	10407	7334	13567	3580	6345

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

To sum up, our analysis suggests the importance of the woman's income for her economic well-being. The relationship between the two is found overall positive which confirms our first hypothesis and is in line with all the bargaining frameworks. We also test whether the positive impact of woman's economic contributions on her financial satisfaction is higher in Conservative and Mediterranean than in Liberal and Socio-Democratic welfare regime. The results indicate the cross-country variation as the coefficient of woman's income share is stronger and significant in some countries - Denmark, Italy and UK, than in others- Ireland and France. However, our hypothesis is not confirmed. We observe that there is no effect of woman's income in France at all, and the effect of woman's income share is the strongest in Denmark, contrary to our expectations. Finally, one might expect that belonging to different income quartiles leads to a different relationship between woman's income contributions and financial satisfaction. Our analysis shows that there are no different paths in sharing across income quartiles, with the exception of UK and France. Contrary to what we expected, in these two countries, the lower income levels seem to provide more basis for equal control over financial resources than higher income quartiles. We need to keep in mind the problem of the unobserved heterogeneity which renders conclusions more difficult and less straightforward.

3.7. Conclusions

This chapter analysed how economic well-being of women changes with the presence of their personal income. This question is of great importance given that more women participate in the labour markets and contribute to the household finances. Economics suggests various theories that explain the way family performs its functions and determines the well-being of its members. The theory of Gary Becker idealizes family seeing it as a rational unit where both wife and husband aim at the maximization of family resources. On the other hand, the bargaining perspective highlights that the households' behaviour depends largely on family dynamics and bargain between partners. The development of this approach led to cooperative, non-cooperative and collective bargaining models that explain better the reality of interactions within household.

There is large empirical evidence against unitary models of household behaviour and this chapter presents another contribution to the empirics. The novelty of our approach lies in the concept of individual welfare, which is presented through the subjective economic well-being- individual financial satisfaction. In most of the economic research, when testing against unitary models, objective outcome of well-being have been considered, such as expenditures, consumption or leisure time. However, the focus on pure goods for individual welfare conceals the complex set of psychological, social and economic conditions which may influence human well-being. Indeed, the reason why subjective well-being is increasingly used to represent well-being in economic and social research is its capacity to reveal the real individual conditions. This was also our motivation for including it as an indicator of well-being. We also add to the current literature for the inclusion of social context in explaining bargaining between partners-the topic largely discussed by sociologists and anthropologists, but rarely present in economics. Five European countries: Denmark, Italy, Uk, France and Ireland which belong to Socio-Democratic, Liberal, Mediterranean and conservative welfare regime, are analysed and compared.

In this chapter, we find the evidence that economic independence is positive for married and cohabiting women leading to their higher level of economic well-being. The impact of individual resources on economic well-being is performed through the change in intra-household bargaining power. In examining the link between ownership of resources and financial satisfaction, we also find that country context matter and that the strength of the association changes from country to country. However, the country differences do not show a clear pattern and with this analysis we were not able to derive further conclusions on the way in which different welfare regimes alter the relation between income and woman's well-being. Among the questions we analysed is also whether the woman's income is equally important at all income levels. Some may suggest that women living in rich households are less in need of financial resources and their own income. Contrary to this common belief, our findings point that there are no different paths in income sharing across income quartiles, although the results might differ in particular cases. In the Uk and France, the income for women is

even more important in higher income quartiles as the households in the low bottom of income distribution may actually be closer to the unitary model of behaviour.

The next chapter will investigate in more detail the role of woman's economic dependency for her well-being by incorporating woman's employment path and career prospects. In addition, the inclusion of woman's employment in the analysis may provide more insight into the differences between countries (welfare regimes) that we found in our data without being able to explain them in more detail.

Chapter 4: European women: the link between money, career and economic well-being

4.1. Introduction

As we saw in the previous chapter, economists have been continuously testing whether and how woman's financial independence plays a role for her economic well-being; the impact of individual resources on woman's economic well-being is led by the change of her intra-household bargaining power (Manser and Brown 1980; McElroy and Horney 1981). In addition, a large body of the sociological literature deals with the same topic. In a classic study of Blood and Wolfe (1960), it is shown that exchange of power in marriage draws on the individual financial contributions of spouses and that women who have access to their own economic resources have higher well-being. Blumstein and Schwartz (1984) confirm this conclusion when analyzing the role of wife's income contributions for the balance of power between spouses. Also, Sorensen and McLanahan (1987) suggest that the level of married woman's economic dependency alters the power structure of the family with concrete implications for woman's well-being.

However, the sociological theory also suggests that bargaining power of partners does not depend only on financial reasoning. It is more likely that the intra-household relations and woman's economic well-being within family can be further explained by a range of woman's intellectual capabilities and achievements (Gerson 1985, 1993; Hochschild, 1989), physical and affective characteristics (Safilios-Rothschild 1976; Hakim 2010) and even by macro factors such as the characteristics of the system in which women and men exercise their right to work (Vogler 1998). The latter is important because unequal pay between men and women and gender occupational segregation are also translated on the family dynamics and individual economic well-being of the family members. An important theoretical sub-stance in this literature is that woman's career prospects and work trajectories matter above money for the process of negotiation in the family and woman's well-being (Gerson 1985, 1993; Hochschild, 1989; Hakim

1991, 1996, 2000). For instance, Gerson (1985, 1993) proposes that modern women are free to choose between various options, from domestic to non-domestic careers, but also implies that good working career prospects are beneficial for woman's economic well-being more than the other choices (Gerson 1993). Hochschild (1989) distinguishes between the impact of a fulfilling career and pure jobs for woman's well-being. Also, Hakim (2000) considers three possible careers for women, e.g. homemaking, working career and work without career intentions, but, instead, she regards them equal in their effect on woman's economic well-being. Furthermore, Hakim focuses in more detail on various forms of labour market participation, such as part-time work, continuous part-time work, low-paid non-career full time jobs, career jobs etc. (Hakim 1991, 1996; Hakim and Blossfeld 1997).

The impact of personal income on woman's well-being has been empirically studied substantially over the last century. However, the role of various employment options for women has not attracted the equal attention. There has been empirical research on the association between woman's career path and well-being (Gerson 1993, 2009; Damaske 2011), on whether full-time and part-time employment affect differently woman's influence over expenditures and sharing (Vogler and Pahl 1993; Stier and Lewin-Epstein 2000) and on the linkage between woman's working hours and her welfare (Boye 2009). Furthermore, some of the authors (Boye 2009) also incorporated the institutional context into the analysis of the effect of woman's employment because of its important role in altering both the opportunity costs of woman's choices and the view of acceptable woman's careers. However, there has not been a study, which systematically captures woman's employment in all its complexity as, for instance, found in the mentioned classifications of Hakim (Hakim 1991, 1996, 2000), and Gerson (1985, 2009).

This chapter contributes to the relevant empirics for several reasons. First, we study how a range of diverse work choices and career prospects influence woman's financial well-being within the family. Second, we study how the potential associations differ in UK, Ireland, Denmark, France and Italy following the 'modified' welfare regime classification (Esping-Andersen 1990, 1999; Lessenich 1995; Ferrara 1996). Third, we apply a subjective measure of woman's

economic well-being in the form of financial satisfaction because it captures economic well-being directly and accounts for a range of economic but also non-economic factors, which could influence an individual. The chapter starts with an overview of previous research on the topic; it elaborates more on the chosen concept of well-being and introduces the comparative perspective. Next, our main hypotheses are discussed followed by the description of data and methods in use. The final section explains the results and brings forward the conclusions.

4.2. Money versus work and career: theory and empirical evidence

That money is the most basic measure of command of resources and economic welfare we were taught by economic bargaining theories but as Amartya Sen often underlines- money is also important not as “an end in itself but rather a means to an end, allowing freedom to function and participate” (Nolan and Whelen 1996:198). A close look into the economic literature shows us that the relevant economic research translates woman’s employment participation in her personal income (earnings, wages or other work and non-work related income contributions), which has the potential to change the allocation of resources within family, influence her so-called bargaining position and consequently her well-being (Lundberg and Pollack 1996). Still, the complex process of human interactions, and especially gender relations, might not always be understood well in terms of income, as income on its own may be a relatively poor proxy for one’s behaviour (Goldthorpe 2009). Thus, family dynamics and woman’s welfare may be studied with more precision by broadening the view of how female labour participation is defined.

As we saw, there is a theoretical stance in the sociological literature that enriches the economic vision of how the individual income contribution translates into higher well-being with the inclusion of employment patterns, future career prospects and commitment to personal occupation (Gerson 1993; Hakim 2000). In this perspective, there are factors which matter for women beyond money. The source of the money is important (Zelizer 1997), the amount of working hours matters (Boye 2009), future career prospects change the meaning of income (Gerson 1993) and also the choice of part time or full time work makes a difference for woman’s position within family and her welfare (Vogler and Pahl

1993). Also, a woman's long term commitment to work is thought to add to the pure material achievements (Hakim 1991).

Two more complete sociological explanations arose within this approach. Gerson (1985) was first to define woman's preferences for the type of life style, dividing women into domestic with focus on homemaking, children and possibly female non-career professions and nondomestic who are oriented towards career and full-time employment. The two groups further comprise working mothers, childless working women, fully career committed women and so on. Later this classification has been revised to include self-reliant, egalitarian and neo-traditional women (Gerson 2009)¹⁷. Similarly, Hakim (2000) distinguishes between the three groups of women that she classifies as: home-centered (homemakers), adaptive (work but not career oriented) and career-oriented. In her view, women today have a choice between various 'careers' from a 'marriage' career to a working career with their equal impact on personal material well-being. She also further enriches this classification attaching, for instance, part time work and discontinuous employment to adaptive women (Hakim 1991). These work options are often characterized by lower work attachment: the first one due to the spells out of the labour market and return to the labour force various times in the life cycle and the latter, due to the lower job quality and less job responsibility in comparison to full-time work (Blossfeld and Hakim 1997). On the other hand, the choice of high-level occupations is associated with career-oriented women as these occupations mean a better status and appreciation as well as a higher stability of career (Hakim 1996).

Empirical evidence on the effect of woman's employment choices on her well-being goes in various directions. For instance, Gerson (1993) in a study of American couples, using in depth interview and life histories, finds that equality of sharing within family, from income to parental duties, takes place more often when woman's potential in terms of work and career is outstanding. She argues that higher husband's earnings do not necessarily change negatively the family dynamics, because woman's career matters beyond income for woman's well-

¹⁷ Self-reliant are work-oriented women, egalitarian are women who choose to balance private and professional life while neo-traditional women are oriented domestically. The groups also correspond to the classification of women suggested by Hakim (2000).

being: 'Even when earnings of women do not outpace her husbands, her long term career prospects might' (Gerson 1993:232). Similarly, the earlier study of Hochschild (1989) points to the reality of 1980's in The United States, where women were already looking for a fulfilling career rather than pure jobs. She also adds the distinction between 'wives in jobs' and 'career wives' and compares how much this difference affects control over spending and housework. Other authors study particular dimensions of woman's employment. In an interesting study of Damaske (2011) it is suggested that what matters is how women have worked during their lives rather than whether currently they work or not. She also shows and explains the association of class with employment: working class women are more likely to experience interrupted career patterns and spells of unemployment, while middle class women often stay for a long time in full-time employment. Vogler and Pahl (1993) and Stier and Lewin-Epstein (2000) instead look at whether control over expenditures and household financial management depend on woman's full time employment comparing it with the part-time work. They conclude that part-time work is not equally beneficial for woman's financial equality as it does not offer them the equal rights in the family. Stier and Lewin-Epstein (ibid.) further explain that part-time does not have the same impact on egalitarian arrangement perhaps also because it implies lower rewards and lower career prospects. Boye (2009) analyses the association between paid working hours and woman's well-being in 18 European countries. She finds various patters in this association depending on the welfare regimes: the most positive association characterizes traditional welfare regimes whereas the lowest association is found in market oriented regimes. She interprets the results in the context of work-family balance which is influenced by the welfare regime. Here, however, woman's career opportunities are not considered.

In addition, there is a large amount of literature, which studies the general effects of employment and unemployment on well-being (Winkelmann and Winkelmann 1998; Vendrik and Woltjer 2006; Frey and Stutzer 2002a), without directly focusing on women.

4.3. Explaining (the economic) well-being

As we saw, in measuring human welfare, standard socio-economic research largely relies on objective and observable outcomes. Thus, human well-being is often represented by measures that objectively capture individual conditions such as individual income and consumption, leisure time and housework. But, individual preferences and real human well-being may diverge from each other (Easterlin 1974) so that material achievements and income are not necessarily the best reflections of human well-being. If we define the well-being as 'individual's personal assessment of their own well-being according to their own opinion', McBride (2001:253), we get closer to the real well-being of the person (Frey and Stutzer 2002a) and broaden our perspective as the concept of subjective well-being encompasses both economic and non-economic dimensions of person's life.

There are many empirical studies, which confirm the correlation of subjective well-being to utility in the economic sense of the word (Frey and Stutzer 2002b; Van Praag, Frijters and Ferrero-i-Carbonell 2003; Senik 2004). Consequently, subjective measures are lately often used in relation to the objective conditions such as income and work (McBride 2001; Bonke and Browning 2009b, Newman, Delaney and Nolan 2008). However, subjective well-being is a rather broad concept and it often incorporates more than one dimension: it might refer to well-being concerning finances, health conditions, housing conditions, family life etc. Economic dimensions of well-being are important because they reflect a complexity of material conditions including consumption and are also one of the main determinants of overall satisfaction and human well-being (van Praag et al. 2003). In addition, financial considerations are of great significance for a married woman, which all together narrows our interest towards the concept of subjective economic well-being, that is, financial satisfaction.

As we already mentioned, several recent studies used the concept of financial satisfaction to explain the economic well-being and mostly in relation to the individual income and (un)employment (Alessie, Crossley and Hildebrand 2006; Bonke and Browning 2009b; Bonke 2008). For instance, Bonke and Browning (2009b) test the effects of household income, personal income share

and employment status on financial satisfaction in Denmark. Newman et al. (2008) also test the role of current income, income expectations, income time-paths and income share on individual financial satisfaction using the data from Ireland. Bonke (2008) examines the consequences of income distribution for individual financial satisfaction in various welfare regimes. These studies, however, do not systematically confront financial satisfaction with employment, but rather touch upon it, studying primarily the effects of income and income distribution.

4.4. Cross-national perspective

A combination of different institutional factors which reflect history, policy and culture of the countries often influence woman's decision to work, woman's employment patterns as well as her bargaining position in the household (Sainsbury 1996; Bonke 2008; Boye 2009). In the literature countries are often grouped in various categories for the similarity of their institutions and one of the most common classifications is welfare regime typology (Esping-Andersen 1990, 1999). The countries are divided according to the prevalence of state, market or family in the combination of individual welfare inputs. The original classification includes: Social-Democratic regimes, Liberal and the Conservative regimes, although it was later expanded to include the Mediterranean countries as a separate block within the conservative countries (Lessenich 1995; Ferrara 1996). This typology is relevant for women's employment because the policy support for their labour market participation varies through welfare regimes. For instance, in the Socio-Democratic block of countries, women's choice to work is favoured both in full time and part-time employment (Esping Andersen 2009), and while Liberal regimes do not directly stimulate women to be economically independent, they impact the decrease of male breadwinner wage, making woman's income important for the household. On the other hand, Conservative model favours wives' economic dependence and the male breadwinner wage, and similarly, the Mediterranean model creates negative incentives for women to participate in the labour market. In addition, welfare regimes influence woman's employment for the way they deal with the issues of gender wage gap and occupational segregation, which as we saw, might have direct implications on woman's economic well-being within family. Thus, the transition from breadwinner to the

dual earner model of society is closely associated with the dominant model of welfare (Blossfeld and Drobnic 2001; Blossfeld and Hofmeister 2008) but welfare regimes may also be further grouped according to their orientation towards dual-earner and breadwinner model. In other words, alternative country welfare policies may still serve for the same goal (Blossfeld and Drobnic 2001:40).

The five countries analysed here, namely Italy, France, UK, Ireland and Denmark are chosen to represent the ‘modified’ welfare regime typology: Italy belongs to the Mediterranean block of countries, UK and Ireland form a part of the Liberal group, France is within conservative category whereas Denmark is an example of Socio-Democratic regime.

4.5. Research Questions and Hypotheses

In the previous sections, we saw that the type of woman’s labour market involvement has the potential to change intra-household relations between men and women and influences her economic well-being beyond income. But we also distinguished between two views on woman’s employment: Gerson (1993) seems to imply that career orientation of women is beneficial for her economic well-being more than the other options, while Hakim (2000) relies more on equality of the choices, without attaching any particular label with regards to intra-household sharing and woman’s economic well-being.

In this chapter we test the hypothesis that woman’s working career (labour market attachment) improves her financial satisfaction and we also test a complementary hypothesis of the negative association between attachment to family life and woman’s financial satisfaction. However, we expect that conclusions might vary in various welfare regimes.

4.5.1. *Labour market attachment*

The definition of labour market attachment in the literature is relatively vague and we find more than one explanation of what it encompasses (Hakim 1991; Blossfeld and Hakim 1997). As we saw, it may refer to either employment without interruptions or the full time employment or to the highly valued occupations or all, and the choice of the reference might have implications for

practical research. Most studies choose to treat only one dimension of labour market attachment, yet encompassing more elements could bring more clarity and enrich the research questions. Moving away from unilateral solutions, we use continuous employment, full time work and woman's career prospects to explain the labour market attachment. In the work of Gerson (1985, 1993) and Hakim (2000), labour market attachment is also labelled as 'working career'.

Career prospects (as social class)

The individual position within the social stratification has a strong impact on the attachment to work. It determines the individual risks of unemployment and chances of re-employment (Goldthorpe 2009; Luchini and Schizzerotto 2010; Bukodi and Dex 2009). It is also related to the individual economic security and lifetime earning prospects (Goldthorpe 2004, 2009). These characteristics of social class can be even more pronounced for women (Stier and Yaish 2008; Buchman and Pfeifer 2004) who are more likely to face volatile labour markets. In addition, as Esping Andersen puts it 'higher occupational classes are also more eligible for investment in skills and trainings and bring more chance for personal development' (Esping Andersen 2002a: 22). Bringing together the different perspectives, we conclude that class has the potential to shape one's future career prospects. Based on the previously elaborated theory and empirical evidence on the positive effect of work commitment for woman's well-being, we test that:

H1a: Woman's good career prospects measured through the concept of social class have a positive impact on her financial satisfaction beyond her income contributions: The higher the woman's social class, the higher is the woman's financial satisfaction.

Continuous employment (versus interrupted employment)

Continuous employment assumes a lack of work interruptions and limited absences from the labour market. In addition, it is very often connected with the "jobs of higher status and earnings" (Hakim 1991:113). As we saw, long-term commitment to work in the form of continuous employment is associated with positive outcomes for women (Gerson 1993) and here we test its role on woman's financial well-being.

H1b: Women who pursue a continuous working career will be more financially satisfied than women who occasionally exit and enter the labour markets.

Part-time work (versus full time work)

Part-time work is often taken as an example of lower labour force attachment (Hakim 1991). The literature suggests several reasons for such opinion. First, it is characterized by lower income and worse career prospects (Stier and Lewin-Epstein 2000). Second, part-time work is often regarded marginal work (Blossfeld 1997). Third, it is the second most common way to combine work and family instead of temporarily leaving the world of work and as such it is often chosen by women who have no career aspirations- adaptive women (Hakim 2000). Full-time work instead implies commitment and better career prospects. Career-oriented women usually choose it (ibid).

Based on the previous overview, we test the following hypothesis:

H1c: Women who (continuously) work part time are less financially satisfied than women in full-time continuous employment.

4.5.2. *Attachment to family life*

Becker's thesis is that women and men work together to sustain their family. As the most common scenario, women specialize in doing housework while men are the only breadwinners, although the distribution of well-being should not be affected by this specialization. The choice of family over work is a more radical way to express dedication to family life and although rare it is still a valid option for modern women. This group of women is named 'neotraditional' (Gerson 2009) or home-oriented (Hakim 2000). As we saw, some studies imply that the choice of working career might be better for woman's well-being (Gerson 1993), and that women have a greater influence at home if they have a regular job (England and McCreary 1987). On the contrary, Hakim (2000) sees all woman's choices equal for woman's material well-being, including 'marriage career'. And, we hypothesize:

H2: Housewives show a lower level of financial satisfaction in comparison to working women (both ‘career oriented’ and ‘adaptive’ women), net of all other characteristics.

4.5.3. *Country (welfare regime) as a stratification variable*

As already mentioned, welfare regimes may constrain or free women in their choices and thus, intervene in the association between woman’s financial satisfaction and her employment patterns. Given that some regimes are more open for woman’s employment and career (Socio-Democratic and Liberal regimes) in comparison to other regimes which impede woman’s labour market participation (Conservative and Mediterranean model), we hypothesize :

H3: The positive relation between woman’s working career (full-time work, continuous employment and career prospects) and her financial satisfaction will be differently accentuated in Liberal and Socio-Democratic regimes on one side and Conservative and Mediterranean model on the other.

4.6. **Data and variables**

The data for the analysis come from the eight waves of the European Community Household panel (1994-2001). The ECHP was chosen for it contains individual data on subjective well-being, information on various forms of income and employment, but also because it has the advantage of a longitudinal framework for EU-15 countries. Its main disadvantage for this analysis is that it does not contain direct information on family dynamics. The unit of analysis is a woman living in a heterosexual relationship, married or cohabitating, aged 18-50, with the partner aged 18 and above. Thus, the sample contains heterosexual married and cohabiting couples from Denmark, Italy, United Kingdom, France and Ireland but we exclude multiple couples within households. The age selection for women was made to avoid the differences in retirement policy within the European Union. The panel is unbalanced and the final sample sizes range from

4197 observations for Denmark, 4623 for Ireland, 5715 for UK, 9334 for France and 13218 for Italy.¹⁸

4.6.1. *Dependent variables*

The main dependent variable is financial satisfaction; the following question is asked to all respondents:

‘How satisfied are you with your present financial situation?’ with the possible responses: 1. not at all satisfied, 2. largely unsatisfied, 3. mildly unsatisfied, 4. mildly satisfied, 5. largely satisfied and 6. Fully satisfied. The variable is further recoded into binary outcome: 1. Satisfied with financial situation 2. Unsatisfied with financial situation.

4.6.2. *Independent variables*

The main independent variables are continuity of employment (as time-trend work dummies) and career prospects (as social class).

The categories of work status¹⁹ are used to create several work related dummies. These dummies are further used to build time trend work dummies - all exhaustive classification where all women are placed into one of the several destinations: remaining employed (continuous employment), remaining unemployed (continuous unemployment), remaining inactive (homemakers) and transitions to and out of work (interruptions). Another group of time trend dummies contains a more detailed classification of individual placement: remaining in full time work (continuous full-time), remaining in part time work²⁰ (continuous part-time work), remaining inactive, remaining unemployed,

¹⁸ The actual number of observations in some parts of the analysis might be higher than in the final sample.

¹⁹ The work status categories are based on the ILO classification; The economically active population, that is everyone who is between 16-65 is divided into three groups: Employed, inactive and unemployed, while the employed are further subdivided into part-time and full time workers.

²⁰ The European legislation on part-time work is not coordinated and there is no a clear cut standard on the number of hours to define a part time job. The ECHP creates the variable part time by asking individuals to declare the type of work that they were doing. This makes responses more comparable despite differences in the working hours.

transitions from and to full-time work and transitions both ways from part-time to full time work. Each destination is based on a combination of a current and last year work status of an individual. The reference category for the first group of time trend work dummies is transition from and to work. The reference for the second group of time trend work dummies is transition from and to full-time work.²¹

European Socio-economic Classification scheme is used to operationalize the social class (Rose and Harrison 2010). ESeC scheme assigns a class position to an individual by combining information from employment status and occupation. The original classification distinguishes between nine classes²² although the scheme can be further regrouped to contain three or five categories. As five group classification of classes already matches our theoretical framework, we use the following five group classification to represent career prospects: managers and professionals (ESeC 1), intermediate and lower supervisory (ESeC 2), small employers and own account workers (ESeC 3), white collar workers (ESeC 4) and blue collar workers (ESeC 5). The currently unemployed are included with their most recent employment. Long term unemployed are treated as a separate category.²³ Class position is taken at year zero, or the first year available for an individual and it represents a time invariant characteristic. We assume that class position is relatively stable over years and that it captures well individual career prospects (Goldhorpe 2004). We do not follow a strict vertical order of positions but we still link higher social classes with brighter career prospects (ibid).

4.6.3. *Control variables*

The following control variables are used in the analysis:

Relative woman's income share (in the household) is the percentage of woman's contribution to the family finances that varies from 0 to 100 (woman's

²¹ These variables correspond to the theoretical framework outlined in the previous sections.

²² The classes are the following: higher salariat occupations, lower salariat occupations, intermediate occupations, self-employed and small employers, self-employed and small employers (agriculture), lower supervisory/ technician occupations, lower services/sales/ clerical occupations, lower technical occupations and routine occupations.

²³ These are the individuals who never worked or whose employment cannot be traced in the dataset.

income/family income). For easier interpretation, the variable is divided by ten. Woman's income share is one of the most basic indicators of her control over financial resources and distribution of well-being.²⁴

Individual and household incomes are sum of all entrances including earnings, state benefits or private incomes. The household income also contains collective entrances. All incomes are logged and matched to refer to the current year as the ECHP gives information on the income obtained in the previous year.

Educational differences capture couple attitudes towards woman's employment and sharing labour in the household. They might intervene in the association of woman's career with her financial satisfaction. Based on the combination of the ISCED classifications, three educational dummies are created: married down- woman is better educated than her partner, married up- woman is less educated than her partner and homogamous couples- the same level of education.²⁵

The number of children is a continuous variable and includes both biological and adopted children. We control for this variable because more children may impede woman's labour market attachment and her financial satisfaction.

Woman's Age is a continuous variable and controls for the role of joint investment in the relationship.

Marital status shows individual civil status in the moment of interview. It is a dichotomous variable coded 1 when woman is married and 0 when a woman is cohabiting. Marriage and cohabitation might have different impact on financial satisfaction because the type of union is often directly related to relationship investments, sharing of labour and employment.²⁶

Financial hardship is a binary variable that shows difficulty to make ends meet and it is 1 when family feels financial hardship and 0 when family does not

²⁴ Chapter 3 provides more details on this topic.

²⁵ The variable education is based on the Isced classification: Isced 0-2- lower secondary education and below, Isced 3-upper secondary education, 5/7-post-secondary (non tertiary) and tertiary education.

²⁶ This will be more elaborated in the chapter 5.

feel financial hardship. Financial hardship might influence the woman's career path and also financial satisfaction.

Wave dummies control for the period effect.

4.7. Methods and the specification of the model

We apply logistic random intercept model- as a special case of multilevel generalized linear model (MGLM) (Rodríguez, 2007). The model is a multilevel framework applied to the longitudinal data, where occasions as a first level are nested within individuals. This model allows us to determine subject specific intercepts controlling for the unobserved heterogeneity. In other words, the model equation contains fixed part in the form of characteristics for which we control and the random part with the features unique for each couple such as motivation, preferences, talents etc.

Our model of financial satisfaction in the multilevel framework can be specified as:

Logit $\{\Pr (S_{ij}=1 | X_{ij}, \mu)\} = \alpha + \beta^s x_{1j} + \beta^t x_{2ij} + \beta^i x_{3j} + \beta^{vc} x_{4ij} + \mu_j$ with $\mu_j | X_{ij} \sim N(0, \psi)$, where μ_j is independent among couples

S is wife's financial satisfaction, i and j denote occasions (time) and couples.

Independent variables in the model are the following:

- 1) x_1 represents woman's career prospects as social class.
- 2) depending on a particular regression x_2 is either:
 - a) a vector of transition (time trend) work dummies.
 - b) a vector of transition work dummies including the division on part-time and full-time work.
- 3) x_3 is a vector of individual and couple time invariant characteristics as well as the variables controlling for period effects.

4) X_4 is a vector of time -variant control variables such as woman's income share, annual family income, financial hardship, age, the number of children.

Dynamic structure of the model (modelling of previous and current employment behaviour) and the presence of specific random term with its distribution also serve as a partial solution to the potential endogeneity problem.

4.8. Results

4.8.1. *Countries at a glance*

A brief look at our samples shows us a range of differences between countries in various aspects (Table 4.1). The first variable that we consider is woman's relative income contribution. In the countries of our sample, the average woman's income share is the lowest in Italy at 22,93% and the highest in Denmark at the average of 45%. On average, women contribute to the family finances less than men in all countries, and even in Denmark, which is often taken as an example of gender egalitarian society, the contributions are less than 50 %. Some possible reasons for these trends could be the wage gap between men and women and also various disincentives for women in the labour markets. The descriptive statistics also shows us that in Italy and Ireland women contribute the least to the household finances. In other words, even though these two countries belong to different welfare regimes, they are similar in the labour market involvement of women which is, for the period analysed here, the lowest in Ireland and Italy out of five countries.

The selected EU countries show different patterns in woman's participation in the labour market. In our sample of women aged 18 to 50, the lowest employment participation is in Italy and Ireland and the highest labour force participation is in Denmark, almost 84%, then UK, 69% and finally France, 62%. These results might reflect the differences in the welfare systems to the extent in which they impede woman's exit to the labour market. However, some part of the explanation may lie elsewhere; here we have Ireland that seems to have developed very traditional model of family despite the liberal welfare state,

possibly due to the influence of Catholic church. Thus, both Italy and Ireland have a large population of women homemakers that goes up to 45%. In Uk and France, around 30% of women are inactive while homemaking is the least common choice in Denmark where only 11 % of women are homemakers. Our sample statistics on female employment are also in line with the ILO country estimates of the female labour force participation for the period analysed (Table 4.2).

Table 4.2: Labour force participation rate by sex (Data unit: Percentage)

Region (Engl. name)	Sex	1994	1995	1996	1997	1998	1999	2000	2001
Denmark	Female	73,3	73,3	73,4	73,9	74,8	75,5	75,4	75,2
France	Female	59,8	60,5	61,2	60,9	61,4	62,1	62,3	62
Ireland	Female	46,3	47	48,7	49,7	52,1	54,4	55,7	56
Italy	Female	42,4	42,5	43,2	43,7	44,5	45,5	46,2	47,1
United Kingdom	Female	66	65,9	66,4	66,9	66,8	67,4	67,7	67,5

Data sources:

1. Copyright (c) 1996-2010 International Labour Organization. All rights reserved.

Data are by sex (female/male/total) and refer to the working age population (ages 15 to 64). ILO Key Indicators of the Labor Market (KILM)

Also, the distribution of social class varies among countries. We notice relatively high proportion of women professionals in the United Kingdom and Denmark (above 30%) in comparison to all the other countries (lower than 20%). Other peculiarities are: higher presence of intermediate class in France along with the Uk and Denmark, low presence of long term-unemployed women in Ireland, Uk and Denmark (less than 1%) and high in Italy (7%), and a relatively low proportion of female white collar workers in Italy (4% versus above 18% in other countries).

When it comes to the education gap between the partners, we notice a high percentage of homogamous couples: on average in around 64 % of Italian couples, partners are at the same level of education and the same pattern is followed in all other countries but in slightly lower proportion (from 50 % to 60%). Also, great disparities are visible in the choice of couples to marry rather than cohabit. And the pattern is the following: In Italy only 1% of our sample cohabitated, in Ireland, 3% of all couples, in France, Uk and Denmark, 15%, 19% and 25% respectively. Finally, the medium age of women in the sample goes from age 35 to 38, and the average number of children is the lowest in Italy and the Uk (1,13 and 1,10) and the highest in France and Ireland. Ireland is, here, a major outlier with an average of two children per couple.

Our next table 4.3 shows average (across waves) yearly proportion of

women remaining in “stable” activity for two consecutive years (remaining employed, remaining unemployed or remaining inactive) and the proportion of women who are instead interrupting their careers (in and out of labour market in two consecutive years). The results are presented for all five countries.

On average each year, in all countries of our sample, around 15% of woman is in transition from one form of employment to another, with the exception of the UK, where around 10% women exit and enter the labour market per year. The percentage of women who are in two consecutive years inactive is the highest in Ireland (38,76%) and Italy (33,5%) and unsurprisingly, lowest in Denmark (7,1%). Average proportion of women staying in employment varies from 44% in Italy and Ireland to 56% in France, 64% in the UK and 77% in Denmark.

Table 4.3: *Average employment transitions by country (women, 18-50)*

Country	Remaining employed %	Remaining unemployed %	Remaining inactive %	Transitions from/to work %	Number of observations N
Italy	44,71	6,08	33,5	15,71	13218
Denmark	77,46	1,76	7,1	13,68	4197
France	56,77	4,03	23,47	15,73	9334
Uk	64,34	0	26,14	9,52	5715
Ireland	44,15	0,97	38,76	16,12	4623

In the table 4.4, the division between full-time work and part-time work is included. We see that the proportion of women remaining in part-time work per wave goes up to 13,4% in Ireland from as low as 4,27% in Italy. On average around 3-5% of women per year changes the type of employment from part-time to full time and back in each country. Also, the countries with the predominance of full-time employment are UK and Denmark (55% and 61%).

Table 4.4: *Average employment transitions by country (women, 18-50)*

Country	Remaining in full time %	Remaining in part-time %	Remaining unemployed %	Remaining inactive %	Transitions full/part-time %	Transitions to/from full-time %	Obs N
Italy	35,28	4,27	6,08	33,5	5,17	15,71	13218
Denmark	61,83	9,67	1,76	7,1	5,96	13,68	4197
France	44,55	8,11	4,03	23,47	4,11	15,73	9334
Uk	55,28	6,26	0	26,14	2,8	9,52	5715
Ireland	25,42	13,04	0,97	38,76	5,69	16,12	4623

Table 4.1: Means and standard deviations of variables by country

Means and S.D of variables	Italy	Denmark	France	UK	Ireland
%					
% of woman's income share	22,93 (26,13)	45,00 (12,71)	30,67 (20,18)	36,01 (20,15)	24,97 (21,09)
Woman's work status (1=yes)					
Employed	0,49 (0,50)	0,84 (0,37)	0,62 (0,48)	0,69 (0,46)	0,52 (0,50)
Unemployed	0,11 (0,31)	0,05 (0,21)	0,08 (0,27)	0 (0)	0,04 (0,19)
Inactive	0,40 (0,49)	0,11 (0,32)	0,30 (0,46)	0,31 (0,46)	0,45 (0,50)
Education gap between partners					
married up (1= yes) (woman's edu<man's edu)	0,17 (0,38)	0,20 (0,40)	0,20 (0,40)	0,28 (0,45)	0,21 (0,41)
married down (1=yes) woman's edu>man's edu	0,17 (0,38)	0,21 ((0,41)	0,20 (0,40)	0,18 (0,38)	0,22 (0,42)
homogamous (1=yes) (woman's edu=man's edu)	0,64 (0,48)	0,58 (0,49)	0,60 (0,49)	0,54 (0,50)	0,57 (0,50)
Woman's marriage status					
Married (1=yes)	0,99 (0,10)	0,75 (0,43)	0,85 (0,35)	0,81 (0,39)	0,97 (0,17)
Cohabiting (1=yes)	0,01 (0,11)	0,25 (0,43)	0,14 (0,35)	0,19 (0,39)	0,03 (0,17)
Woman's age	38,17 (6,7)	36,65 (7,4)	37,68	35,73 (7,73)	38,35
Woman's social class					
Managers and prof (1=yes)	0,14 (0,35)	0,32 (0,46)	0,18 (0,38)	0,30 (0,46)	0,17 (0,37)
Interm and lower super (1=yes)	0,19 (0,39)	0,27 (0,45)	0,29 (0,45)	0,23 (0,42)	0,20 (0,40)
Small employ and ind. work	0,07 (0,27)	0,027 (0,16)	0,05 (0,21)	0,03 (0,18)	0,04 (0,19)
White collar (1=yes)	0,04 (0,22)	0,21 (0,40)	0,18 (0,39)	0,22 (0,41)	0,19 (0,39)
Blue collar (1=yes)	0,18 (0,38)	0,13 (0,34)	0,15 (0,36)	0,13 (0,33)	0,19 (0,39)
Never worked and l. t. unemp. (1=yes)	0,07 (0,26)	0,01 (0,075)	0,02 (0,15)	0 (0)	0,01 (0,09)
Missing	0,31	0,03	0,13	0,09	0,2
The number of children	1,13 (0,93)	1,26 (1,08)	1,38 (1,1)	1,108 (1,15)	1,99 (1,35)
Financial hardship in the family (1=yes)	0,56 (0,49)	0,29 (0,45)	0,43 (0,50)	0,32 (0,47)	0,60 (0,49)
(Difficulty to make ends meet)					
Family income in euros	21005 (11900)	44002 (15240)	34243 (25071)	34263 (19555)	30802 (22021)
Number of observations N	13218	4197	9334	5715	4623

4.8.2. *Testing the hypotheses*

We ran regressions independently for each country to obtain coefficient estimates for each institutional context. First, we include models only with a full set of control variables, which might intervene in the association between woman's labour market attachment and financial satisfaction. The basic model of financial satisfaction without main independent variables includes distribution of income and family income, age, marital status, educational differences, the measure of financial hardship and controls for waves. The second model is enriched with the woman's career prospects (social class), while the models that follow add the continuity of woman's employment (time trend dummies) in order to test its importance for woman's financial satisfaction independently of her income.

In the first model (table 4.5), we find that the household income distribution (woman's income share) makes some difference for the woman's financial satisfaction net of household income but its effect is not equal among countries. The coefficient is positive for three countries, namely Denmark, Uk and Italy where the results are in line with the bargaining frameworks (and rejection of unitary models): the more income women bring into the family, the higher the odds that they will be financially satisfied. More concretely, the estimated odds that a woman is financially satisfied increase 6,5% in Italy, 13% in Denmark and 8% in the Uk with every 10% of increase in her financial contributions within the family. However, the individual income effect is not observed in France and Ireland and the coefficients are statistically insignificant.

What is interesting here are the country differences in the effect of female income share on woman's financial satisfaction, which shows no clear pattern. The positive effect of woman's income share is present in Denmark, Uk, and Italy and each of them belongs to a different welfare regime, while the effect, for instance, in Irish data is insignificant even though Ireland belongs to the liberal welfare regime together with the UK. In the literature, we find that Bonke (2008) also compares liberal, conservative and socio-democratic regimes using individual

financial satisfaction data and he concludes that in countries that are more egalitarian and where women contribute substantially to the household income, female income share is less of a bargaining instrument because it is seen as threat for dual earner model. On the other hand, he finds that in Southern Europe, which is characterized by a breadwinner model, female income is more of a straightforward bargaining instrument. Our results, however, are not in line with this view.

Table 4.5: *Logistic random intercept regression: estimated odds ratios*
Estimates for the model of woman's financial satisfaction

Model 1:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	Or (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,06 (0,01)***	1,13 (0,04)***	1,0 (0,02)	1,08 (0,028)***	1,01 (0,02)
Family income	2,28 (0,11)***	3,17 (,539)***	2,62 (0,21)***	3,90 (0,42)***	3,43 (0,33)***
Age	1,00 (0,004)	1,05 (0,009)***	0,98 (0,01)***	0,98 (0,007)***	1,00 (0,007)
Financial hardship (1=yes)	0,16 (0,008)***	0,11 (0,01)***	0,07 (0,005)***	0,01 (0,001)***	0,22 (0,02)***
Number of children	1,02 (0,03)	0,89 (0,05)**	0,97 (0,03)	0,80 (0,04)***	0,87 (0,03)***
<i>Educational differences^a</i>					
Married up	1,3 (0,09)***	0,94 (0,12)	0,96 (0,08)	1,03 (0,11)	1,13 (0,13)
Married down	1,22 (0,09)***	1,29 (0,17)*	0,93 (0,08)	0,96 (0,12)	1,15 (0,13)
Married (ref.=coh)	1,2 (0,25)	1,38 (0,18)**	1,45 (0,14)***	1,42 (0,18)***	1,12 (0,26)
<i>Wave^b</i>					
wave 2	1,06 (0,07)	0,76 (0,11)*	0,83 (0,07)**	1,16 (0,15)	1,01 (0,11)
wave 3	0,77 (0,06)***	0,69 (0,11)**	0,85 (0,07)*	0,98 (0,13)	0,85 (0,09)
wave4	0,64 (0,05)***	0,93 (0,15)	0,95 (0,09)	1,06 (0,14)	0,97 (0,11)
wave5	1,00 (0,07)	0,70 (0,11)**	0,96 (0,09)	1,25 (0,17)	0,84 (0,11)
wave6	1,04 (0,08)	0,63 (0,10)***	0,92 (0,09)	1,18 (0,17)	0,77 (0,11)*
wave7	0,99 (0,08)	0,52 (0,08)***	1,00 (0,1)	0,87 (0,13)	0,70 (0,10)**
Random part					
ψ	1,78 (0,11)	1,83 (0,23)	2,14 (0,15)	2,75 (0,24)	1,89 (0,187)
Rho	0,35	0,36	0,39	0,45	0,36
Log likelihood	-9319,11	-2209,71	-6471,56	-3475,68	-3445,21
N.	17582	5875	13567	10407	6345

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference category is homogamous couple.

^b Reference category is wave 1

A set of other socio-economic variables are also included as controls in the

model: logged family income,²⁷ age, marital status, children, educational gap, household financial hardship and wave dummies. For instance, the woman's economic well-being is negatively affected by each child in three countries, Denmark, UK and Ireland, which is not the case in Italy and France. Each child lowers the odds of financial satisfaction on average 10% to 20%. This result probably has to do with the financial constraints and temporarily labour market withdrawal that women face when having children. It is interesting that results differ for Italy and France, and this might be perhaps explained by the role of extended family in those countries. The variable of civil status also plays an important role for woman's financial satisfaction: being married increases woman's financial satisfaction in comparison to cohabitation in almost all countries. This result finds some confirmation in the relevant empirical studies which show superiority of marriage over cohabitation for well-being of women (Vogler 2005; Vogler, Brockmann, and Wiggins 2006). The difficulty to make ends meet lowers substantially odds that a woman will be financially satisfied in all countries: women that face no financial hardship have from 4,5 (Ireland) to 100 times (UK) higher odds of being financially satisfied. Household income also positively affects financial satisfaction.

After having controlled for the important socio-economic variables, we now consider whether there is an improvement in woman's financial satisfaction with the inclusion of woman's career prospects (social class).

In the table 4.6, we see that the social class coefficients for the first two ESeC classes are significant and positive in all countries except from the United Kingdom and partly France. As higher social classes are linked to better career prospects (Goldhorpe 2004), we conclude that bright career prospects show an independent positive effect on woman's financial satisfaction net of both family income and woman's income contributions. Woman's income share is still significant for all the three countries where its effect is found in the first place; however, these results confirm that career prospects might matter beyond money for woman's financial well-being.

²⁷ The correlation coefficient between family income and woman's contributions is at 0,20 which is acceptable and does not create a problem of collinearity.

Table 4.6: *Logistic random intercept regression: estimated odds ratios*
The regression of career prospects on woman's financial satisfaction (selected variables)

Model 2:					
Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	Or (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,03 (0,01)***	1,14 (0,04)***	1,00 (0,02)	1,08 (0,03)***	0,98 (0,02)
Family income	2,07 (0,1)***	2,93 (0,52)***	2,47 (0,21)***	3,79 (0,44)***	3,08 (0,31)***
<i>Career prospects</i> *					
Managers & Professionals	1,87 (0,21)***	1,56 (0,31)**	1,34 (0,19)**	1,19 (0,22)	1,68 (0,31)***
Intermediate	1,65 (0,17)***	1,63 (0,31)**	1,09 (0,14)	1,10 (0,20)	1,68 (0,28)***
Small employers	1,25 (0,17)*	0,86 (0,33)	0,81 (0,16)	1,29 (0,39)	1,71 (0,49)*
White collar	1,25 (0,19)	1,4 (0,27)*	1,03 (0,14)	1,02 (0,18)	1,37 (0,23)*
Long-term unemployed	0,58 (0,08)***	0,97 (0,53)	0,61 (0,15)**	/	0,48 (0,24)
Random part					
ψ	1,8 (0,11)	1,8 (0,23)	2,14 (0,15)	2,74 (0,24)	1,88 (0,19)
Rho	0,35	0,35	0,39	0,45	0,36
Log likelihood	-9220,45	-2170,97	-6431,24	-3472,06	-3434,57
N.	17482	5815	13485	10394	6344

* significant at 10%; ** significant at 5%; *** significant at 1%

* The reference category is blue collar worker.

Next we assess the role of various working patterns (time trend work dummies) for woman's financial well-being net of absolute family income and woman's income share (Table 4.7). We follow the relevant literature which underlines that work trajectories as social indicators reveal more than activity status (Hakim 1991; Sorensen 1990). The model with time trend dummies enables us to study the employment dynamics: the effect of 2-year employment path on financial satisfaction including the effect of transitions from and to employment and unemployment. Thus, as already mentioned, four different combinations (dummies) of previous and current work statuses are introduced in addition to other independent variables: remaining unemployed, remaining employed, remaining inactive and opting in and out of employment. As we link the labour market statuses from two consecutive years, we often refer to remaining employed and remaining inactive as a type of career. In other words, being employed in two consecutive years is taken as a proxy for continuous employment (working career) while being inactive in two consecutive years is taken to indicate commitment to domestic responsibilities (marriage career). The effect of these two careers on woman's financial satisfaction along with the continuous unemployment is assessed against an 'interrupted' career (being in and out of the labour market) as

a reference category. In the literature that we reviewed in the first sections, we find that interrupted working patterns are often a characteristic of adaptive women (Hakim 2000).

Table 4.7: *Logistic random intercept regression: estimated odds ratios*
The regression of career prospects and work commitment on woman's financial satisfaction (selected variables)

Model 3:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	Or (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,02 (0,02)	1,05 (0,05)	0,98 (0,02)	1,01 (0,03)	0,99 (0,03)
Family income	2,05 (0,12)***	3,48 (0,77)***	2,23 (0,21)***	3,6 (0,51)***	2,98 (0,36)***
<i>Work commitment</i> ^a					
Remaining employed	1,59 (0,16)***	1,92 (0,30)***	1,66 (0,17)***	1,32 (0,21)*	1,34 (0,19)**
Remaining unemployed	0,60 (0,09)***	0,39 (0,14)**	0,48 (0,1)***	/	0,70 (0,32)
Remaining inactive	1,54 (0,14)***	0,84 (0,19)	1,58 (0,19)***	0,69 (0,12)**	1,34 (0,19)**
<i>Career prospects</i> ^b					
Managers&Professionals	1,74 (0,23)***	1,19 (0,27)	1,21 (0,20)	1,06 (0,23)	1,53 (0,33)**
Intermediate	1,51 (0,18)***	1,35 (0,30)	1,03 (0,15)	0,88 (0,18)	1,70 (0,33)***
Small employers	0,97 (0,15)	0,60 (0,25)	0,68 (0,15)*	1,39 (0,48)	1,84 (0,61)*
White collar	1,25 (0,22)	1,23 (0,27)	0,93 (0,14)	0,91 (0,18)	1,20(0,23)
Long-term unemployed	0,76 (0,13)	1,31 (1,01)	1,07 (0,32)	/	0,59 (0,38)
Random part					
ψ	2,004 (0,14)	1,67 (0,26)	2,27 (0,18)	2,89 (0,29)	2,047 (0,23)
Rho	0,38	0,34	0,41	0,47	0,38
Log likelihood	-6994,1	-1549,89	-4888,47	-2571,29	-2592,32
N.	13507	4253	10299	8027	4774

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is interrupted career.

^b Reference is blue collar worker.

After having controlled for a range of factors, continuous employment proves to be a good predictor of woman's financial satisfaction independently of the welfare regime; Women remaining employed have from 1,32 (UK) to almost twice (Denmark) the odds of being financially satisfied as women who are opting in and out of the labour market. This result is in line with our hypothesis on positive effect of labour market attachment on woman's financial satisfaction. However, the results also show that being continuously inactive might increase the odds that a woman will be financially satisfied, in some cases, as much as being committed to work. More precisely, being a committed housewife in Italy, France and Ireland is practically equivalent to being continuously employed in

terms of impact on individual financial satisfaction. The same association is not found in Denmark and Uk, where the odds of being financially satisfied for inactive women are either lower or equal to the odds of being financially satisfied when temporarily exiting and entering labour market. This implies that our hypothesis on negative effect of woman's attachment to home on her financial satisfaction is not confirmed in the three EU countries where marriage career seems to matter, while the hypothesis stands for Uk. In Denmark, there is no difference between home-makers and adaptive women.

After controlling for the variables of work commitment, the effect of other variables such as income share or social class is largely absorbed. As commitment is often related to the choice of high-level occupations, one positive effect is expected to be partly absorbed by the other (Hakim 1991). The only outliers in this are Ireland and Italy, where women managers and professionals as well as intermediate class still yield an additional increase in odds of being financially satisfied. This might be due to the traditionalist society, in which women have difficulty achieving high level positions, but when they do, they may benefit largely out of it both in the family and outside of it. Furthermore, the odds ratio of income share is reduced substantially and no longer reaches significance in any of the countries. This means that continues employment partly mediates the relationship between money and financial satisfaction and the effect of income share translates into employment. Being continuously unemployed is the worst 'career' for women and lowers their financial satisfaction, which is in line with the results of several other studies (Newman, Delaney and Nolan 2008; Bonke and Browning 2009b; Winkelmann and Winkelmann 1998).

The last model (table 4.8) adds the time- trend dummies, which include the division on part- time and full -time work.

Table 4.8: *Logistic random intercept regression: estimated odds ratios**The regression of career prospects and work commitment on woman's financial satisfaction (selected variables)*

Model 4:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	Or (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,01 (0,02)	1,04 (0,05)	0,96 (0,02)	1,03 (0,04)	0,99 (0,03)
Family income	2,1 (0,12)***	3,29 (0,73)***	2,08 (0,20)***	3,1 (0,53)***	3,03 (0,37)***
<i>Work commitment</i> ^a					
Remain full time(ref. Int)	1,79 (0,19)***	2,03 (0,34)***	1,86 (0,22)***	1,58 (0,36)**	1,25 (0,23)
Remaining part-time	1,26 (0,20)	1,47 (0,35)	1,77 (0,28)***	1,26 (0,35)	1,46 (0,25)**
Remaining unemployed	0,60 (0,09)***	0,40 (0,14)**	0,49 (0,1)***	/	0,71 (0,33)
Remaining inactive	1,55 (0,14)***	0,84 (0,19)	1,6 (0,20)***	0,76 (0,16)	1,37 (0,19)**
Trans full/part-time	1,59 (0,23)***	2,09 (0,55)***	1,63 (0,31)***	1,92 (0,70)*	1,44 (0,31)*
<i>Career prospects</i> ^b					
Managers&Professionals	1,61 (0,21)***	1,19 (0,27)	1,15 (0,19)	1,19 (0,3)	1,45 (0,31)*
Intermediate	1,46 (0,18)***	1,37 (0,30)	0,99 (0,14)	0,99 (0,24)	1,69 (0,32)***
Small employers	0,93 (0,14)	0,61 (0,26)	0,69 (0,16)	1,56 (0,65)	1,89 (0,63)*
White collar(ref. blue collar)	1,22 (0,21)	1,25 (0,28)	0,91 (0,14)	1,037 (0,25)	1,18 (0,22)
Long-term unemployed	0,77 (0,13)	1,34 (1,02)	1,11 (0,33)	/	0,58 (0,38)
Random part					
ψ	2,00 (0,14)	1,61 (0,26)	2,26 (0,19)	2,98 (0,37)	1,96 (0,23)
Rho	0,38	0,33	0,41	0,47	0,37
Log likelihood	-6854,96	-1538,71	-4481,58	-1792,24	-2522,59
N.	13218	4197	9334	5715	4623

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is interrupted career.^b Reference is blue collar worker.

We observe that continuous full-time employment increases woman's financial satisfaction substantially in all countries except from Ireland but remaining in part-time work may also have a positive impact on woman's financial satisfaction. More precisely, in France and Ireland, continuous part-time work is positively associated with woman's financial satisfaction in comparison to being- in and out of the labour market. We believe that high support for part-time employment and its prevalence in some societies might be accounted for this trend.²⁸ As in previous models, marriage career brings higher financial satisfaction in Ireland, France and Italy. In Denmark and UK, the coefficient for being inactive has a negative sign, but it is not statistically significant; so, in these

²⁸ Ireland is an interesting case as a large proportion of women works part-time (for the period analysed).

countries, there is no difference between entering and re-entering full-time employment and inactivity. Following the model, we conclude that our hypothesis on the negative effect of continuous part-time employment is only partly supported and it does not apply in France and Ireland. Interesting is also the result on the transition from and to part-time work and full-time work as it seems that exchanges between the two are not so much different in their effects to remaining in the full time employment. Moreover, this is the trend for all the selected countries. As in the previous model, the effect of income here practically disappears.

In sum, our analysis points to several conclusions. We find that woman's labour market attachment has a positive impact on her financial satisfaction as expected in our main hypothesis. More concretely, woman's career prospects have an independent positive effect on woman's economic well-being, net of woman's income share and household income; also, women pursuing a stable working career (continuous employment) have higher odds of being financially satisfied than women who occasionally exit and re-enter the labour market. The effect of work-commitment, when it is added, partly absorbs the impact of career prospects due to its relation with them and the effect of woman's income share practically disappears. In addition, the continuous part time employment increases financial satisfaction less than continuous full-time employment (actually continuous part-time is often equal to the effect of opting in and out of the labour market), confirming our hypothesis, although not equally in each country. Finally, the main surprise is related to our hypothesis for inactive women as it has not been fully supported: Women who are homemakers may be as financially satisfied as work career women, net of all other characteristics but the result is found only in certain institutional contexts.

The peculiarity of the results is their international comparison. Indeed, the previous conclusions are extracted as trends and here are some clarifications and exceptions: First, our hypothesis suggested that Liberal and Socio-Democratic regimes should be more similar and have different results from the other two regimes. However, the analysis shows that countries group according to some other characteristics rather than the welfare regime as Ireland seems to be more similar to Italy and France. Second, marriage career seems to be equal to the

working career for women in the three countries: Italy, Ireland and France. Also, the choice of career oriented professions for women has an independent impact on their financial satisfaction in Ireland and Italy even after we control for working patterns. In addition, the choice of continuous part time work increases woman's economic well-being (in comparison to opting in and out of the labour market) in France and Ireland where the culture supports the notion of women working part-time due to the family obligations; thus, work does not necessarily imply full-time work. Finally, one conclusion stands still for all countries: Regardless of the welfare regime, the choice of continuous employment has the most positive impact on woman's material well-being over the choice of transition in and out of work, independently and as mediator of income contribution.

4.9. Summary and Conclusions

The goal of this chapter was to understand the impact of woman's labour market attachment on her economic well-being (financial satisfaction). We start with reviewing the sociological theory that suggests that bargaining power of partners does not depend only on material resources but it can be rather explained by a range of other individual characteristics, including intellectual capabilities and achievements. Then we choose our theoretical perspective which focuses on the role of woman's career prospects and work trajectories for the process of negotiation in the family and woman's well-being. We outline two dominant approaches. First, the perspective of Gerson (1985, 1993) who divides woman's career on domestic and non-domestic and suggests that good working career prospects are superior for woman's economic well-being to other choices. Second, the perspective of Hakim (2000) who also considers various careers for women, from homemaking to working career but attaches them equal value for woman's well-being. Following on the outlined theoretical framework and relevant empirical evidence, we choose to test the Gerson's hypothesis of positive association between woman's labour market attachment and her financial satisfaction and the hypothesis of negative association between woman's attachment to home and her financial satisfaction. We assumed that these associations might vary in various welfare regimes and we included in our analysis five countries from Socio-Democratic, Conservative, Liberal and Mediterranean model.

The results of our analysis pointed that woman's labour market attachment reflected through her career prospects and continuous employment positively influence her welfare (financial satisfaction) in all studied countries which is in line with our hypotheses. However, our analysis has also demonstrated that marriage career may have similar effects on financial satisfaction as woman's working career; the data confirm that there are three career profiles: home-making, working career, and interrupted career, where the first two have the potential to positively impact the woman's well-being, beyond woman's income contributions. Marriage career is, in its effect, almost equal to working career in three EU countries: Italy, Ireland and France. Several explanations are possible for these results. Working women may be more financially satisfied also because they are able to control better the distribution of household welfare due to success at work (also the income effect was absorbed by continuous employment). However, the inactive women, whose financial power is limited to their unearned income and income transfer from their husbands, may compensate for the lack of work by creating a closer personal attachment and relationship within family. This is also acknowledged in the literature as "emotional labour" (Hochschild 1983). In addition, dedication to family could add one more element to the household- an increased stability and joint investment, as woman's employment is sometimes thought to increase family instability (Esping Andersen 2002a:20). These factors together might partly explain the higher material well-being of homemakers. Finally, women who are in the literature classified as adaptive, and are characterized by less attachment to both work and home, show the lowest level of financial satisfaction along with women who are continuously unemployed. In other words, trying to balance between the two worlds is the least beneficial for woman's material well-being and her position in the family.

We also studied the effect of institutional context, more precisely, welfare regimes on the observed relations. As we saw, the institutional context matters as it may alter the results in various directions. For instance, even though the positive effect of labour market attachment on woman's financial satisfaction is observed in all countries, we still see institutional variations, especially in terms of the effect of part-time and full-time employment. Some countries provide more support for part-time work as a way to combine work and family, so that the idea

of woman's employment in these countries refers rather to part-time employment. This is, for instance, the case of Ireland. Also, another interesting feature of these results regards the role of homemaking career in various societies. The positive impact of homemaking on woman's material well-being is visible in the societies that belong to three different welfare regimes (Ireland, France and Italy) but are still bonded by some common characteristics, probably also by their general orientation towards breadwinner instead of dual earner model. As we saw, alternative policies may serve for the same goals, and here the welfare regimes classification fails to explain the major differences in results, as the countries seem to be grouped together also according to some other characteristics. In sum, this analysis is an important step to analyse the role of institutions for woman's well-being, but our results also suggest that the relevant future comparative research should perhaps consider applying other institutional classifications or even disentangle the institutional components when studying their influence on woman's choices and their well-being. That would provide scope for further clarifications and better understanding of the observed micro-relations.

Chapter 5: The type and duration of family union and income sharing: the implications for woman's economic well-being

5.1. Introduction

As we already mentioned in the introduction of the thesis, another factor which reflects the overall change in the role and behaviour of women and her life opportunities are new forms of partnerships between men and women. One of them is cohabitation. Indeed, cohabitation is, in many countries, quickly replacing marriage as 'a privileged status signalling adulthood' (Thornton, Axinn, and Xie 2007:308). A rising number of individuals decide to put their relationships on trial by living together before marriage while some even opt for a more radical arrangement and continue to cohabit for a long time without changing their legal status. Indeed, as different as the patterns of cohabitation may be in different geographical settings, the phenomenon has become a symbol of first partnership for the young adults (Kiernan 2001).

These developments have influenced a bulk of research on the relation of cohabitation to marriage and the quality differences between the two. While some authors point out the superiority of marriage on material, physical and spiritual well-being of an individual (Waite 1995), others try to signal personal characteristics of cohabitants that account for the gap in quality found between the two forms of union (Brown and Booth 1996; Brines and Joyner 1999; Willetts 2006). Willetts (2006) shows that the legally married and cohabitants are not different with respect to a number of measures such as relationship satisfaction or perception of equity, although she focuses only on long-term cohabitation that is supposed to be the most similar to marriage. Brown and Booth (1996) find lower quality in cohabitation even after controlling for demographic characteristics and relationship duration but what they discover to predict well the relationship quality are marriage plans. Thornton, Axinn and Xie (2007) investigate the reasons that motivate a young individual to choose one form of the relationship over the other, their origins, characteristics and profile. Thus, the starting point of much of

the previous empirical work is to understand whether individual and relationship characteristics can explain the observed differences between the unions. If not, the legal character of marriage may be the element that brings the change.

Recently more empirical attention is given to the financial aspects of cohabitation as it is one of the dimensions that also distinguishes two forms of unions (Winkler 1997; Oropesa, Landale and Kenkre 2003; Heimdal and HouseKnecht 2003; Vogler 2005; Vogler, Brockmann and Wiggins 2008; Vogler, Lyonette and Wiggins 2008; Lyngstad, Noack and Tuft 2010). Although both are believed to enjoy the benefits of the economics of scale (Waite 1995), cohabiting couples are thought to be using so called ‘privatized management system’ that gives more independence to the family members (Vogler 2005) but also offers less protection and little income sharing. Accordingly, cohabiting partners majorly do not pool financial resources which might have negative implications on the economic well-being of the partners, especially when one of them, usually woman, earns less (Vogler 2005). The money sharing of cohabiting couples was not sufficiently studied in the 1990’s (Heimdal and HouseKnecht 2003), also because cohabitation was still a novelty, whereas interest on income organization and sharing in marriage in economics and sociology dates back from as early as 1960’s. As research follows reality, and more and more couples choose to cohabit, the financial organization of cohabitation becomes central in a comparative view with marriage.

In this chapter, we examine how cohabitation influences woman’s economic well-being and whether it discourages income pooling between family members. Rejection of pooling hypothesis for cohabiting couples would be in line with bargaining framework and would indirectly imply the use of other than joint management system as defined in sociology.²⁹ The second goal of this chapter is to investigate whether the differences in economic well-being and income pooling between married and cohabiting couples come as a result of the joint investments in marriage in time or legal protection obtained simply by getting married. The question we ask is what matters more- the prospects of long-term investments or the actual long-term investments. We compare four welfare regimes, that is, five

²⁹ More information on the relevant definitions and classifications is given in the first thesis chapter.

European countries: Denmark, France, United Kingdom, Italy and Ireland, some of which are characterized by higher incidence of cohabitation and the efforts to institutionalize it while the others lag behind. Yet, each country has its particularities.

5.2. Previous findings

Sociological research on internal organizational structure of married couples distinguishes several types of money management systems within the family.³⁰ These systems are lately grouped into systems in which couples behave more as single economic units and so called ‘privatized’ systems, which assume that each partner is a unit on their own, and may decide either to keep finances fully separate or contribute partially to the joint account (Vogler 2005). The latter is most often found in cohabiting unions. Indeed, one of the main characteristic of cohabiting unions is individualism (Brines and Joyner 1999) and as such they tend to be based on a more individualistic arrangement of money management. In the analysis of British data from ISSP in 1994 and 2002, Vogler, Brockman and Wiggins (2006) found that ‘partial pool’ where partners contribute one (but equal) part of their income to the joint account, is mostly associated with childless cohabiting couples. In their other paper (2008), they further analyse how management systems differ in various cohabiting unions, concluding that cohabiting couples with children are more similar in money management to married couples, while keeping money separate or partially separate characterizes mostly childless and post-marital cohabiting couples. Others (Brines and Joyner 1999; Heimdal and Houseknecht 2003; Lyngstad, Noack and Tufte 2010) present similar remarks. In some of these studies, ‘privatized’ management systems are also linked to the lower economic well-being of the partner who earns less (Vogler 2005; Vogler, Brockmann, and Wiggins 2006).

Economic empirical evidence also pointed to the lack of pooling of resources among cohabiting couples. Winkler (1997) studies income pooling of American cohabiting couples using data from the 1993 Current population survey and 1987 National survey on families. She concludes that cohabiting couples do not pool

³⁰ The most basic classification includes female whole wage system, male whole wage system, housekeeping allowance system and a joint pooling system, although a growing number of studies add another two categories, namely partial pool and independent management.

income although she finds exceptions when couples have biological children or are in a long-term relationship. What she intends by term ‘pooling’ here is, however, different from pure joint management of financial resources and it refers to spending that is independent of who actually earns income.

However, in much of the empirical work, the authors do not only consider the likelihood of pooling resources but also test the factors that could account for it. Once present in the analysis, relevant personal or relationship characteristics may provide a broader understanding of what the reasons are for couples not to pool their financial resources and whether the legal character of relationship plays an important role for sharing. Therefore, the current empirical research includes various predictors, from traditional gender ideology and a series of socio-demographic characteristics (Heimdal and Houseknecht 2003) to the duration of relationship and children (Bonke and Uldall-Poulsen 2007; Lyngstad, Noack and Tufte 2010). The empirical base for including predictors showing a relationship investment comes from Treas (1993) who first investigated how the internal organizational structure of marriage may become more efficient, and income pooled as a function of joint investment in relationship. She operationalizes marriage investment through sunk costs, continuity and metering, all of which are representing an investment that has no value in case marriage dissolves. Her results showed that marriage investment matters and couples gain on efficiency of internal organization with time, that is, they pool their income. The approach that she developed was later also applied to cohabiting couples to better understand whether and why marriage differs from cohabitation and if the quality differences can also be attributed to the joint investments.

The theoretical stance for the work of Treas (1993) and others is based on the theory of Gary Becker, bargaining framework and transaction costs approach. The recognition that marriage is a governing structure that may limit the market nature of intra-household bargaining is taken from transaction cost theory: similar to the firm’s setting, the marriage related investments such as children, joint property and human investments increase certainty, and so the efficiency of internal structure by minimizing the transactions costs. Thus, the joint investments add to the outcomes of intra-household negotiation by raising the price of marriage and the price of the loss in case marriage dissolves. Certainly, this has practical

implication on income organization, income sharing and also on the potential difference between marriage and cohabitation.

5.3. Cohabitation: definition, process and geography

There is no a single definition of cohabitation and its relationship to marriage. Definition-wise it can be regarded as: equivalent to singlehood and a contrast to marriage, an equivalent to marriage and a contrast to singlehood, an independent alternative to marriage in contrast to being single, a union dependent on the choice to marry and a probation, or a first stage in marriage process (Thornton, Axinn and Xie 2007:93). First forms of cohabitation took place mostly among formerly married and only later it diffused among the young singles. However, the pace of diffusion is rather different in various settings, and countries follow separate patterns in the evolution of cohabitation. For instance, Kiernan (2001) distinguishes four stages in the process of its evolution. In the first stage the phenomenon is accepted mostly by the minority. Then in the next stages it is regarded a 'trial'- a potential introduction to marriage and an alternative to marriage. Finally, in the last stage, the married and the cohabitants are 'indistinguishable' and might have similar legal status, raise children and perform other social roles. In this situation, traditional differences in, for instance, age or education, religion or traditional values (Nazio 2008) among the married and cohabiting couples largely disappear.

There are societies that are accelerating the diffusion of cohabitation (Nazio 2008; Orloff 2002) either through their welfare regime or through other institutional features. Here we classify several institutional perspectives on cohabitation for the period we analyse: While the United States have high incidence of cohabitation, the institutional support is rather scarce. In Europe, 'North-South' divide (Iacovou 1998) groups the European forerunners in legalizing cohabitation against the followers with poor laws and little progress (Nazio 2008). Others (Kiernan 2001) make further distinction within Europe and differentiate between the Nordic countries experience (Denmark, Sweden and Finland) and France as leaders in cohabitation policies followed by the UK, Netherlands, Germany and Austria where cohabitation is moderate and only partially acknowledged by the law. Accordingly, very few cohabiting unions and practically non-existing laws

characterize the southern countries and Ireland. Lately, however, rates of cohabitation have risen everywhere, and it is possible that countries converge in their view and treatment over cohabitation in time.

The evolution of cohabitation in a country may determine family policies, change characteristics of cohabitants and influence their behaviour with regards to many aspects of personal life. And if countries are more progressive in terms of the legislation on cohabiting unions, then the cohabitation in these countries is more likely to be similar to marriage than in the others. As previously mentioned, out of five countries³¹ in our study, the three of them show progress in legalizing cohabitation: Denmark, France and the UK, in such order whereas Ireland and Italy are known to be European laggards in the laws on cohabitation.³²

5.3.1. *Denmark*

The experience of Denmark is intriguing because the law treats cohabiting couples equal to married ones when it comes to taxes, social security and compensation after the death of the partner (Hamplova 2009) even though there are other dimensions of common life such as inheritance or division of property after separation that neither Danish law regulates. Denmark has, however, gone furthest in giving rights to an individual, regardless if married or cohabiting, through the introduction of the ‘individual principle’ in 1987 (Lund- Andersen 1990).

5.3.2. *France*

France has a relatively advanced legislation on cohabitation dating back to the 19th century, which gives right to the cohabiting partner to even obtain certain material protection in case of dissolution of the union. Also, since 1999 unmarried couples are encouraged to register their partnerships thanks to the introduction of

³¹ The comparison of the five countries relies on the classification of the welfare regimes to which the countries belong. However, policy response to cohabitation may also differ within the welfare regime in specific national context.

³² Another common feature for the two countries in the period analysed is low incidence of cohabitation. But, in both Ireland and Italy cohabitation is becoming more prevalent and changes in legislation are expected in the upcoming years.

the *pacte civil de solidarité* (PACS). This gives the cohabitants the position in welfare rights that are very much equal to those of the marrieds (Nazio 2008:70) and also entitles them to similar rights in terms of taxation (Martin and Théry 2001).³³ Another feature of the French policy on cohabitation is equal treatment of children, independently of whether they live with unmarried or married parents. However, as in Denmark neither in France partners have an access to inheritance or property if the relationship ends.

5.3.3. *United Kingdom*

United Kingdom does not offer any special status to cohabiting couples and they have no rights to maintenance or property after the union ends. Also, cohabiting couples pay more tax than married couples. However, they still obtain some rights such as in welfare benefits or child support payments and certain protection derives from the property principle.

5.3.4. *Italy*

By the Italian law, only the married and the formerly married but separated couples are offered protection and defined as ‘family’. Thus, cohabitators are treated as two single individuals for tax purposes, inheritance, pension rights and social security. Still, if there are children in the union, who are recognized by both parents, they will enjoy the same rights as children in marriage. Protection to cohabiting partners is sometimes granted but on a single case basis.

5.3.5. *Ireland*

In Ireland there is no recognition of the cohabiting unions. Thus, cohabiting couples have no property and maintenance rights after the relationship ends. Similarly, they do not enjoy tax exceptions which apply to married couples. However, the Irish law protects the children of the cohabiting couples, who are treated equally in all instances as the children of married parents. If cohabiting

³³ This law was not in place for the whole period we analysed in this study.

individuals have a child, they also might be eligible for some social welfare benefits.

5.4. Hypotheses

As we saw, cohabitation has characteristics often different from marriage either because of the selection of cohabitants into cohabiting unions or due to the lack of legal protection of cohabiting couples. Literature suggests (Winkler 1997; Oropesa, Landale and Kenkre 2003; Heimdal and HouseKnecht 2003; Vogler 2005) that one of the aspects in which cohabiting couples differ the most from married ones is internal organization of finances and income pooling. This might have some (negative) implications for the economic well-being of cohabiting partners (Vogler 2005). In this analysis, we expect to find the evidence that cohabitation lowers the economic well-being of women in comparison to marriage and that cohabiting couples are less likely to pool income than married couples. However, here we do not focus directly on the type of financial management system that cohabiting couples choose, but rather test whether individual well-being depends on the proportion of income that one earns, defined often as ‘Beckerian’ pooling (Bonke and Browning 2009a). Rejection of ‘Beckerian’ pooling hypothesis would also provide some insight into the potential financial organization of the cohabiting couples³⁴. Furthermore, we expect to see the same trend in all countries analysed here: Denmark, France, the United Kingdom, Italy and Ireland but we hypothesize that the trends should be less accentuated in the countries where cohabitation is legally closer to marriage. Second, we hypothesize that the cohabitants are more likely to experience lower economic well-being and are less likely to pool income because their relationship comprises lower level of joint investment due to the shorter duration. Thus, we expect to see no difference in income pooling and economic well-being between recently marrieds and cohabitants, but if they are different, this might imply the role of legal treatment

³⁴ The term ‘pooling’ appears in sociology to mean joint executive control over money, and in economics to show that consumption is independent of who actually brings income (Bonke and Browning 2009a). Obviously, it is likely that joint control over money equals joint control of consumption but as Bonke and Browning argue, the definition can also diverge, since couples can jointly manage money while still the higher earner controls the consumption, or alternatively, the couples may apply separate management regime but still exercise equal control of consumption. However, latest empirical research (Bonke and Uldall-Poulsen 2007; Bonke and Browning 2009a) confirms a high correlation between pooling in economics, so called ‘Beckerian pooling’ and joint pooling system in sociology. In these studies, relative incomes are found to affect the individual control over consumption sharing only in the households where joint money management is not a practice.

of cohabitation. Again, we hypothesize that the difference should be the smallest in countries where married and cohabiting couples are more equalized by law, e.g. Denmark and France.

5.5. Data and variables

The data for the analysis are drawn from the ECHP (European Community Household panel) as a nationally representative panel survey which gathered information on a range of socio-economic topics from the 1994-2001. The principal advantages of this dataset are a relatively good coverage of the variables relevant for the analysis and detailed information on employment and incomes. The longitudinal character of the data is important because it enables a partial control for subject heterogeneity.

The analysis is based on heterosexual married and cohabiting couples and is limited to women aged 18 to 50, and men aged 18 and above. This choice was made to exclude the women in retirement age in all the countries of interest, and also choose the time span in which the most of the woman's productive and reproductive life takes place. The choice of lower age limit was also motivated by the presence of cohabitation in relatively young cohorts.

The total sample after adjustments for the sake of the analysis comprises of 51609 observations for all five countries, 5285 for Denmark, 12940 for France, 10322 for the UK, 16817 for Italy and 6245 for Ireland. The sample goes down on number in some analysis and the total number of observations may vary by few hundreds.

5.5.1. *Dependent variable*

The dependent variable is woman's economic well-being. The individual well-being can be studied on various individually assignable outcomes, from individual income and consumption to leisure time and housework, which are all thought to objectively capture individual conditions³⁵. However, a growing economic and social literature (McBride 2001; Van Praag et al. 2003) recognizes

³⁵ This is elaborated in more detail in the first thesis chapter.

that subjective measures of human well-being may give best judgment of one's individual conditions (Frey and Stutzer 2002b); consequently, subjective well-being is more often used as a proxy of the objective situation. Thus, here we focus on individual financial satisfaction to measure the woman's economic well-being. The dependent variable is the probability that a woman will be financially satisfied in a given year and it answers the question: 'How satisfied are you with your financial situation?'. Scale of responses goes from 1-totally unsatisfied with financial situation to 6- totally satisfied with financial situation. The lack of (Beckerian) income pooling will be reflected in positive impact of female relative income contributions on woman's financial satisfaction net of family income.

5.5.2. *Independent variables*

The main independent variables are the following:

Income share defined as female monetary contributions to the household is a ratio of female income and total household income in tenths of percentages. The income measure is a sum of work- related and unearned income.

Cohabitation is a dichotomous variable coded 1 when woman is cohabiting and 0 when a woman is married. Marriage is defined as an individual's legal status in the moment of interview.

Duration of relationship (marriage) is influential in income allocation (Treas 1993). Economic organization of a relationship depends on the length of the union as couples bind much more together in time and consequently, simplify their financial management (Oropesa, Landale and Kenkre 2003). Unlike long-term relationships, 'short term contracts require frequent negotiation, making it risky to accumulate capital (invest)' (Pollak 1985: 596). As relationship duration is positively correlated with relationship investment and strength, we create a variable that takes into account the actual duration of marriage. For the creation of this variable, the relationship status was recorded in the first wave in which the individual participated. We divide marriages as 1) recently married, up to one year, 2) 'young' marriages, from one up to ten years, 3) 'long' marriages, from ten years and above. The downside of this variable is that it does not account for the

duration of cohabiting relationships. In other words, cohabitation is a reference category for all the duration related dummies. We have made this choice following the empirical evidence which suggests that the major part of cohabitations is of a shorter duration (Bumpass and Sweet 1989; Kiernan 2001).

The interaction terms between income share and cohabitation status as well as between income share and marriage duration.

A range of other variables are expected to account for the differences between married and cohabiting couples:

Household income is a sum of all household entrances including earnings, state benefits or private income. The income in euros is logged and lagged to refer to the current year given that the ECHP matches current information with the income obtained in the previous year.

Age is included as a continuous variable for both men and women because it can affect individual decision to enter one or the other union. There is a generational effect in cohabitation as most of the couples that cohabit in Europe are either of a relatively young age or they belong to post-marital cohabitation (Kiernan 2001).

Educational differences: Cohabitation is often seen as a highly egalitarian relationship where partners have similar levels of education (Nazio 2008). We control for the educational differences by introducing a variable that measures the educational gap between the partners. The variable is based on combination of the Isced classifications³⁶ and includes the following categories: married down-woman is better educated than her partner, married up- woman is less educated than her partner and homogamous couples, which implies the same level of education of the partners.

Work: Young and emancipated working women are thought to prefer cohabiting unions over marriage for the fact that cohabitation implies little traditionalism, which is also reflected in a more egalitarian allocation of housework (Brines and Joyner 1999). To control for the effect of work on

³⁶ Isced 0/2- lower secondary education and below, Isced 3-upper secondary education, 5/7-post-secondary (non -tertiary) and tertiary education.

relationship choices, here we create several work related dummies: variable 'working' where work is coded 1, a dummy 'inactive', where inactive is coded 1 whereas the reference category is unemployed. The classification of work statuses is based on the ILO classification.

Children: There is a widespread opinion that children are a strengthening component in a relationship. As more cohabiting couples become parents, cohabiting unions with children are becoming closer to marriage (Vogler, Brockmann and Wiggins 2008; Kiernan 2001). Here we employ a continuous variable that measures the number of children in the household irrespective of their age or biological relation to the parents. This way we also control for the confounding effect of children on the relationship between the cohabitation and financial satisfaction.

Social class of both partners (5 scale ESeC classification) is measured according to the five group ESeC³⁷ class scheme which includes: managers and professionals, intermediate and lower supervisory, small employers and own account workers, white collar and blue collar workers³⁸. Long-term unemployed³⁹ are treated as a separate category. The class position is a time invariant characteristic because it is taken only in the first year available for an individual. The variable is chosen because there might be a correlation between cohabitation and social class. The link is not a clear cut as some suggest that higher social classes are more innovative and as such more open to cohabitation prior to marriage (Ermisch and Francesconi 2000), while others claim that cohabitation may be a sign of disadvantaged material conditions, so it is more prevalent among lower classes (Carlson, McLanahan, and England 2004; Smock, Manning, and Porter 2005). Lastly, it is also possible that the diffusion of cohabitation at all societal levels might have eliminated some of the initial correlation with class.

Financial hardship is a variable that shows difficulty to make ends meet. It is coded 1 when families feel financial hardship and 0 when families do not have

³⁷ The original ESeC scheme contains 9 classes but for the purpose of our analysis we use a simplified version of 5 classes.

³⁸ ESeC assigns a class position to an individual by combining information from their employment status and occupation.

³⁹ Individuals who never worked or whose employment cannot be traced in the dataset

problems in making ends meet. It is included because of its potential relation to cohabitation as it is suggested that cohabitation can be preferred to marriage also for the reasons of material hardship.

Waves control for period effects, e.g current economic conditions

5.6. Models

As we already elaborated, different internal financial organization and different paths in income pooling characterize cohabitation and marriage, which is why we also expect their diverse effect on individual financial satisfaction (economic well-being). The potential difference in financial satisfaction and income pooling between the two unions may also be explained by the marriage investments reflected in the duration of marriage.

Multilevel proportional odds model that takes into account the clustered nature of the data is used to test the effect of cohabitation and different marriage duration on woman's financial satisfaction and income pooling. This model gives us a cumulative probability that a response is in higher category from the previous one that is why is also known as cumulative model for ordinal responses. The model has the advantage of correcting for data dependency and heterogeneity by clustering responses of the individuals and modelling individual effect. We apply episodes as the first level and individual characteristics as the second level.

In the first stage, we estimate the basic model that includes the variables relative income share and the legal (civil) status to determine the impact of both of them independently on woman's financial satisfaction. The model contains a series of control variables such as age of partners, educational difference, social class of partners; woman's working status, children and family income, financial hardship and controls for the waves. Then we enrich the same model with the interaction term of legal status by woman's monetary contributions, which should show the possible differences in pooling behaviour of two types of women.

As we saw from the previous review, the couples who stay longer together are more likely to pool income. Therefore, the effect of marriage on financial satisfaction may vary depending on its duration. Thus, we expect to see not only

one pattern in the effect of marriage, but also many of them, and we expect that some of them would be more similar to the effect of cohabitation. In other words, we hypothesize that marriages of various durations do not have the same impact on woman's financial satisfaction and also have various relations to income share.

Therefore, our third model attempts to test whether the potential differences in pooling income and financial satisfaction between married and cohabiting women result from lack of joint investment in cohabitation (potentially due to its shorter duration). Therefore, we first add the marriage duration in the model followed by several interactions between income share and the marriage duration in the next step.

A separate regression is run for each country to obtain separate predictors for all the five institutional contexts.⁴⁰ However, to test the strength of the effects among countries, we also run regressions on a pooled sample with dummies for each country. These models are not presented here and are available in the appendix.

5.7. Results

5.7.1. Descriptive statistics

Approximately 30% of women in the sample, aged 18-50, cohabitates in Denmark, which is around 10-14 % more than in the United Kingdom or France. In the Italian sample, only around 1,5% of women cohabitates whereas in the Irish data, cohabiting women represent around 4% of all women aged 18-50. These figures correspond relatively well to the country ranking and the official OECD statistics for the period analysed (table 5.1).

Table 5.1: Partnerships and prevalence of cohabitation

Country	All ages from 20 years old				Ages 20-34				
	Single living alone	Married	Cohabiting	Other	Single living alone	Married	Cohabiting	In parental home	Other
Denmark	24.1	40.8	11.5	23.5	33.7	25.4	28.6	7.6	4.8
France	22.8	44.6	14.4	18.2	19.4	21.3	21.8		37.5
Italy	10.8	53.9	2.0	33.2	5.8	30.5	3.0	51.1	9.5
Ireland	10.6	53.4	5.9	30.0	5.5	27.6	13.4	45.2	8.3
UK	14.9	47.3	8.7	29.0	11.4	32.2	22.2	24.7	9.6

Source: OECD Family Database www.oecd.org/els/social/family/database

⁴⁰ Ireland and UK belong to the liberal welfare regime but they have slightly different legislation on cohabitation.

Table 5.2 shows the mean and standard deviation of main independent variables by type of union for each present country. We ask whether the characteristics of married couples are very different from those of cohabiting couples and whether the situation varies by countries.

At first look, the figures for Denmark show that respondents who cohabit tend to be younger, with fewer children (or childless), lower educated than married couples and with relatively lower incomes. They also slightly differ in social position in comparison to married couples who are on average higher up on the scale. Surprisingly, in Denmark the picture corresponds to the traditional view of marriage in many instances. From the sample data we see that the view of marriage as an economic shelter (Vogler 2005) is, to some extent, confirmed. However, another possibility as some suggest (Smock, Manning and Porter 2004) is that marriage happens when partners think that they have reached certain financial and social level. In other words, marriage does not necessarily bring economic well-being but economic well-being may be a precondition for marriage (Oppenheimer 1988). Interestingly enough, monetary contributions of Danish women do not depend on type of union and they are comparatively higher than in all other countries.

The picture for French sample is in some instances similar to the Danish one. Still, the difference between the two unions lies in the average monetary contributions of cohabiting women that are higher for around 8% than those of married women. A higher percentage of cohabiting women in the sample have tertiary education while the male respondents show similar education levels with their cohabiting peers. As in Denmark, income of married couples is relatively higher while married and cohabiting women obtain similar income levels. However, here we do not observe significant differences in the social class. The French data are peculiar also for more children out of wedlock than in Denmark, Uk and Italy and as many as in Ireland.

Table 5.2: Descriptive statistics by the type of union and country

Means and S.D of variables	Denmark		France		United Kingdom		Italy		Ireland	
	married	cohab.	married	cohab.	married	cohab.	married	cohab.	married	cohab.
%	69,57%	30,43%	82,99%	17,01%	80%	20%	98,45%	1,55%	96,09 %	3,91%
% of woman's income share	44, 87 (13,22)	45,24 (12,44)	30,85 (20,26)	38,21 (18,34)	33,66 (18,82)	40,76 (17,31)	23,64 (26,30)	33,56 (28,16)	24,71 (21,52)	35,76 (18,59)
Woman's work status (1=yes)										
Employed	0,85 (0,35)	0,74 (0,43)	0,64 (0,48)	0,66 (0,47)	0,75 (0,43)	0,79 (0,41)	0,50 (0,50)	0,63 (0,48)	0,51 (0,50)	0,69 (0,46)
Unemployed	0,05 (0,22)	0,06 (0,25)	0,08 (0,27)	0,12 (0,32)	0	0	0,11 (0,31)	0,10 (0,29)	0,04 (0,19)	0,05 (0,22)
Inactive	0,10 (0,29)	0,19 (0,39)	0,28 (0,45)	0,22 (0,41)	0,24 (0,43)	0,21 (0,41)	0,39 (0,49)	0,27 (0,45)	0,45 (0,50)	0,26 (0,44)
Female income (mean)	18117,92	15379,60	10959,20	11383,33	9649,66	10725,93	5120,45	7249,3	6233,52	8731,69
Female education (1=yes)										
Isced 5-7	0,41 (0,49)	0,26 (0,44)	0,24 (0,43)	0,31 (0,46)	0,40 (0,49)	0,54 (0,50)	0,09 (0,28)	0,06 (0,24)	0,15 (0,36)	0,20 (0,40)
Isced 3	0,42 (0,49)	0,54 (0,50)	0,35 (0,48)	0,35 (0,47)	0,14 (0,35)	0,10 (0,30)	0,40 (0,49)	0,44 (0,50)	0,45 (0,50)	0,44 (0,50)
Isced 0-2	0,17 (0,37)	0,20 (0,40)	0,41 (0,49)	0,34 (0,47)	0,45 (0,50)	0,35 (0,48)	0,51 (0,50)	0,5 (0,5)	0,40 (0,49)	0,36 (0,48)
Male Education (1=yes)										
Isced 5-7	0,37 (0,48)	0,28 (0,45)	0,23 (0,42)	0,22 (0,42)	0,51 (0,50)	0,54 (0,50)	0,10 (0,30)	0,07 (0,25)	0,18 (0,38)	0,16 (0,37)
Isced 3	0,46 (0,50)	0,53 (0,50)	0,39 (0,49)	0,38 (0,48)	0,13 (0,33)	0,12 (0,33)	0,38 (0,48)	0,41 (0,49)	0,37 (0,48)	0,41 (0,49)
Isced 0-2	0,17 (0,37)	0,19 (0,39)	0,38 (0,48)	0,39 (0,49)	0,36 (0,48)	0,33 (0,47)	0,52 (0,50)	0,52 (0,50)	0,45 (0,50)	0,43 (0,49)
(Selected) Social class-Women (1=yes)										
Esec1	0,33 (0,47)	0,24 (0,43)	0,18 (0,39)	0,20 (0,40)	0,28 (0,45)	0,26 (0,44)	0,15 (0,36)	0,19 (0,39)	0,18 (0,38)	0,17 (0,37)
Esec2	0,28 (0,45)	0,24 (0,43)	0,29 (0,45)	0,26 (0,44)	0,23 (0,42)	0,26 (0,44)	0,20 (0,40)	0,17 (0,38)	0,19 (0,39)	0,24 (0,43)
Esec3	0,03 (0,18)	0,01 (0,11)	0,05 (0,23)	0,03 (0,17)	0,04 (0,20)	0,02 (0,14)	0,08 (0,27)	0,08 (0,27)	0,04 (0,19)	0,04 (0,20)
Esec4	0,20 (0,40)	0,26 (0,44)	0,18 (0,38)	0,21 (0,41)	0,24 (0,43)	0,24 (0,42)	0,05 (0,22)	0,09 (0,28)	0,18 (0,39)	0,21 (0,41)
Esec5	0,13 (0,34)	0,17 (0,38)	0,15 (0,36)	0,15 (0,36)	0,13 (0,34)	0,11 (0,32)	0,18 (0,38)	0,23 (0,42)	0,18 (0,39)	0,22 (0,41)
Missing	0,03	0,08	0,15	0,15	0,08	0,11	0,34	0,24	0,23	0,12
(Selected) Social class-Men (1=yes)										
Esec1	0,42 (0,49)	0,30 (0,47)	0,32 (0,46)	0,24 (0,43)	0,38 (0,49)	0,32 (0,47)	0,26 (0,44)	0,30 (0,45)	0,24 (0,42)	0,22 (0,42)
Esec2	0,16 (0,37)	0,20 (0,40)	0,22 (0,41)	0,23 (0,42)	0,16 (0,36)	0,17 (0,37)	0,20 (0,40)	0,1 (0,30)	0,13 (0,34)	0,15 (0,36)
Esec3	0,05 (0,22)	0,04 (0,21)	0,1 (0,29)	0,04 (0,21)	0,14 (0,35)	0,09 (0,29)	0,18 (0,38)	0,21 (0,41)	0,22 (0,42)	0,15 (0,36)
Esec4	0,05 (0,22)	0,08 (0,28)	0,04 (0,19)	0,05 (0,22)	0,04 (0,20)	0,05 (0,22)	0,04 (0,20)	0,03 (0,18)	0,05 (0,21)	0,09 (0,28)
Esec5	0,31 (0,46)	0,34 (0,47)	0,29 (0,46)	0,37 (0,48)	0,26 (0,44)	0,29 (0,45)	0,30 (0,46)	0,31 (0,46)	0,34 (0,47)	0,34 (0,48)
Missing	0,01	0,04	0,03	0,07	0,02	0,08	0,02	0,05	0,02	0,05
Age-Women	38,31 (6,75)	30,22 (7,13)	38,34 (6,94)	31,95 (7,10)	37,07 (7,20)	29,96 (7,50)	37,84 (7,04)	33,6 (7,06)	38,23 (6,78)	30,21
Age-Men	41,14 (7,47)	32,55 (7,62)	41,12 (7,80)	34,5 (8,08)	39,73 (8,43)	32,47 (8,33)	41,58 (7,84)	38,1 (9,8)	40,67 (7,56)	33,95
Family income	44666	37619,96	34826,73	29057	33561,06	31178,68	20841,3	22762,69	29914,38	27510, 41
Children	1,36 (1,10)	0,77 (0,95)	1,39 (1,11)	1,04 (1,05)	1,29 (1,13)	0,70 (0,98)	1,1 (0,94)	0,69 (0,71)	1,99 (1,38)	1,07 (1,16)
N	3677	1608	10739	2201	8259	2063	16557	260	6001	244

We turn to the sample of United Kingdom; as in France and Denmark, female cohabiting respondents are profiled as relatively younger altogether with their partners. They have fewer children and lower household income although their personal income exceeds the levels reached by the married women. It is interesting that the proportion of highly educated women in the sample of cohabitants in the UK and France is higher than in the sample with married couples and the tendencies were opposite in Denmark. Similar to France, the mean monetary contribution of cohabiting women in the UK sample is higher than among married women.

In the Italian sample, we observe that cohabiting women have higher incomes, contribute more to the household finances (almost 10% difference), have fewer children and are relatively younger than married women. Still, the female age difference between the unions is only four years, whereas in other countries it ranges from seven to ten years. This might reflect the structure of cohabitants who in Italy enter later into cohabitation (and marriage) and also include a higher proportion of separated women in comparison to the women in their first relationship. Interestingly, low educated women present almost 50% of married women and only 5% of cohabiting women. The relationship between class and cohabitation is not very visible as class distribution is relatively similar in both unions. The exception is the intermediate and lower supervisory class of men which is predominant among the married. Family income is slightly higher among cohabiting couples, which is opposite of what we observe in the other countries.

Finally, in Ireland cohabiting women are younger and with fewer children although the average number of children is higher than in the other countries. They earn higher income and contribute more to the household than married women but they have lower family incomes. As in other reviewed countries, there is no a fully clear class pattern in the data. An interesting feature of the Irish and Italian sample is inactive women who are comparatively more present in the category of married women.

Parallel comparison of the five countries in terms of socio-economic and demographic characteristics of their cohabiting and married couples suggests one

common profile for cohabitants rather than five distinct ones. Younger age, fewer children, high level of economic independence and lower household income are the most dominant common characteristics. In addition, the cohabiting women in France and Uk are relatively better educated than married ones. As we saw, Danish sample is an exception for the described trends, as married women tend to be more educated and earn more.

5.7.2. *Cohabitation, financial satisfaction and income pooling.*

The table 5.3 ⁴¹ presents the basic model with the odds ratios in which female relative monetary contributions and legal status as major independent variables are regressed on financial satisfaction, net of several controls including family income. The odds that a woman in Denmark will be more financially satisfied versus less, regardless of the cut-points, increase 5% with each 10 % of increase in monetary contributions, net of family income. The effect is weak and significant at 10% but it still shows that on overall population of women in Denmark, the hypothesis of income pooling is rejected which is not the case in France, United Kingdom, Italy and Ireland. The odds of being more financially satisfied, when woman is cohabiting in Denmark are around 77% as large as the odds of married women. Similarly, the odds that a cohabiting woman will be more financially satisfied in France and United Kingdom are lower and around 70% as large as the odds of married French and British women. Cohabitation seems to be closer to marriage in its effect on financial satisfaction in Ireland and Italy, but the coefficients are insignificant, either because of the relatively small number of cohabiting women, or because there is no difference in the effect. We report the coefficients even though we are not able to give explanations that are more precise. In addition, our model also contains residual intra class correlation that varies from 0,36 to 0,41, which means that still around 40% of unexplained variation of financial satisfaction is due to unobserved individual characteristics. Therefore, the results are interpreted with caution.

⁴¹ The model presents only selected variables. Full models are given in the appendix.

Table 5.3: Random intercept proportional odds model (selected variables)
The regression of cohabitation and income share on financial satisfaction: model 1

Dependent variable	Denmark	France	United Kingdom	Italy	Ireland
Financial satisfaction	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)
Fixed part: odds ratios					
% of income share	1,05 (0,99, 1,12)*	0,99 (0,97, 1,03)	1,01 (0,97, 1,05)	1,01 (0,99, 1,03)	1,00 (0,96, 1,05)
Family income	2,55 (1,96, 3,31)***	2,35 (2,05, 2,68)***	3,07 (2,62, 3,58)***	1,68 (1,57, 1,79)***	2,29 (1,95, 2,69)***
Children	0,87 (0,80, 0,94)***	0,95 (0,90, 0,99)**	0,80 (0,74, 0,85)***	0,96 (0,91, 1,01)	0,86 (0,81, 0,92)***
<i>Employment status</i> ^a					
Working	2,82 (2,13, 3,76)***	2,92 (2,48, 3,44)***	1,54 (1,31, 1,80)***	2,12 (1,82, 2,46)***	2,15 (1,58, 2,94)***
Inactive	1,72 (1,25, 2,36)***	2,99 (2,53, 3,54)***	ref.	1,86 (1,64, 2,11)***	2,15 (1,59, 2,90)***
<i>Civil status</i> ^b					
Cohabitation	0,77 (0,63, 0,93)***	0,72 (0,62, 0,84)***	0,70 (0,58, 0,82)***	0,89 (0,62, 1,28)	0,90 (0,61, 1,32)
Fixed part: Thresholds					
k1:	6,13	3,86	3,20 ^c	1,45	5,19
k2:	7,56	5,13	5,28	3,20	6,56
k3:	9,14	7,29	8,66	5,20	8,12
k4:	11,19	9,63	12,27	7,55	10,02
k5:	13,89	13,55		10,24	11,84
Random part:					
ψ	1,92 (0,16)	1,87 (0,10)	2,26 (0,13)	1,98 (0,09)	2,24 (0,15)
ρ	0,37	0,36	0,41	0,37	0,4
Log likelihood	-6841,47	-16507,085	-9597,13	-22864,826	-9314,35
N	5285	12940	10322	16817	6245

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is unemployed in all countries except from the United Kingdom. British data contain only employed and inactive, with the latter as a reference category.

^b Reference is marriage

^c Variable 'Financial satisfaction' has five response categories in the British data

This model shows that marriage is positively related to woman's financial satisfaction in all countries⁴², that is, it renders higher economic well-being than cohabitation. However, testing the strength of the effects among countries⁴³, in a pooled sample, the negative effect of cohabitation seems to be strongest in Denmark with respect to all other countries, which is opposite to what we expected according to the similarity of legal status for the two groups. To answer the question we posed in the introduction of this chapter, our results suggest that the type of union that is the most beneficial for woman's financial satisfaction is marriage. In the terminology of the organization theory (Williams 1981), the marriage seems to be a more efficient governing structure.

The second model (table 5.4)⁴⁴ tests if cohabiting women pool their income. We include the interaction of income share by cohabitation which only slightly

⁴² The coefficients for Italy and Ireland show the same trend although less accentuated but the coefficients are insignificant.

⁴³ The pooled sample includes only Denmark, Uk and France.

⁴⁴ The model shows only selected variables. The full model is presented in the appendix.

improves the model. In three countries, Denmark, UK and France, the interaction is positive and significant, thus showing that cohabiting women do not pool income, while the path for married women is opposite. The interaction term in the models for Italy and Ireland is insignificant. Looking into more details, we identify four groups of women:

- a. Cohabiting women that possess income
- b. Cohabiting women with no income
- c. Married women with income
- d. And married women with no income.

The odds that a cohabiting woman will be more financially satisfied are multiplied by 1.23 for each ten per cent of income share in Denmark. The same odds are 1.10 times higher with every 10 % of income share in France and 1.09 times in the United Kingdom. In this model formulation, net of other effects, the pooling hypothesis is not rejected for married women in none of the countries. As the results point out, the behaviour of cohabiting women falls well into bargaining framework, or in other words, most of the association between income share and financial satisfaction is found among cohabiting women. In sum, income share is a better predictor of financial satisfaction of cohabiting women than married women, which might imply that cohabiting couples actually use other than joint management system.⁴⁵ Of course, with this approach we are not able to say which internal management structure are implemented by cohabiting couples, but we understand that there is a high association between joint pooling and joint control over resources. As Bonke and Browning (2009a) suggest, it is more likely that relative incomes affect the individual control over consumption sharing in the households where joint money management is not a practice. The interactions in the pooled model are not significant and there is no difference in the strength of pooling among countries.

⁴⁵ See Bonke and Browning (2009a) for more explanations and links between income pooling and financial management.

Table 5.4: Random intercept proportional odds model (selected variables)

The regression of cohabitation and income share on financial satisfaction with the interaction term (cohabitation with income share): model 2

Dependent variable	Denmark	France	United Kingdom	Italy	Ireland
Financial satisfaction	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)
Fixed part: odds ratios					
% of income share	0,97 (0,91, 1,04)	0,98 (0,95, 1,01)	0,99 (0,95, 1,04)	1,01 (0,99, 1,03)	1,00 (0,96, 1,05)
Family income	2,54 (1,96, 3,31)***	2,33 (2,04, 2,66)***	3,07 (2,63, 3,59)***	1,68 (1,57, 1,79)***	2,29 (1,95, 2,68)***
Children	0,87 (0,80, 0,94)***	0,95 (0,90, 0,99)**	0,80 (0,75, 0,84)***	0,96 (0,91, 1,01)	0,86 (0,81, 0,92)***
<i>Employment status</i> ^a					
Working	2,81 (2,12, 3,74)***	2,92 (2,48, 3,44)***	1,54 (1,31, 1,81)***	2,12 (1,83, 2,46)***	2,16 (1,58, 2,94)***
Inactive	1,72 (1,26, 2,37)***	2,96 (2,50, 3,50)***	ref.	1,86 (1,64, 2,12)***	2,15 (1,59, 2,91)***
<i>Civil status</i> ^b					
Cohabitation	0,26 (0,15, 0,45)***	0,45 (0,33, 0,60)***	0,48 (0,34, 0,69)***	0,70 (0,42, 1,19)	0,78 (0,36, 1,68)
Cohabxincome share	1,27 (1,13, 1,42)***	1,13 (1,06, 1,21)***	1,10 (1,01, 1,19)**	1,08 (0,96, 1,21)	1,04 (0,87, 1,25)
Fixed part: thresholds					
k1:	5,66	3,70	3,17 ^c	1,45	5,18
k2:	7,09	4,97	5,25	3,2	6,55
k3:	8,67	7,14	8,62	5,20	8,11
k4:	10,72	9,47	12,23	7,55	10,01
k5:	13,42	13,40		10,23	11,83
Random part:					
ψ	1,88 (0,15)	1,87 (0,10)	2,25 (0,13)	1,98 (0,09)	2,24 (0,15)
rho	0,36	0,36	0,41	0,37	0,40
Log likelihood	-6832,84	-16500,341	-9594,43	-22864,08	-9314,26
N	5285	12940	10322	16817	6245

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is unemployed in all countries except from the United Kingdom. British data contain only employed and inactive, with the latter as a reference category.

^b Reference is marriage

^c Variable 'Financial satisfaction' has five response categories in the British data

In addition, we observe in the model that married inactive women are far better off financially. The odds that a cohabiting woman with no income will be more financially satisfied are much lower than the same odds for married inactive woman. More concretely, predicted odds of financial satisfaction are from two (France, Uk) to almost four times (Denmark) higher for married inactive women in comparison to cohabiting women when they do not earn any income. This result is in line with the literature according to which marriage is a shelter for non-working women and a source of their status and security (England 2000). In other words, cohabitation does not seem to offer equal protection to non-working women (Vogler 2005).

As we saw, both marriage and cohabitation are based on teamwork and economics of scale. Still, our first analysis implies that one relationship- marriage is more beneficial for women. Why is this so? To test whether higher financial satisfaction comes from greater relationship investments as a function of time we

add variables for the married up to 1 year, those married less than 10 and above ten years (table 5.5).

Table 5.5: Random intercept proportional odds model (selected variables)

The regression of marriage duration and income share on financial satisfaction :model 3

Dependent variable	Denmark	France	United Kingdom	Italy	Ireland
Financial satisfaction	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)
Fixed part: odds ratios					
% of income share	1,05 (0,99, 1,12)*	1,00 (0,97, 1,04)	1,01 (0,97, 1,05)	1,01 (0,99, 1,03)	1,00 (0,96, 1,05)
Family income	2,56 (1,96, 3,33)***	2,17 (1,86, 2,53)***	3,18 (2,7, 3,74)***	1,68 (1,57, 1,80)***	2,30 (1,96, 2,70)***
Children	0,87 (0,80, 0,94)***	0,93 (0,88, 0,99)**	0,81 (0,76, 0,87)***	0,96 (0,91, 1,01)	0,86 (0,81, 0,92)***
<i>Employment status</i> ^a					
Working	2,79 (2,10, 3,72)***	3,01 (2,48, 3,64)***	1,57 (1,33, 1,85)***	2,12 (1,82, 2,47)***	2,15 (1,58, 2,93)***
Inactive	1,66 (1,21, 2,29)***	3,30 (2,70, 4,02)***	ref.	1,87 (1,64, 2,13)***	2,15 (1,59, 2,91)***
<i>Relationship duration</i> ^b					
married(1 year)	1,21 (0,95, 1,53)	1,28 (1,02, 1,61)**	1,41 (1,14, 1,75)***	1,15 (0,78, 1,71)	1,06 (0,68, 1,64)
married(1-10)	1,41 (1,09, 1,82)***	1,37 (1,12, 1,69)***	1,54 (1,22, 1,96)***	1,09 (0,76, 1,58)	1,18 (0,77, 1,79)
married(10+)	1,57 (1,14, 2,17)***	1,68 (1,34, 2,10)***	1,49 (1,12, 1,96)***	1,15 (0,78, 1,70)	1,03 (0,64, 1,66)
Fixed part: thresholds					
k1:	6,26	3,34	3,76 ^c	1,51	5,45
k2:	7,70	4,61	5,87	3,26	6,83
k3:	9,28	6,73	9,25	5,27	8,39
k4:	11,30	9,03	12,89	7,62	10,28
k5:	13,98	12,85		10,33	12,11
Random part:					
ψ	1,86 (0,16)	1,79 (0,11)	2,34 (0,14)	2,00 (0,09)	2,25 (0,15)
tho	0,36	0,35	0,41	0,38	0,41
Log likelihood	- 6721,85	-11925,68	-8989,29	-22437,62	-9285,81
N	5174	9129	9708	16526	6225

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is unemployed in all countries except from the United Kingdom. British data contain only employed and inactive, with the latter as a reference category.

^b Reference is cohabitation.

^c Variable 'Financial satisfaction' has five response categories in the British data

Almost hierarchically, the longer the marriage, the higher is the increment on financial satisfaction. Thus, it seems that the variation between cohabitation and marriage is likely to come from the joint investments in marriage. Still, the positive effect of one-year long marriage is present in all countries.⁴⁶ However, in Denmark the effect of one-year marriage, although positive, is statistically insignificant which could imply the role of legal treatment, which equalizes married and cohabiting couples. Thus, the difference between the unions here is less visible. As we observe, in other countries legal contract in the form of marriage matters from the start, which might have to do also with the stricter regulation on cohabiting unions. But, the one year contract brings higher financial satisfaction in the UK than in France- second forerunner in cohabitation after

⁴⁶ All the relevant coefficients for Italy and Ireland are insignificant and do not show a clear pattern. For this reason, we are not able to give more insight into the direction and meaning of the results for these two countries.

Denmark. Surprisingly, after testing the relationship in a pooled sample, we get that the positive effect of marriage duration is still the strongest in Denmark.⁴⁷

The results of the interaction between the income share and various marriage durations in the final model show that the likelihood of pooling of resources increases over time with higher marriage investments in Denmark, France and UK (Table 5.6). In other words, as time passes, it is difficult to distinguish between the individual and collective contributions and relying more on personal income only lowers the odds of higher financial satisfaction.

Table 5.6: Random intercept proportional odds model (selected variables)

The regression of marriage duration and income share on financial satisfaction with the interaction term (marriage duration with income share): model 4

Dependent variable	Denmark	France	United Kingdom	Italy	Ireland
Financial satisfaction	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)	Est(95% CI)
Fixed part: odds ratios					
% of income share	1,25 (1,14, 1,38)***	1,11 (1,04, 1,19)***	1,10 (1,02, 1,18)**	1,08 (0,97, 1,22)	1,04 (0,87, 1,25)
Family income	2,56 (1,97, 3,34)***	2,14 (1,83, 2,49)***	3,18 (2,7, 3,74)***	1,68 (1,57, 1,80)***	2,29 (1,95, 2,70)***
Children	0,86 (0,80, 0,94)***	0,94 (0,89, 0,99)**	0,81 (0,76, 0,87)***	0,96 (0,91, 1,01)	0,86 (0,81, 0,92)***
<i>Employment status</i> ^a					
Working	2,78 (2,09, 3,70)***	3,03 (2,50, 3,67)***	1,57 (1,33, 1,86)***	2,12 (1,82, 2,47)***	2,16 (1,59, 2,95)***
Inactive	1,67 (1,21, 2,29)***	3,25 (2,66, 3,97)***	ref.	1,87 (1,64, 2,13)***	2,16 (1,60, 2,92)***
<i>Relationship duration</i> ^b					
married(1 year)	2,35 (1,08, 5,13)**	1,72 (1,06, 2,81)**	1,55 (0,97, 2,50)*	1,55 (0,87, 2,74)	0,94 (0,38, 2,31)
married(1-10)	4,05 (1,95, 8,41)***	2,29 (1,57, 3,33)***	2,65 (1,71, 4,12)***	1,36 (0,80, 2,31)	1,43 (0,64, 3,17)
(married(10+)	6,93 (3,44, 13,99)***	2,97 (2,08, 4,24)***	2,19 (1,40, 3,43)***	1,49 (0,86, 2,57)	1,19 (0,52, 2,71)
married(1 year)xinshare	0,86 (0,73, 1,02)*	0,93 (0,83, 1,04)	0,98 (0,88, 1,10)	0,91 (0,80, 1,04)	1,03 (0,83, 1,28)
married(1-10)xinshare	0,80 (0,68, 0,92)***	0,88 (0,80, 0,95)***	0,86 (0,78, 0,95)***	0,94 (0,83, 1,06)	0,94 (0,78, 1,14)
married(10+)xinshare	0,72 (0,63, 0,83)***	0,86 (0,80, 0,92)***	0,90 (0,82, 0,99)**	0,92 (0,82, 1,04)	0,96 (0,80, 1,16)
Fixed part: thresholds					
k1:	6,93	3,64	4,10*	1,75	5,60
k2:	8,37	4,91	6,22	3,50	6,70
k3:	9,95	7,03	9,60	5,51	8,53
k4:	11,97	9,34	13,24	7,86	10,43
k5:	14,64	13,16		10,57	12,25
Random part:					
ψ	1,81 (0,15)	1,80 (0,11)	2,32 (0,14)	2,00 (0,09)	2,24 (0,15)
ρ	0,35	0,35	0,41	0,38	0,4
Log likelihood	-6710,52	-11917,23	-8984,19	-22436,325	-9285,01
N	5174	9129	9708	16526	6225

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Reference is unemployed in all countries except from the United Kingdom. British data contain only employed and inactive, with the latter as a reference category.

^b Reference is cohabitation.

^c Variable 'Financial satisfaction' has five response categories in the British data

Again the positive coefficient for monetary contributions of cohabiting women suggests that cohabiting women do not pool income. Rejection of pooling is also observed for the recently married women in Denmark (the odds ratio is 1,07). It emerges that these two groups of women in Denmark are after all not that different and the real difference comes with the time. The reason for the little

⁴⁷ The model with interactions is presented in the appendix.

observed difference between young marriage and cohabitation could be a good legal treatment of cohabitation in Denmark that is again consistent with our expectations. In other countries, the marriage itself, even if in place for a short time, possibly affects the internal organizational structure and income pooling.

Again, the most interesting result comes when we compare the predicted odds of financial satisfaction of non-working women, married for one or more years, with the odds of non-working cohabiting women. In Denmark, the ratio of the odds between the two groups varies from 2.35 to 6.93 in favour of married women although in other countries the range is more moderate. Thus, the longer the marriage is, the more secure non-working women are and their financial situation is far better than the position of similar non-working cohabiting women. For one possible explanation of this phenomenon, we can also recall Becker's hypothesis of specialization in marriage as a form of investment that is much less common in cohabitation (Brines and Joyner 1999). Cohabiting relationships tend to be more egalitarian but also provide less protection, because relationship investment is lower.

5.7.3. Limitations of the data

This analysis is useful to explain the role of marriage for woman's economic well-being and income pooling. It also directs us to understand the importance of legal regulation that regulates cohabitation. However, this research is not without its limitations.

The main disadvantage of the dataset is the lack of data on the length of cohabiting unions. Following the research on the duration of cohabiting unions (Ermish and Francesconi 1998; Kiernan 2001) that highlights the temporary character of cohabitation and its short duration, we take all cohabitants as one group assuming that the major part cohabitates for a short time. Some further analysis should investigate this dimension better.

The advantage of the models is the presence of children as a control variable due to importance of children for pooled money management. Unfortunately, here

we lack information on biological children and potentially the age of children for further detailed investigation.

The third limitation of this work is the lack of data on financial management and income mechanisms. We study the problem indirectly through the effect of income contributions (income reorganization) on financial satisfaction of cohabiting and married women. Our results are suggestive about control of money but not conclusive in terms of what the exact (practical) financial arrangement of cohabiting couples is.

5.8. Discussion and conclusions

At the start of this chapter, three questions were raised, first, whether cohabitation means lower woman's economic well-being with respect to marriage and if this is so, whether it can be explained by lack of income pooling of cohabiting couples. In addition, we ask whether the potential differences between the unions are due to the lower investments in cohabitation or legal contract that binds married people. We compared European countries, which belong to four different welfare regimes; they have different incidence of cohabitation and share various legal views of it. We also assumed that the relative resources of partners are more likely to matter in the relationship characterized by lower investments and low collective values, which is reflected in its length. Therefore, we expected that marriage as a contract does not bring any additional value and that the major influence on economic well-being comes from the long term investment in the relationship.

Our analysis gave us several indications. As hypothesized, we discovered that marriage is more likely to bring higher economic well-being than cohabiting union and that cohabitants are more likely to rely on market based exchanges and bargaining for control of resources. Therefore, the income in cohabiting unions is not pooled but the character of our data did not permit us to look into specific income management systems and suggest what really happens with the income organization in the household.

Furthermore, we show that the differences in the effect on woman's economic well-being between cohabiting and married couples mostly result from the time

component and joint investments. But, we also observe that legal contract raises the cost of the relationship as well, and influence income pooling especially in the countries where legal status of cohabitants is more unequal. For instance, in Denmark the differences in economic well-being between cohabitation and recent marriage are hardly observable and in France, they are lower than in the UK. However, the results for Denmark are also surprising in their own way as they show that the major positive effect of marriage comes with duration, increasing significantly the gap between the unions, which is relatively small or inexistent when marriage is 'young'. Indeed, the duration effect of marriage is the strongest in Denmark with respect to all other countries in the analysis.

Another important implication of these results relates to the position of non-working women in cohabiting unions. The cohabitants and the married have often different perception of what equality is and whether it means equal contributions or equal access to financial resources: the literature on internal financial organization of cohabiting couples reports the use of privatized systems of money management in cohabitation, which are based on 50%-50% contributions by the partners. And this system functions fairly well if contributing equally is not a burden for any of the members. In addition, cohabiting unions tend to be even more beneficial for women in the sense that the woman is more independent in her decisions and her expenditures. But as Vogler (2005:18) argues in her study, in privatized systems 'when one partner earns more than the other, the higher earner (usually the male partner), tended (tends) to have more control over money as well as greater access to the money for their own use'. In other words, if a woman earns no or low income, the principle of independent finances means that she cannot rely on her partner as much, so she will be worse off financially in comparison to the married women. This is the situation when the cohabitation becomes less beneficial for a woman. Moreover, marriage as a legal concept traditionally relies on specialization and trading (Brines and Joyner 1999), while cohabiting unions are seen as new equal partnerships. In such context, it is more likely that being out of the labour market is less of a disadvantage for a married woman who may specialize in domestic work than for a woman who cohabitates. Our models certainly support this theoretical view in more than one geographic context.

To sum up, this chapter showed us that the legal character of marriage as an ‘initial investment’ is more important in the countries where legal burden of marriage is high. In addition, independently of geographical setting, the marriage contract matters for non-working women for it offers them better economic security. As of the rest, the principle component that explains negative impact of cohabiting unions on woman’s economic well-being and income pooling, as our analysis suggests, is not the idea of long-term investment in the form of contract but the investment itself.

Chapter 6: Concluding remarks

In this work we have analysed the relation of woman's economic independence and her choice of partnership with economic well-being. The economic independence is reflected in the ownership of personal income and employment patterns while the choice of partnerships refers to the two forms of unions: marriage and cohabitation. We regard these three conditions (women's earning capacity, woman's employment and new ways of partnering) an outcome of overall change in the role and behaviour of women outside of the family, and as such, important for women's behaviour within family, in terms of bargaining power, decision making and their welfare. In studying the topic, we have applied the perspective of unified social science, trying to overcome the traditional divisions between the relevant economic and sociological theory.

We started by introducing the theoretical framework for the topic: several approaches in the rational choice economic theory and sociological literature were outlined in order to understand how the effects of income, work and unions on economic well-being of women have been studied in the past. We explained that first models of family behaviour (Parsons, Becker) considered the economic well-being of women always equal to their partners' economic well-being; in this view, the intra-household distribution of well-being is independent of individual contributions. We also considered critiques to the first outlined approach moving to the second important group of theories within resource bargaining perspective. The second theoretical perspective largely considers woman's personal achievements and individual characteristics when explaining the woman's economic well-being. Indeed, a large part of our work relied on this view, on both the economic bargaining theories, and their sociological equivalent. However, we argued that only individual factors are not able to fully explain woman's economic well-being; thus, we incorporated in our theoretical framework another important stance, namely, the transaction costs approach, which highlights the role of union for woman's economic well-being. In other words, the individual characteristics of a woman are accompanied by a set of collective features in explaining her economic well-being. These factors were also considered in our work. Finally, we argued that micro-processes are not independent of the context

in which they take place suggesting that institutional characteristics intervene also in the association between women's individual and collective features and their economic well-being. After having elaborated on the different criteria which are used to group countries of various institutional characteristics, we have chosen a welfare regime typology to present our institutional context.

Our next step was to choose the adequate definition of well-being that would be used throughout our work. We reviewed the most popular concepts of well-being in socio-economic research starting from those which rely on revealed behaviour and moving towards subjective measures of human well-being. We have also discussed the advantages and disadvantages of some of the measures which we found the most influential in the applied research. Finally, we chose to focus on a concept of subjective well-being, which reflects individual financial satisfaction, because it captures a complex set of socio-economic conditions behind woman's economic well-being.

Then we summarized the relevant empirical literature to finally define our main research hypotheses. We started with the hypotheses which were derived from economic bargaining theories, then we enriched them with the sociological perspective on the role of woman's employment and career prospects, while the last set of hypotheses considered also the role of union, eg. marriage on woman's economic well-being. We also incorporated an institutional perspective by including the hypotheses which tested for the difference between welfare regimes. However, these general hypotheses were followed with a set of narrow hypotheses specific to the each empirical chapter. In sum, in this work we hypothesized that:

H1: The financial satisfaction of a married woman is positively related to her economic contributions to the family.

H2: The positive impact of woman's economic contributions on her financial satisfaction will vary by the welfare regime.

H3: Woman's financial satisfaction is positively related to her work commitment and bright career prospects.

H4: We expect that the positive relation between woman's career and her financial satisfaction will differ among countries that belong to various welfare regimes.

H5: Cohabitation is negatively related to the woman's financial satisfaction.

H6: There is a differential impact of cohabitation on woman's financial satisfaction based on the country context and welfare regime.

H7: Cohabiting women are less likely to pool the money within the household.

H8: Lack of money pooling within household among cohabiting couples will vary with the country context and welfare regime.

Once we defined our conceptual framework, we moved to the operationalization of our research questions. The operational measures that refer to the financial satisfaction were presented, as well as the methodological framework for the analysis. This work relied on the longitudinal data (of European Community Household Panel), which helped us control some of the problems to which subjective measures are especially sensitive, such as systematic bias due to unobserved individual characteristics. The character of data also allowed us to apply dynamic modeling in order to partially treat endogeneity issues relevant for our research. We applied two types of models within multilevel technique namely logistic random intercept model and proportional odds model. Finally, we also selected countries for our comparative analysis including Italy, Ireland, UK, Denmark, France to represent Mediterranean, Liberal, Socio-Democratic and Conservative welfare regimes.

Our work pointed to several important conclusions. In the analysis of the effect of woman's income ownership on her economic well-being we found that our first main hypothesis was confirmed: the economic independence reflected in material resources is positive for married and cohabiting women and leads to their higher level of economic well-being. This conclusion was also in line with the economic bargaining theories which were our starting point. Our second hypothesis, however, regarded the role of welfare regimes in the relationship

between ownership of resources and financial satisfaction. We asked if money is more likely to influence woman's financial satisfaction in some welfare regimes rather than in the others. More specifically, we assumed that in more egalitarian welfare regimes (Liberal and Socio-Democratic regime) income is less important as a bargaining instrument than in conservative and familialistic model. The results of our analysis confirmed that welfare regimes have the potential to change the strength of the relationship between personal money and well-being, but probably not in our expected direction. Indeed, countries were grouped according to the criteria that go beyond the typology of the welfare regimes. Thus, we concluded that country context does matter but we needed a more detailed analysis of female working patterns and employment in order to understand the direction of the welfare regime's impact. This was one of the reasons why in the next chapter we widened our theoretical perspective analyzing not only woman's achievements in the forms of income, but rather a complex set of employment relations in which they are involved. Our view was that not only income matters for woman's well-being but also other non-income related factors, which potentially influence woman's position in the household. Our theoretical perspective derived from the theories of Gerson (1985, 1993) and Hakim (2000) and we expected that the effect of welfare regimes would be easier to track when taking into account also the form of female employment. Therefore, we looked for the confirmation of our third hypothesis on the role of work commitment and career prospects for woman's financial satisfaction.

In our analysis, we showed that woman's labour market attachment reflected through her career prospects and continuous employment positively influences her welfare (financial satisfaction) confirming, thus, our initial view. However, the results also gave us some surprises especially in terms of the effect of some career choices on women. For instance, 'marriage' career emerges as a powerful predictor of woman's financial satisfaction as well. Another surprise came from our comparative analysis: while we studied the effect of institutional context we also had certain expectations of how particular welfare regimes should affect micro-relations, based on their influence on woman's employment. However, even though institutional context in the form of welfare regimes turned important, the variation in results was not easy to explain also because it seemed

that the countries might have been grouped together according to some other criteria rather than welfare regime. In all the analyses we found that, for instance, Ireland is more similar to Italy than to the UK, even though it belongs to the liberal welfare regime. Thus, we concluded that it is important to analyse the role of institutions for intra-household relations and individual welfare but we suggested that there might be some other typologies that better cover the observed relations.

Finally, in the last chapter, we moved from the analysis of the effect of woman's individual achievements towards our hypotheses on the role of union for woman's well-being. We parted by outlining the approaches which suggest the superiority of marriage over cohabitation for woman's well-being (Waite 1995; Vogler 2005) and we also investigated the reasons for such prevalent view. We found that one of the reasons for this view was also the differences in income sharing between married and cohabiting couples, which were found to be substantial. The results of our analysis were the following: we discovered that marriage is more likely to bring higher economic well-being than cohabiting union and that cohabitants are more likely to rely on market based exchanges and bargaining for control of resources. In other words, individual financial resources are of greater importance for the well-being of cohabiting than married women. The results were further elaborated by inclusion of other potentially important variables, such as duration of marriage, as we attempted to test whether the differences we observed were due to the lower relationship investment. In this, we relied on the premises of transaction cost approach. Similarly to the previous results, we also found the role of institutions in the observed relations. Each country was studied in the context of current legislation on cohabitation, which is not only specific to the welfare regime but also to each country.

To conclude, in our analysis of the effect of income, work and union on woman's financial satisfaction we discovered that our theoretical frameworks relatively well explained the observed relations. Most of our hypotheses were confirmed, both general and specific. Still, a weakness in our theoretical framework might have been the choice of the welfare regime typology as we thought that it was not able to fully explain the observed differences. And, even when the welfare regime typology offered the sufficient information for explanations, the complexity of institutional factors did not allow us to understand

which policies or components influenced the most the associations we studied. Therefore, we suggest that this study was important to provide a first insight into the international differences of the link between income, work and union with financial satisfaction (for women), but the next analyses would be richer if they either apply a more adequate country typology or analyse the separate effect of each relevant institutional component on the micro relations.

Appendix⁴⁸

Table A1: Logistic random intercept regression: estimated odds ratios

The regression of career prospects on woman's financial satisfaction (the table refers to the table 4.6)

Model 2:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	OR (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,03 (0,01)***	1,14 (0,04)***	1,00 (0,02)	1,08 (0,03)***	0,98 (0,02)
Family income	2,07 (0,1)***	2,93 (0,52)***	2,47 (0,21)***	3,79 (0,44)***	3,08 (0,31)***
Managers&Professionals	1,87 (0,21)***	1,56 (0,31)**	1,34 (0,19)**	1,19 (0,22)	1,68 (0,31)***
Intermediate	1,65 (0,17)***	1,63 (0,31)**	1,09 (0,14)	1,10 (0,20)	1,68 (0,28)***
Small employers	1,25 (0,17)*	0,86 (0,33)	0,81 (0,16)	1,29 (0,39)	1,71 (0,49)*
White collar (ref. blue collar)	1,25 (0,19)	1,4 (0,27)*	1,03 (0,14)	1,02 (0,18)	1,37 (0,23)*
Long-term unemployed	0,58 (0,08)***	0,97 (0,53)	0,61 (0,15)**	/	0,48 (0,24)
Missing cat.	1,12 (0,11)	0,75 (0,24)	1,25 (0,18)	1,13 (0,26)	1,08 (0,18)
Age	0,99 (0,004)	1,04 (0,01)***	0,98 (0,005)***	0,98 (0,01)***	1,00 (0,01)
Number of children	1,00 (0,03)	0,90 (0,05)**	0,97 (0,03)	0,80 (0,04)***	0,87 (0,03)***
Married up (ref.=hom)	1,32 (0,1)***	1,01 (0,14)	0,97 (0,08)	1,03 (0,11)	1,15 (0,13)
Married down	1,13 (0,09)	1,21 (0,16)	0,90 (0,08)	0,95 (0,12)	1,09 (0,12)
Married (ref.=coh)	1,22 (0,26)	1,38 (0,18)**	1,44 (0,14)***	1,42 (0,18)***	1,09 (0,25)
Financial hardship (I=yes)	0,17 (0,01)***	0,11 (0,01)***	0,07 (0,004)***	0,01 (0,001)***	0,22 (0,02)***
Wave 2 (ref.=wave1)	1,05 (0,07)	0,77 (0,11)*	0,83 (0,07)**	1,17 (0,15)	1,01 (0,11)
Wave 3	0,79 (0,06)***	0,69 (0,11)**	0,85 (0,07)*	0,98 (0,13)	0,85 (0,09)
Wave4	0,67 (0,05)***	0,95 (0,16)	0,95 (0,09)	1,07 (0,15)	1,00 (0,12)
Wave5	1,04 (0,08)	0,73 (0,12)**	0,96 (0,09)	1,26 (0,17)*	0,87 (0,11)
Wave6	1,08 (0,08)	0,62 (0,10)***	0,92 (0,09)	1,20 (0,17)	0,80 (0,11)
Wave7	1,04 (0,08)	0,53 (0,09)***	1,02 (0,1)	0,88 (0,13)	0,74 (0,11)**
Random part					
ψ	1,8 (0,11)	1,8 (0,23)	2,14 (0,15)	2,74 (0,24)	1,88 (0,19)
Log likelihood	-9220,45	-2170,97	-6431,24	-3472,06	-3434,57
N.	17482	5815	13485	10394	6344

* significant at 10%; ** significant at 5%; *** significant at 1%

⁴⁸ The appendix includes the tables that were not reported in the main text as well as the complete version of the models presented only with selected variables.

Table A2: Logistic random intercept regression: estimated odds ratios

The regression of career prospects and work commitment on woman's financial satisfaction (the table refers to the table 4.7)

Model 4:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	OR (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,02 (0,02)	1,05 (0,05)	0,98 (0,02)	1,01 (0,03)	0,99 (0,03)
Family income	2,05 (0,12)***	3,48 (0,77)***	2,23 (0,21)***	3,6 (0,51)***	2,98 (0,36)***
Remaining employed (ref. Int)	1,59 (0,16)***	1,92 (0,30)***	1,66 (0,17)***	1,32 (0,21)*	1,34 (0,19)**
Remaining unemployed	0,60 (0,09)***	0,39 (0,14)**	0,48 (0,1)***	/	0,70 (0,32)
Remaining inactive	1,54 (0,14)***	0,84 (0,19)	1,58 (0,19)***	0,69 (0,12)**	1,34 (0,19)**
Managers&Professionals	1,74 (0,23)***	1,19 (0,27)	1,21 (0,20)	1,06 (0,23)	1,53 (0,33)**
Intermediate	1,51 (0,18)***	1,35 (0,30)	1,03 (0,15)	0,88 (0,18)	1,70 (0,33)***
Small employers	0,97 (0,15)	0,60 (0,25)	0,68 (0,15)*	1,39 (0,48)	1,84 (0,61)*
White collar (ref. blue collar)	1,25 (0,22)	1,23 (0,27)	0,93 (0,14)	0,91 (0,18)	1,20 (0,23)
Long-term unemployed	0,76 (0,13)	1,31 (1,01)	1,07 (0,32)	/	0,59 (0,38)
Missing cat.	1,02 (0,12)	0,85 (0,32)	1,15 (0,20)	1,5 (0,41)	1,00 (0,19)
Age	0,99 (0,01)**	1,03 (0,01)***	0,97 (0,01)***	0,98 (0,01)***	1,00 (0,01)
Number of children	1,00 (0,04)	0,9 (0,06)*	0,96 (0,04)	0,82 (0,04)***	0,85 (0,04)***
Married up (ref.=hom)	1,36 (0,11)***	1,19 (0,19)	0,97 (0,1)	1,13 (0,14)	1,19 (0,16)
Married down	1,15 (0,10)	1,14 (0,17)	0,875 (0,09)	0,97 (0,14)	1,09 (0,14)
Married (ref.=coh)	1,49 (0,43)	1,33 (0,21)*	1,33 (0,15)**	1,29 (0,21)	1,02 (0,32)
Financial hardship (1=yes)	0,15 (0,01)***	0,11 (0,01)***	0,07 (0,01)***	0,01 (0,001)***	0,22 (0,02)***
Wave 2 (ref.=wave7)	1,06 (0,09)	1,64 (0,29)***	0,80 (0,08)**	1,26 (0,21)	1,29 (0,21)
Wave 3	0,79 (0,07)***	1,68 (0,30)***	0,81 (0,08)**	1,04 (0,17)	1,11 (0,17)
Wave4	0,67 (0,06)***	2,04 (0,38)***	0,90 (0,09)	1,19 (0,19)	1,31 (0,20)*
Wave5	1,04 (0,09)	1,34 (0,24)*	0,92 (0,1)	1,4 (0,22)**	1,15 (0,18)
Wave6	1,11 (0,09)	1,26 (0,22)	0,89 (0,1)	1,3 (0,20)*	1,10 (0,18)
Random part					
ψ	2,004 (0,14)	1,67 (0,26)	2,27 (0,18)	2,89 (0,29)	2,047 (0,23)
Log likelihood	-6994,1	-1549,89	-4888,47	-2571,29	-2592,32
N.	13507	4253	10299	8027	4774

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A3: Logistic random intercept regression: estimated odds ratios

The regression of career prospects and work commitment on woman's financial satisfaction (the table refers to the table 4.8)

Model 5:

Fin. Sat.	Italy	Denmark	France	UK	Ireland
Variables	OR (std.error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)	Or.(Std.Error)
Fixed part					
Woman's income share	1,01 (0,02)	1,04 (0,05)	0,96 (0,02)	1,03 (0,04)	0,99 (0,03)
Family income	2,1 (0,12)***	3,29 (0,73)***	2,08 (0,20)***	3,1 (0,53)***	3,03 (0,37)***
Remain full time (ref. Int)	1,79 (0,19)***	2,03 (0,34)***	1,86 (0,22)***	1,58 (0,36)**	1,25 (0,23)
Remaining part-time	1,26 (0,20)	1,47 (0,35)	1,77 (0,28)***	1,26 (0,35)	1,46 (0,25)**
Remaining unemployed	0,60 (0,09)***	0,40 (0,14)**	0,49 (0,1)***	/	0,71 (0,33)
Remaining inactive	1,55 (0,14)***	0,84 (0,19)	1,6 (0,20)***	0,76 (0,16)	1,37 (0,19)**
Trans full/part-time	1,59 (0,23)***	2,09 (0,55)***	1,63 (0,31)***	1,92 (0,70)*	1,44 (0,31)*
Managers&Professionals	1,61 (0,21)***	1,19 (0,27)	1,15 (0,19)	1,19 (0,3)	1,45 (0,31)*
Intermediate	1,46 (0,18)***	1,37 (0,30)	0,99 (0,14)	0,99 (0,24)	1,69 (0,32)***
Small employers	0,93 (0,14)	0,61 (0,26)	0,69 (0,16)	1,56 (0,65)	1,89 (0,63)*
White collar (ref. blue collar)	1,22 (0,21)	1,25 (0,28)	0,91 (0,14)	1,037 (0,25)	1,18 (0,22)
Long-term unemployed	0,77 (0,13)	1,34 (1,02)	1,11 (0,33)	/	0,58 (0,38)
Missing cat.	1,02 (0,12)	0,87 (0,32)	1,11 (0,19)	1,68 (0,50)*	1,00 (0,19)
Age	0,99 (0,01)**	1,03 (0,01)***	0,97 (0,01)***	0,97 (0,01)***	1,00 (0,01)
Number of children	1,00 (0,04)	0,90 (0,06)*	0,98 (0,04)	0,85 (0,06)**	0,85 (0,04)*
Married up (ref.=hom)	1,36 (0,12)***	1,21 (0,19)	0,95 (0,1)	1,02 (0,15)	1,20 (0,16)
Married down	1,18 (0,10)*	1,11 (0,17)	0,90 (0,1)	0,85 (0,14)	1,12 (0,14)
Married (ref.=coh)	1,45 (0,43)	1,31 (0,21)*	1,33 (0,16)**	1,33 (0,25)	1,01 (0,31)
Financial hardship (1=yes)	0,15 (0,01)***	0,12 (0,01)***	0,07 (0,01)***	0,009 (0,001)***	0,22 (0,02)*
Wave 2 (ref.=wave7)	1,07 (0,09)	1,65 (0,29)***	0,80 (0,09)**	1,22 (0,24)	1,32 (0,21)*
Wave 3	0,79 (0,07)***	1,70 (0,31)***	0,80 (0,09)*	0,95 (0,19)	1,11 (0,18)
Wave4	0,68 (0,06)***	2,05 (0,39)***	0,89 (0,10)	1,04 (0,20)	1,3 (0,20)
Wave5	1,05 (0,09)	1,39 (0,25)*	0,87 (0,10)	1,32 (0,25)	1,13 (0,18)
Wave6	1,11 (0,1)	1,3 (0,23)	0,88 (0,10)	1,35 (0,25)	1,09 (0,18)
Random part					
ψ	2,00 (0,14)	1,61 (0,26)	2,26 (0,19)	2,98 (0,37)	1,96 (0,23)
Log likelihood	-6854,96	-1538,71	-4481,58	-1792,24	-2522,59
N.	13218	4197	9334	5715	4623

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A4: Random intercept proportional odds model (coefficients)

The regression of cohabitation (marriage duration) and income share on financial satisfaction: France
(The table refers to the tables 5.3 to 5.6)

	(1)	(2)	(3)	(4)
Financial satisfaction				
Woman's Income share	-0.000 (0.015)	-0.022 (0.016)	0.001 (0.017)	0.108*** (0.032)
Working	1.071*** (0.084)	1.072*** (0.084)	1.102*** (0.098)	1.107*** (0.098)
Inactive	1.096*** (0.086)	1.085*** (0.086)	1.193*** (0.102)	1.178*** (0.102)
age_f	-0.001 (0.008)	-0.002 (0.008)	-0.004 (0.009)	-0.006 (0.009)
Household income	0.853*** (0.069)	0.846*** (0.069)	0.773*** (0.078)	0.761*** (0.078)
Financial hardship	-2.103*** (0.052)	-2.104*** (0.052)	-2.246*** (0.062)	-2.247*** (0.062)
Number of children	-0.054** (0.026)	-0.052** (0.026)	-0.070** (0.029)	-0.062** (0.030)
Married up	-0.025 (0.069)	-0.025 (0.069)	0.043 (0.082)	0.039 (0.082)
Married down	-0.041 (0.071)	-0.042 (0.071)	0.009 (0.085)	0.005 (0.085)
Cohabitation	-0.328*** (0.078)	-0.803*** (0.151)		
Long term unemployed_f	-0.338 (0.208)	-0.334 (0.208)	-0.486** (0.224)	-0.488** (0.224)
ESeC 1_f	0.137 (0.121)	0.138 (0.122)	0.110 (0.130)	0.114 (0.130)
ESeC 2_f	0.049 (0.106)	0.047 (0.106)	0.065 (0.111)	0.065 (0.111)
ESeC3_f	-0.258 (0.171)	-0.255 (0.171)	-0.227 (0.180)	-0.232 (0.180)
ESeC4_f	-0.036 (0.112)	-0.037 (0.112)	0.005 (0.117)	0.004 (0.117)
Missing	0.099 (0.124)	0.083 (0.124)	0.119 (0.132)	0.084 (0.133)

Long-term unemployed_m	-0.505*** (0.151)	-0.517*** (0.151)	-0.407** (0.191)	-0.436** (0.192)
ESeC 1_m	0.228*** (0.078)	0.226*** (0.078)	0.274*** (0.089)	0.267*** (0.089)
ESeC 2_m	0.019 (0.067)	0.019 (0.067)	0.036 (0.078)	0.036 (0.078)
ESeC3_m	0.254** (0.109)	0.247** (0.109)	0.145 (0.123)	0.135 (0.123)
ESeC4_m	-0.029 (0.137)	-0.022 (0.137)	0.028 (0.156)	0.035 (0.157)
Missing	0.018 (0.128)	0.013 (0.128)	0.142 (0.158)	0.125 (0.158)
Age_m	-0.022*** (0.007)	-0.021*** (0.007)	-0.024*** (0.007)	-0.022*** (0.007)
wave2	-0.256*** (0.059)	-0.254*** (0.059)	-0.253*** (0.059)	-0.251*** (0.059)
wave3	-0.294*** (0.061)	-0.291*** (0.061)	-0.285*** (0.062)	-0.282*** (0.062)
wave4	-0.176*** (0.064)	-0.172*** (0.064)	-0.168** (0.066)	-0.164** (0.066)
wave5	-0.180*** (0.067)	-0.174*** (0.067)	-0.028 (0.147)	0.016 (0.147)
wave6	-0.077 (0.067)	-0.070 (0.067)	-0.079 (0.125)	-0.047 (0.125)
wave7	-0.020 (0.069)	-0.012 (0.069)	0.113 (0.129)	0.145 (0.130)
cohabshare		0.124*** (0.034)		
married (1year)			0.247** (0.117)	0.545** (0.248)
married(1-10year)			0.316*** (0.105)	0.829*** (0.192)
married(10+)			0.519*** (0.114)	1.088*** (0.182)
married (1year)xshare				-0.072 (0.059)
married(1-10year)xshare				-0.132*** (0.043)
married(10+)share				-0.152*** (0.038)
Observations	12940	12940	9129	9129

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A5: Random intercept proportional odds model (coefficients)
 The regression of cohabitation (marriage duration) and income share on financial satisfaction: Ireland
 (The table refers to the tables 5.3 to 5.6)

	(1)	(2)	(3)	(4)
Financial satisfaction				
Woman's Income share	0.004 (0.022)	0.002 (0.022)	0.004 (0.022)	0.043 (0.092)
Working	0.768*** (0.158)	0.769*** (0.158)	0.766*** (0.158)	0.772*** (0.158)
Inactive	0.764*** (0.154)	0.766*** (0.154)	0.766*** (0.154)	0.770*** (0.154)
age_f	0.009 (0.014)	0.009 (0.014)	0.011 (0.015)	0.011 (0.015)
Household income	0.828*** (0.082)	0.827*** (0.082)	0.831*** (0.082)	0.831*** (0.082)
Financial hardship	-1.365*** (0.068)	-1.364*** (0.068)	-1.354*** (0.068)	-1.354*** (0.068)
Number of children	-0.145*** (0.031)	-0.145*** (0.031)	-0.146*** (0.031)	-0.145*** (0.032)
Married up	0.066 (0.098)	0.066 (0.098)	0.059 (0.098)	0.058 (0.098)
Married down	0.074 (0.092)	0.076 (0.092)	0.071 (0.092)	0.068 (0.092)
Cohabitation	-0.108 (0.196)	-0.250 (0.393)		
Long term unemployed_f	-0.348 (0.483)	-0.354 (0.483)	-0.317 (0.484)	-0.304 (0.484)
ESeC 1_f	0.216 (0.171)	0.218 (0.171)	0.210 (0.171)	0.213 (0.171)
ESeC 2_f	0.261* (0.158)	0.262* (0.158)	0.258 (0.158)	0.258 (0.158)
ESeC3_f	0.116 (0.264)	0.117 (0.264)	0.118 (0.265)	0.117 (0.264)
ESeC4_f	0.161 (0.157)	0.161 (0.157)	0.159 (0.158)	0.162 (0.157)
Missing	0.055 (0.159)	0.054 (0.159)	0.075 (0.160)	0.080 (0.161)

Long-term unemployed_m	-1.008*** (0.196)	-1.009*** (0.196)	-1.008*** (0.196)	-1.012*** (0.196)
ESeC 1_m	0.509*** (0.113)	0.510*** (0.113)	0.513*** (0.113)	0.513*** (0.113)
ESeC 2_m	0.247** (0.113)	0.249* (0.113)	0.248** (0.113)	0.248** (0.113)
ESeC3_m	0.333*** (0.112)	0.333*** (0.112)	0.332*** (0.112)	0.333*** (0.112)
ESeC4_m	-0.027 (0.177)	-0.027 (0.177)	-0.065 (0.178)	-0.065 (0.178)
Missing	-0.515** (0.234)	-0.515** (0.234)	-0.522** (0.234)	-0.519** (0.234)
Age_m	-0.003 (0.012)	-0.003 (0.012)	-0.002 (0.012)	-0.002 (0.012)
wave2	0.056 (0.079)	0.056 (0.079)	0.054 (0.080)	0.054 (0.080)
wave3	-0.181** (0.084)	-0.180** (0.084)	-0.183** (0.085)	-0.182** (0.085)
wave4	-0.008 (0.088)	-0.007 (0.088)	-0.013 (0.090)	-0.013 (0.090)
wave5	-0.026 (0.095)	-0.025 (0.095)	-0.037 (0.098)	-0.039 (0.099)
wave6	-0.131 (0.105)	-0.130 (0.105)	-0.143 (0.111)	-0.141 (0.111)
wave7	-0.114 (0.115)	-0.112 (0.115)	-0.134 (0.122)	-0.130 (0.122)
cohabshare		0.039 (0.092)		
married (1year)			0.058 (0.223)	-0.064 (0.460)
married(1-10year)			0.162 (0.213)	0.356 (0.407)
married(10+)			0.028 (0.245)	0.175 (0.420)
married (1year)xshare				0.033 (0.109)
married(1-10year)xshare				-0.056 (0.096)
married(10+)share				-0.039 (0.095)
Observations		6245	6245	6225

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A6: Random intercept proportional odds model (coefficients)

The regression of cohabitation (marriage duration) and income share on financial satisfaction: Italy
(The table refers to the tables 5.3 to 5.6)

	(1)	(2)	(3)	(4)
Financial Satisfaction				
Woman's Income share	0.010 (0.011)	0.009 (0.011)	0.010 (0.011)	0.081 (0.059)
Working	0.751*** (0.077)	0.752*** (0.077)	0.753*** (0.077)	0.754*** (0.077)
Inactive	0.621*** (0.065)	0.622*** (0.065)	0.626*** (0.066)	0.626*** (0.066)
age_f	-0.001 (0.008)	-0.002 (0.008)	-0.003 (0.009)	-0.004 (0.009)
Household income	0.517*** (0.034)	0.517*** (0.034)	0.518*** (0.035)	0.518*** (0.035)
Financial hardship	-1.484*** (0.042)	-1.484*** (0.042)	-1.485*** (0.043)	-1.485*** (0.043)
Number of children	-0.041 (0.026)	-0.041 (0.026)	-0.040 (0.027)	-0.039 (0.027)
Married up	0.210*** (0.063)	0.211*** (0.063)	0.221*** (0.064)	0.222*** (0.064)
Married down	0.155** (0.066)	0.157** (0.066)	0.158** (0.067)	0.161** (0.067)
Cohabitation	-0.114 (0.182)	-0.352 (0.267)		
Long term unemployed_f	-0.277** (0.128)	-0.274** (0.128)	-0.284** (0.130)	-0.286** (0.130)
ESeC 1_f	0.547*** (0.106)	0.548*** (0.106)	0.550*** (0.108)	0.551*** (0.108)
ESeC 2_f	0.410*** (0.098)	0.410*** (0.098)	0.403*** (0.099)	0.403*** (0.099)
ESeC3_f	0.123 (0.126)	0.119 (0.126)	0.112 (0.127)	0.106 (0.127)
ESeC4_f	0.158 (0.140)	0.161 (0.140)	0.161 (0.141)	0.163 (0.141)
Missing	0.018 (0.092)	0.018 (0.092)	0.011 (0.093)	0.006 (0.093)

Long-term unemployed_m	-0.786*** (0.124)	-0.785*** (0.124)	-0.785*** (0.126)	-0.786*** (0.126)
ESeC 1_m	0.594*** (0.068)	0.593*** (0.068)	0.592*** (0.069)	0.593*** (0.069)
ESeC 2_m	0.253*** (0.062)	0.253*** (0.062)	0.250*** (0.063)	0.250*** (0.063)
ESeC3_m	0.348*** (0.071)	0.348*** (0.071)	0.345*** (0.072)	0.345*** (0.072)
ESeC4_m	0.225** (0.107)	0.224** (0.107)	0.212* (0.109)	0.214* (0.109)
Missing	0.142 (0.130)	0.141 (0.130)	0.153 (0.131)	0.154 (0.131)
Age_m	-0.006 (0.007)	-0.006 (0.007)	-0.006 (0.008)	-0.006 (0.008)
wave2	-0.062 (0.053)	-0.062 (0.053)	-0.061 (0.053)	-0.061 (0.053)
wave3	-0.218*** (0.055)	-0.218*** (0.055)	-0.211*** (0.056)	-0.210*** (0.056)
wave4	-0.275*** (0.056)	-0.275*** (0.056)	-0.268*** (0.058)	-0.268*** (0.058)
wave5	-0.006 (0.057)	-0.006 (0.057)	-0.002 (0.060)	-0.001 (0.060)
wave6	0.046 (0.059)	0.045 (0.059)	0.074 (0.063)	0.073 (0.063)
wave7	-0.031 (0.061)	-0.031 (0.061)	-0.016 (0.068)	-0.016 (0.068)
cohabshare		0.073 (0.060)		
married (1year)			0.143 (0.200)	0.436 (0.291)
married(1-10year)			0.090 (0.187)	0.307 (0.272)
married(10+)			0.143 (0.197)	0.397 (0.279)
married (1year)xshare				-0.092 (0.066)
married(1-10year)xshare				-0.064 (0.061)
married(10+)share				-0.079 (0.060)
Observations	16817	16817	16526	16526

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A7: Random intercept proportional odds model (coefficients)

The regression of cohabitation (marriage duration) and income share on financial satisfaction: UK
(The table refers to the tables 5.3 to 5.6)

Financial satisfaction	(1)	(2)	(3)	(4)
	pk002_f			
Woman's Income share	0.013 (0.019)	-0.006 (0.021)	0.014 (0.020)	0.094** (0.038)
Working	0.429*** (0.082)	0.431*** (0.081)	0.449*** (0.085)	0.453*** (0.085)
age_f	-0.018** (0.009)	-0.019** (0.009)	-0.024** (0.010)	-0.026*** (0.010)
Household income	1.120*** (0.079)	1.123*** (0.079)	1.157*** (0.083)	1.156*** (0.083)
Financial hardship	-3.357*** (0.070)	-3.356*** (0.070)	-3.380*** (0.073)	-3.379*** (0.073)
Number of children	-0.227*** (0.033)	-0.228*** (0.033)	-0.204*** (0.035)	-0.203*** (0.035)
Married up	-0.021 (0.073)	-0.022 (0.073)	-0.046 (0.076)	-0.046 (0.076)
Married down	-0.009 (0.082)	-0.006 (0.082)	-0.036 (0.086)	-0.029 (0.086)
Cohabitation	-0.363*** (0.087)	-0.732*** (0.182)		
ESeC 1_f	0.167 (0.142)	0.169 (0.141)	0.145 (0.148)	0.152 (0.148)
ESeC 2_f	-0.038 (0.139)	-0.040 (0.139)	-0.073 (0.145)	-0.074 (0.145)
ESeC3_f	-0.058 (0.229)	-0.048 (0.229)	-0.101 (0.238)	-0.080 (0.238)
ESeC4_f	-0.170 (0.136)	-0.167 (0.135)	-0.220 (0.142)	-0.215 (0.142)
Missing	0.228 (0.177)	0.249 (0.177)	0.200 (0.190)	0.242 (0.190)

ESeC 1_m	0.269*** (0.087)	0.266*** (0.087)	0.239*** (0.090)	0.235*** (0.090)
ESeC 2_m	0.043 (0.090)	0.039 (0.090)	0.041 (0.093)	0.038 (0.093)
ESeC3_m	0.280*** (0.107)	0.283*** (0.107)	0.261** (0.111)	0.258** (0.111)
ESeC4_m	0.161 (0.152)	0.157 (0.152)	0.117 (0.162)	0.105 (0.162)
Missing	-0.358** (0.145)	-0.366** (0.145)	-0.359** (0.153)	-0.379** (0.153)
Age_m	0.009 (0.008)	0.011 (0.008)	0.012 (0.008)	0.014* (0.008)
wave2	0.057 (0.079)	0.058 (0.079)	0.068 (0.081)	0.067 (0.081)
wave3	-0.022 (0.080)	-0.020 (0.080)	-0.008 (0.083)	-0.007 (0.083)
wave4	-0.008 (0.084)	-0.004 (0.084)	-0.009 (0.088)	-0.006 (0.088)
wave5	0.012 (0.086)	0.016 (0.086)	0.015 (0.091)	0.020 (0.091)
wave6	-0.015 (0.089)	-0.011 (0.089)	-0.027 (0.097)	-0.023 (0.097)
wave7	-0.317*** (0.095)	-0.312*** (0.095)	-0.308*** (0.105)	-0.304*** (0.105)
cohabshare		0.093** (0.040)		
married (1year)			0.345*** (0.110)	0.442* (0.242)
married(1-10year)			0.434*** (0.121)	0.977*** (0.224)
married(10+)			0.396*** (0.142)	0.784*** (0.229)
married (1year)xshare				-0.018 (0.057)
married(1-10year)xshare				-0.146*** (0.050)
married(10+)share				-0.100** (0.048)
Observations	10322	10322	9708	9708

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A8: Random intercept proportional odds model (coefficients)

The regression of cohabitation (marriage duration) and income share on financial satisfaction: pooled models

	(1)	(2)
Financial satisfaction		
Woman's Income share	-0.003 (0.011)	0.001 (0.012)
Working	1.282*** (0.073)	1.340*** (0.083)
Inactive	1.050*** (0.075)	1.084*** (0.086)
age_f	0.003 (0.005)	-0.000 (0.006)
Household income	0.830*** (0.044)	0.852*** (0.049)
Financial hardship	-2.423*** (0.036)	-2.510*** (0.040)
Number of children	-0.108*** (0.018)	-0.107*** (0.020)
Married up	-0.027 (0.044)	0.004 (0.048)
Married down	0.018 (0.046)	0.040 (0.051)
Cohabitation	-0.200*** (0.075)	
Long term unemployed_f	-0.200 (0.194)	-0.339 (0.211)
ESeC 1_f	0.239*** (0.080)	0.187** (0.085)
ESeC 2_f	0.112 (0.075)	0.079 (0.079)
ESeC3_f	-0.086 (0.126)	-0.099 (0.133)
ESeC4_f	0.038 (0.077)	0.016 (0.081)
Missing	0.172* (0.095)	0.227** (0.102)

Long-term unemployed_m	-0.563*** (0.135)	-0.486*** (0.161)
ESeC 1_m	0.235*** (0.050)	0.255*** (0.054)
ESeC 2_m	0.032 (0.048)	0.049 (0.052)
ESeC3_m	0.197*** (0.068)	0.160** (0.074)
ESeC4_m	0.025 (0.088)	0.052 (0.096)
Missing	-0.188** (0.088)	-0.163* (0.099)
Age_m	-0.005 (0.005)	-0.005 (0.005)
wave2	-0.183*** (0.041)	-0.187*** (0.042)
wave3	-0.254*** (0.043)	-0.255*** (0.044)
wave4	-0.182*** (0.045)	-0.178*** (0.047)
wave5	-0.194*** (0.046)	-0.176*** (0.056)
wave6	-0.226*** (0.047)	-0.289*** (0.058)
wave7	-0.315*** (0.048)	-0.414*** (0.061)
Denmark	1.686*** (0.075)	1.070*** (0.109)
UK	-0.257*** (0.056)	-0.301*** (0.100)
cohabXden	-0.472*** (0.116)	
cohabXfra	-0.065 (0.104)	

married (1year)	0.259***	
	(0.098)	
married(1-10year)	0.247**	
	(0.107)	
married(10+)	0.200*	
	(0.110)	
married (1 year)Xden	-0.060	
	(0.157)	
married(1-10year)den	0.508***	
	(0.165)	
married(10+)xden	1.187***	
	(0.158)	
married (1 year)xfra	0.071	
	(0.157)	
married(1-10year)xfra	-0.036	
	(0.146)	
married(10+)xfra	-0.019	
	(0.129)	
Observations	28547	24011

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

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