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What makes full-time employed women satisfied with their working hours?

Abstract:

In spite of extended parental leaves, tremendous improvement in day-care availability, and a cultural climate that is supportive of women's full-time work, Norwegian women still have one of the highest female part-time rates in Europe. Longer working hours among women would clearly alleviate the lack of labour in many sectors of the economy, but this reserve may be difficult to mobilise as previous research have shown that large proportions of female full-time workers are discontent with their working hours. In this article we examine whether this is true even today, and identify factors that may facilitate or impede working-hours satisfaction among female full-timers based on recent data from the Norwegian Labour Force Surveys. Contrary to past research, we find that most women are satisfied with their full-time hours. Still, young children in the household are a strong deterrent of full-time contentment, as is long working hours for the spouse, if women are married. Full-time contentment also varies with occupation, but the main job-deterrent seems to be non-standard working hours such as shift and rota.

Keywords: Female labour supply, working-hours preferences, working-hours contentment, full-time work

JEL classification: J22, J24, J28

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Discussion Papers

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1. Introduction

In recent years there has been a rising demand for labour in Norway, and due to a growing population of elderly people the demand is predicted to increase further in the future. A much debated question is therefore how to mobilise more labour reserves, as labour force participation is already high, both among men and women. In 2009, more than 80 per cent of men and almost 80 per cent of women aged 25-66 years were economically active (Statistics Norway, 2010a). On the other hand, Norwegian women have one of the highest part-time rates in Europe. More than 40 per cent of all employed women still work part time, and part-time work is common at all stages of the life-cycle, not only when the children are small (Bø et al., 2008). An obvious way to raise labour supply would therefore be to induce more women to work full time. How this can be done is a complex question that needs to be studied from different angles. The point of departure of previous research has often been part-time workers, and their preferences for and propensity to work longer hours (Kjeldstad og Nymoen, 2004; Ministry of Labour and Social Affairs, 2004). At the same time much previous research indicates that women are often discontent with full-time work (Kitterød, 2007; Merz, 2002; Reynolds, 2005; Torp and Barth, 2001; van Echtelt et. al, 2006). Our approach is therefore to investigate more closely the determinants of working-hours satisfaction among full-time working women. In this way we hope to identify circumstances that act as incitements or deterrents of full-time work.

When analysing working-hours satisfaction we need information both on the number of hours women actually or contractually work *and* the hours they would prefer to work. In empirical research it is often assumed that actual working hours reflect preferred hours, but as pointed out by several authors (e.g. Clarkberg and Moen, 2001; Böheim and Taylor, 2004; Reynolds, 2003) work-hour *behaviour* may not necessarily reflect work-hour *preferences*. Employer demands and labour market institutions restrict employees in their choices, and working hours tend to come in "pre-packaged bundles". This so-called "lumpiness" of labour demand is one explanation why actual working hours may deviate from preferred hours (van Echtelt et al., 2009). Another explanation that may be more valid in contemporary labour markets with fewer standard contracts and more flexibility is that there is a new form of lumpiness related to a shift of attention from time considerations to task considerations. An increased focus on output and performance may then result in employees spending more time at work than they prefer, even if they may freely choose their working hours (the autonomy paradox; ibid).

Recently, studies on working-hour preferences and possible mismatches with actual hours have appeared from several countries. This research confirms that there are significant discrepancies

between people's actual and preferred working hours, and a general finding is that the proportion preferring shorter working hours far outweighs the proportion preferring longer hours (Böheim and Taylor, 2004; Clarkenberg and Moen, 2001; McDonald et al., 2006; Merz, 2002; Reynolds, 2003 and 2005; Reynolds and Aletraris, 2006; van Echelt et al., 2006). The results vary considerably across countries and are sensitive to question formulations and context (see e.g. Stier and Lewin-Epstein, 2003), but over-employment among women is usually estimated to be in the range of 30 to almost 70 per cent. Previous Norwegian research reaches similar conclusions (Ellingsæter,1987; Kitterød and Roalsø, 1996; Torp and Barth, 2001; Kitterød, 2007). These studies are based on different sample surveys with varying focus, theme and question formulation, and are sometimes limited to mothers only. Yet, the general impression is that a large proportion (30-50 per cent) would prefer to work less. Over-employment thus seems more of a problem than under-employment also in Norway.

The present paper investigates this issue in more detail based on more recent data from the regular Norwegian Labour Force Surveys (NLFS). The NLFS is a large, quarterly representative sample of the resident, working-age population of Norway, but before 2006 this data source could not be used to analyse mismatches in working hours for all employed persons, as questions on preferred hours were only put to the part-time employed. In the following, we illuminate both full-time working and part-time working women's contentment with their contractual working hours based on descriptive statistics, but the main goal is to distinguish the most influential factors of contentment among full-time workers. To do so we run a logistic regression model among full-time workers only, including a set of individual and job related explanatory variables that are believed to affect women's preferences and contentment. In addition we examine the importance of the husband's personal characteristics and his labour market situation based on a sub-sample of married women. Guided by these results we suggest some answers to our initial question of what makes full-time working women satisfied with their working hours.

2. The Norwegian context

Norwegian women have a high employment level, and mothers in particular are characterised by large proportions in the labour force even when the children are small. In 2009, more than 80 per cent of Norwegian mothers of pre-school children were economically active. This is a larger proportion than among women of working-age in general, and not far from the corresponding proportion among men (Statistics Norway 2010a). However, as mentioned introductorily, part-time is wide-spread. The Norwegian Work Environment Act lays down parents' right to reduced working hours, unless this is of serious inconvenience to the employer, and about half of all employed mothers work part-time (Bø

et al. 2008). In addition, the Norwegian labour market is strongly gender segregated. Men often work in professions in which long hours are common and reduced hours discouraged, whereas women are concentrated in professions with less long hours and more part time (Abrahamsen 2000).

Figure 1 gives a brief overview of recent trends in female employment in Norway based on published NLFS statistics. The division of employed persons into full-time and part-time workers rests on the information on contractual working hours. Full time is defined as weekly working hours of 37 hours or more, or 32-36 hours if the respondents claim that this constitutes full-time work. Part time is further divided into short and long part time. Contractual working hours of 1-19 hours per week are defined as short part time, whereas 20-36 hours are defined as long part time, except for respondents who work 32-36 hours and claim that this is full-time work.

As shown in Figure 1, the proportion of women aged 25-54 in the labour force has been rising slightly since the mid 1990s, from 81 per cent in 1996 to 85 percent in 2008. Unemployment was somewhat higher around the mid 1990s and in 2003-2005 than in the rest of the period, but the level never exceeded 3.2 per cent, which is very low in international comparison. The most prominent change over the last decade or so has been the increase in full-time work. In 1996, 46 per cent of all women 25-54 years worked full time, while 19 per cent worked long part time, and 14 per cent worked short part time. In 2008 the full-time proportion had risen to 55 per cent, whereas the corresponding long part-time and short part-time proportions were 21 and 9 per cent, respectively. When cumulating the three working-hours alternatives, we see that the employment rate also increased slightly over the period, from just below 80 per cent at the beginning to 85 per cent at the end.

High part-time rates among women with small children have usually been explained with a shortage of child care, but as the coverage of kindergartens has now improved tremendously, this explanation is less obvious. Today (2010) almost 90 per cent of 1-5 year olds have a place in a publicly subsidised day-care institution compared to just about 60 per cent at the turn of the millennium (Statistics Norway, 2010b). At the same time, the parental payment in kindergartens has been reduced considerably following a maximum fee regulation in 2003. Children below the age of one are usually looked after at home by the parents, as the total parental leave period is 56 weeks with 80 per cent wage compensation or 46 weeks with full compensation (up to an annual income ceiling of NOK 421536 or about EUR 53000). The extension of parental leave combined with improved supply of kindergartens and after-school programs have clearly facilitated women's employment. Moreover, new generations of women are better educated, the cultural climate in Norway is more supportive of

women's full-time work, and men are expected to be more involved in family work. An intriguing question is therefore why the proportion of female full-time workers is still relatively low in Norway, which brings us back to our initial theme of work-hour contentment among full-time workers.

Outside the labour force

80

Unemployed
Short part time

40

Full time

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

Figure 1. Female labour market activity in Norway. Women 25-54 years. 1996-2008

Source: Norwegian Labour Force Surveys

3. Data and descriptive statistics

The main source of information about the Norwegian labour market is the NLFS. The survey is based on a random sample of family units, where first a reference person in each family is selected, and next all other family members of working age are included. The gross sample consists of 24 000 persons, and since participation in the NLFS is obligatory, the response rate is very high, about 90%. Family membership is based on a common family identity number, but cohabiting couples do not have the same family number. Hence, there is no information on the partner in cohabiting couples in the NLFS. The respondents are interviewed eight consecutive quarters and answer a series of questions about their labour market situation, place of work and working hours in a given reference week. Together these reference weeks cover all weeks of the year.

The NLFS also contains a question about working-hours preferences, and for part-time workers, statistics on underemployment have existed for some time. The definition of underemployment is quite strict in published statistics from the NLFS. Besides expressing a preference for longer contractual

hours, a person must also have tried to get longer hours and be able to start with longer hours within a month to be counted as underemployed. Defined in this way, about 10 per cent of part-time workers in Norway were underemployed in 2007, the lowest level recorded since the statistics were first published at the end of the 1980s. The large majority of the underemployed are women, close to 80 per cent (Herstad Horgen and Rønning 2008). Care should be exercised in regarding the surplus working hours as a direct measure of spare labour market resources, however, as people may actually work longer than their contractual hours. The real surplus labour supply may therefore be somewhat lower than the difference between preferred and contractual hours (Fevang 2004, Amble 2008, Kjeldstad 2009).

Since 2006, the question on preferred working hours has also been put to full-time workers, and this gives us a complete picture of possible mismatches between contractual and preferred working hours in the Norwegian labour force. Working-hours preferences are revealed by first asking all employed persons: "Do you prefer other contractual working hours than xx hours, on the condition that the income is changed accordingly?" (xx being their total present hours in main and secondary occupations, if any). Those who give an affirmative answer are then asked: "How many hours per week do you prefer as contractual hours in all?" By means of these questions we can establish whether employed women are content with their present working hours, or whether they would prefer to work longer or shorter hours. Below we report the results for 1st quarter 2006 to 4th quarter 2007 for female employees aged 25-54 years. That is, we focus on the part of the life-course when most women are established with family and care responsibilities, and in line with other authors (e.g. Böheim and Taylor, 2004; Reynolds, 2003 and 2005, and Reynolds and Aletraris, 2007) we exclude self-employed who usually determine their working hours themselves.

As shown in Figure 2, the large majority of Norwegian women are satisfied with their contractual working hours, more than 80 per cent of all employed women over the whole of 2006-2007, and close to 90 per cent at the end of 2007. It is also worth noticing that the proportion preferring longer working hours is somewhat higher than the proportion preferring shorter hours. This is at odds with most of the findings of previous studies, both national and international, which suggest that most women who are dissatisfied with their working hours would prefer to work less. Thus, our analysis of Norway does not corroborate the assumption that over-employment is more of a problem than underemployment.

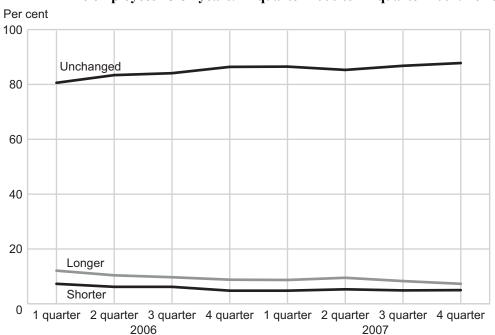
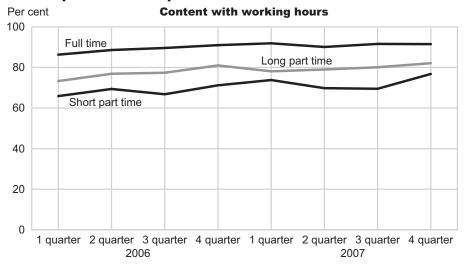


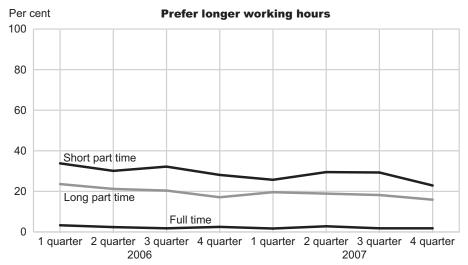
Figure 2. Proportions that prefer unchanged, longer or shorter working hours. Norwegian female employees 25-54 years. 1st quarter 2006 to 4th quarter 2007. Per cent

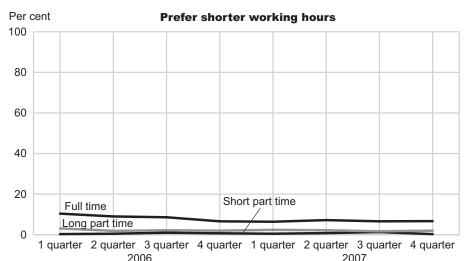
Source: Norwegian Labour Force Surveys

Previous research furthermore indicates that women who work full time more often are discontent with their working hours than women who work part time. For the UK, Böheim and Taylor (2004) found e.g. that about 45 per cent of full-time women was constrained in their working hours, mainly because they would prefer to work less, while the corresponding proportion among part-time workers was less than 30 per cent. Similar or even higher proportions of hour mismatches for full-time workers have also been reported for the US and Australia (Reynolds, 2003; McDonald et al., 2006), and for Norway (Torp and Barth, 2001; Kitterød, 2007). Our analysis based on NLFS data renders quite the opposite result. We find that the satisfaction with present hours is higher the longer the contractual hours are (Figure 3, upper panel). In 2006-2007, about 90 per cent of the full-time employees stated that they did not prefer any other working hours, whereas the corresponding proportions among long part-timers and short part-timers were just below 80 and about 70 per cent, respectively. Not surprisingly, very few full-time employees reported that they wanted longer working hours, only 2-3 per cent, but this share was much higher among part-time employees (Figure 3, middle panel). On average for 2006-2007, 19 per cent of long part-timers and 29 per cent of short part-timers expressed a preference for longer working hours. The proportions fell over the period. This is probably a reflection of the business cycle, as previous research has shown that underemployment is closely related to economic cycles (Kjeldstad, 2009). When the economy is expanding there are fewer underemployed, and in 2007 the economy was at its peak.

Figure 3. Proportions that are content with, or prefer longer or shorter working hours. Norwegian female employees 25-54 years working full time, long part time or short part time. 1st quarter 2006-4th quarter 2007. Per cent







Source: Norwegian Labour Force Surveys

As expected, the proportion preferring shorter hours is highest among full-time employees, but the mismatch is distinctly lower than for part-timers preferring longer hours (Figure 3, lower panel). On average for 2006-2007, about 8 per cent of full-time employees reported that they wanted shorter contractual hours, and similar to the trend for part-timers, the percentage fell across the period. One conclusion so far based on our analysis of NLFS data and the labour market situation in 2006-2007 is therefore that the mismatch in contractual working hours seems to be more of a problem for female part-timers than for female full-timers. As mentioned, this is contrary to the findings of previous research, and in a recent article we discuss why this is so (Kitterød and Rønsen, 2009). A full review of this question is outside the scope of this paper, but in our previous article we particularly stress the importance of survey theme, question formulation, and the social context of the survey. The NLFS is, for example, occupied with one single theme, the labour market, while previous analyses are based on surveys with a broader focus, either on time use and living conditions in general, or on child-care availability and the reconciliation of family and employment. In the latter cases, paid work may be conceived to be more in conflict with home-time and leisure, and long working hours may thus appear less attractive. In addition, the NLFS relates preferred working hours to contractual hours, whereas most other surveys compare preferred hours to usual or average working hours, which may well be longer than contractual hours. When interpreting the results, it is important to have in mind such differences between surveys.

4. Determinants of working-hours satisfaction

The next step of our analysis is to try to disentangle factors that make women satisfied with full-time work, and we do this by formulating a multivariate logistic regression model. The point of departure is full-time working female employees 25-54 years, as in the descriptive analysis. The dependent variable in the model has two possible outcomes, content or not content with present contractual working hours. "Content" in this connection is defined a bit broader than in the descriptive analysis, as we also include full-time employees who say they would prefer longer hours, but this group is very small, only 2-3 per cent. In the multivariate analysis, a satisfied full-time worker is thus either a woman who is pleased with her present contractual hours or one who would prefer to work even longer than she does at present.

Since the NLFS has a panel structure, respondents may have taken part in one or several of the quarterly surveys. We do not utilise the panel structure, but treat each survey as a separate cross-section and collapse the eight quarters into one larger data set. This means that one person may appear

several times in the data set, but in the analysis we control for this dependence between observations by adjusting the standard errors accordingly (estimating so-called "robust" standard errors).

At this point, we should also emphasize that the analysis is conditional on working full-time, and full-time jobs are more uncommon in certain groups, employment sectors and geographical regions than in others. Hence, women who work full time may sometimes be quite a select group. If these women are particularly determined to work full time, they could more often be content with their working hours than other women. However, if they live or work in surroundings that are less positive to full-time work and are met with other expectations from for example close relations and colleagues, this may influence their work-hour satisfaction in a negative manner. To which degree the results for full-time workers also hold for women in general is therefore an open question that cannot be answered by the present analysis¹.

When considering which explanatory variables to include in the model our point of departure is economic and sociological theories of labour supply behaviour. Usually these theories predict an individual's preferred adaptations to the labour market given certain economic and structural constraints, but the choice of working hours is also restricted by labour demand (Altonij and Paxson, 2001; Böheim and Taylor, 2004; Reynolds, 2003). Employers have incentives to hire employees for a substantial number of hours due to adjustment cost and return on human capital investments, and this creates a so-called 'lumpiness of labour demand' that explain why actual working hours deviate from what employees prefer (Hamermesh and Pfann, 1996). In contemporary labour markets with more flexibility there may also be a new form of lumpiness caused by the fact that work itself comes in lumps of tasks that must be finished before certain deadlines. This may make work particularly "timegreedy" and result in longer hours than employees prefer, even if they are free to choose their working hours (van Echtelt et al., 2006).

Based on the above notions, our models include both personal characteristics predicting preferred working hours and job-related variables that amongst others may reflect how easy or difficult it is to

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¹ To be able to generalise the results to all women we also tried estimating a two-stage Heckman selection model, i.e. we first estimated the probability of working full time (the selection equation) based on all women, and next the probability of being content with full-time work (the behavioural equation) based on full-time employees only, in which the latter equation also included a correction term for selection computed in the first step. Since there is a large degree of overlap in the determinants of working full-time and being content with full-time work, the two equations necessarily include many of the same explanatory factors, however. This led to a lot of multicollinearity, and to quite inflated coefficients and large standard errors in the behavioural equation. We therefore abandoned this approach and present in stead results that are conditional on working full-time. Yet, the general impression from the two-stage Heckman selection model was that there are larger differences in full-time contentment if we compare all women than when we compare women who have chosen to work full time in the first place.

realise one's exact preferences in that type of a job. In addition, both economic and sociological theories make assumptions about the labour market adaptations of couples, and when limiting the analyses to married women, we also include characteristics of the husband in the model.

Human capital variables are crucial in all labour market research, as both theory and empirical evidence tell us that women with higher education and more employment experience have higher labour force participation and work longer hours than women with less education and employment experience. Whether they are also more content with full-time work than other women is less certain a priori. Having invested more time in education, they are likely to be more motivated to work long hours, and if women with high education are more in demand on the labour market, they may also be more successful in obtaining their preferred contractual hours, and be more satisfied with a full-time job. Besides, the full-time jobs of highly educated women may have other unobserved characteristics that make them more attractive, e.g. higher pay, more autonomy and more flexibility, which we are not able to control for with the data available to us. ²

Our *educational level* variable is not based on survey information, but is linked on to the survey from administrative registers of the population's highest educational attainment. There is no information on employment experience in our data, but *women's age* may be used as a proxy, as age and employment experience is usually highly correlated. Based on the human capital reasoning above, we would then expect older women to be more content with their full-time job than younger women. However, one pitfall with this argument is that age reflects other unobservable attributes like e.g. health and vitality as well, and we have no information about this in our data. As increasing age may imply poorer health and/or less enthusiasm in furthering a career, higher age may also be associated with less contentment among full-time workers. The expected effect of age is therefore not given a priori.

Family and caring obligations mean that there is a greater demand for the woman's time at home, and thus the presence of children and especially smaller children in the household is usually associated with less market work. In our model the household situation is captured by both a *marital status* variable and a combined variable for the number of *children* (whether they have children or not) and age of the youngest of child. We distinguish between those who have no children below the age of 16, and those who have one or more children and a youngest child of respectively 0, 1-2, 3-6, 7-10 and 11-

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² In our data we only have information on annual income, which is highly dependent on how much the individual has worked that year. It is therefore a very imprecise measure of the wage rate per unit of labour input (e.g. per hour), which is the preferred predictor of own economic reward in labour supply models. If we had known women's total working hours in the respective year, we could have estimated the wage rate, but without such information we have abandoned this procedure.

15 years. When marital status is concerned, theory predicts that those who have a partner and coprovider would be less inclined to work full time than those who live alone and depend solely on their own income. How this translates into satisfaction with full-time is less clear, but a priory we would expect that women who face greater demands on their time input in the home and still work full time, will be less content with their working hours than other women. That is, we expect married and cohabiting women to be less content than unmarried or previously married women. The same argument applies for children in the household. As younger children are more time intensive than older children, the demand for time at home decreases with the age of the children's age. Therefore we assume that women with dependent children are less content with full time than childless women or women with grown-up children, and that the contentment is lower the younger the age of the youngest child

Another personal characteristic included in the model is *region* of residence, which is meant to pick up differences in norms and values. We assume that women in areas with strong traditional family values and work cultures are less content with full-time work than women with more modern values. In Norway, the counties Agder and Rogaland constitute a region with strong religious and traditional values, and we therefore expect full-time working women to be less satisfied there than in other regions. On the other hand, the full-time proportion is especially low in Agder and Rogaland, which means that women who work full time are very select. If these women are particularly motivated and determined to work full time, this could mean that full-time contentment is higher in Agder and Rogaland than in other regions. The *period* trend is represented by the eight quarters of 2006-2007, which was a time of economic boom that increased in strength over the period. As it is presumably easier to land a job with the exact hours one prefer in a tight labour marked with a large demand for labour, we expect women's satisfaction with full-time work to increase over the period, as is also suggested by previous research (Kjeldstad 2009) and evidence from the descriptive statistics reported above.

Features of the job and the work-place are also highly likely to influence a woman's satisfaction with full-time work. In particular we expect women to be more pleased with full-time work the more they are able to influence their own working situation and the more flexible the job is. Flexibility in this case could e.g. be the possibility to work flexible hours, work from home and take time off in lieu of paid overtime. In the NLFS there is no direct question of job flexibility, but there is information of several other job-related features, such as occupation, type and size of the enterprise, type of work

contract (permanent or temporary), and working-hours arrangement (ordinary day-time, shift, rota etc.). These variables are included in our model.

When *occupation* is concerned, senior managerial and professional jobs are generally characterised by a large degree of autonomy and flexibility, while nursing and other jobs in the health and social sector is typified by very fixed hours and little flexibility. As for *type of enterprise* we would normally expect jobs in the public sector (government-, municipal- or county administration) to have more flexibility than jobs in the private sector. Furthermore, a company's willingness or ability to offer employees flexible work schedules may be larger in large firms than in smaller enterprises, implying that there is a positive association between women's contentment with full-time work and the *number of employees*. Flexibility may also be conceived to vary with *type of contract*, as a permanent job usually offers better job protection and employee rights than a temporary job, but in addition the mismatch between contractual and preferred hours is likely to be greater in a temporary job as the employee has not yet succeeded in finding just the job she wants. Finally, we expect the *working-hours arrangement* to affect women's satisfaction with full-time work, as jobs with shift and rota schedules and other non-standard hours (evening, night, week-ends) are generally less flexible and possibly more strenuous than most ordinary daytime jobs.

The husband's personal and labour market characteristics may impact his wife's employment situation in several ways. According to New Household Economics (Becker 1991), the spouses specialize in the fields in which they have a comparative advantage in order to maximize the joint utility of the household. Consequently, it is expected that higher wages and longer working hours for the husband would reduce the wife's labour market engagement. When the time uses of the partners are more complementary and less substitutable, the degree of specialization will be lower. This does not preclude a gendered-biased division of labour, however, as the crucial factor is the partners' relative marginal productivity in market work and domestic work.

In sociological theories the partners' labour market resources are regarded more as a type of social capital. It is assumed that the spouses provide each other with skills, network resources and knowledge, thereby assisting each other in finding good jobs and enhancing each others labour supply (Bernardi, 1999). A more specialised version of this theory stresses the role of the husband's educational attainment in supporting his wife's employment. Education is here seen as a proxy for norms and values, and since highly educated men usually have more modern views on women's role in the labour market and at home than less educated men, they are assumed to be more supportive of

the wife's employment. Another strand of thought puts more emphasis on the persistence of male breadwinner norms and the central role employed work continue to have for men's identity. Even if men may be supportive of their wives' employment, they are less likely to encourage their partners to work more than themselves. This is in line with the "doing gender" theory, which postulates that both men and women continuously construct and reconstruct their gender identity (Berk 1985). Hence, men tend to undertake activities that are seen as typically masculine and avoid activities with feminine connotations. The "doing gender" notion entails more of a conflict perspective on the partners' adjustments than what is implied by other theories, but has received considerable support in studies on couples' division of household work (Bittman et al., 2003).

The conflict perspective is also present in other theories of the household division of labour. Based on game-theoretic approaches in economics it is for example assumed that the partners seek to maximise their individual utility and bargain over the division of tasks, overall labour time and leisure, and the distribution of consumption goods and services (see e.g. Seiz 1995). The bargaining power of each spouse is a crucial element in this model, and this depends on the spouses' relative resources and their alternative options. A relative resources or resource bargaining approach is also common within sociological research on gender-based inequalities in task allocation, particularly housework. Resources are here defined more broadly and may both comprise money, personal services, love, prestige, admiration and other emotional and psychological elements, but in empirical research the most analysed factors are socio-economic resources like income, education and occupational position (e.g. Coltrane, 1996; Greenstein, 2000).

The theories above have no clear predictions about the relationship between the husband's individual and job-related characteristic and the wife's *satisfaction* with her working hours, but they serve as a point of departure for our choice of covariates for the analysis of married women. In the following we shall reason a bit more on possible linkages with working-hours satisfaction as we describe the various variables in more detail.

The human capital and labour market resources of the male partner are represented by the *husband's* age, the *husband's* educational level, the *husband's* main activity (whether he regards himself as mainly employed, unemployed, or engaged in other activities)³, and the *husband's* annual income (pensionable earnings before tax). Based on New Household Economics we would expect women with

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³ Persons with other activities comprise students, conscripts, home workers, disabled, early retirees and retirement pensioners.

a husband with more labour market and income resources to be less satisfied with a full-time contract than other women, as this theory predicts less market work from the wives of more resourceful husbands. But social capital theory yields the opposite prediction: the skills and network of a husband with more resources may have helped his wife in finding a more suitable full-time job, and therefore she may be more content with her working hours. Besides, a highly educated husband may have more modern family values and generally be more supportive of his wife's employment than men with lower education.

As indicators of relative resources and bargaining power we have included the *age difference between spouses* and the *educational level difference between spouses*. We differentiate between couples where the husband is younger (at least 5 years), couples where the husband is older (at least 10 years), and couples who are more equally aged (i.e. husbands from 4 years younger to 9 years older). The difference in education has been computed based on a variable with more levels than the one used for the wife's and the husband's own education, which means that we are able to pick up more differences between the spouses. If the husband is younger or has less education than his wife we assume that she has more to say when the partners settle their division of market and domestic work, and that she therefore may be more content with full time than wives who have less bargaining power, either because they are younger than their husband or have less education than him.

When the husband is employed, we expect that longer market hours on his part puts more pressure on the wife's time inputs at home, and that she would therefore be less satisfied with a full-time job. Since very few men work part time we only distinguish between husbands who have very *long weekly working hours* (45 hours or more per week) and others with more normal or shorter hours. If the husband was at work at the time of interview, we use his actual weekly working hours, and if he was temporarily absent we use his contractual weekly working hours.

Other job-characteristics included in the model are the husband's employment status and the industry and ownership type of the enterprise in which he is employed. *Husband's employment status* distinguishes between salaried employees, self-employed or family workers. If self-employment or work in smaller family businesses entails a more flexible time schedule, one may assume that it would be easier for the wives in such couples to work full-time. On the other hand self-employment usually means longer working hours and a stronger involvement in the job even off-hour. Even if we control for the husband's working hours, the totality of this engagement may still make it harder for the wives

of self-employed persons to work full time. The association between employment status and full-time work satisfaction is therefore hard to predict a priory.

Husband's industry is categorised in groups which are supposed to reflect the degree of shift- and rota work and other non-standard hours in the industry⁴. Three industrial groups stand out with particularly high proportions of shift and rota work, namely health and social work, transport storage and communication, and hotels and restaurants (Andersen et al., 2008). More than 40 per cent of all employees in these sectors work shift or rota. Other industries with relatively high proportions (around 20 per cent) are agriculture, hunting, forestry and fishing, mining and manufacturing, and wholesale and retail trade. Considering also other similarities and dissimilarities between these industries, amongst others gender composition, we have collapsed some of the groups and distinguish between the following five categories: (i) agriculture, forestry and fishing; (ii) mining, manufacturing, transport and communication; (iii) trade, hotels and restaurants; (iv) health- and social work; and (v) the remaining industries. If the husband is working non-standard hours like shift and rota we could envisage that his presence at home during ordinary day-time would make it easier for the wife to work full time, and that she therefore would be more content with a full-time job. A job with non-standard hours may on the other hand be more exhausting and strenuous than ordinary day-time jobs, and this may make the husband less supportive of his wife's full-time job. The association between the husband's working hours arrangement and the wife's contentment with full-time work is therefore also ambiguous a priory.

The last job characteristic we examine is the *husband's type of enterprise*, and we differentiate between private, municipal, county administrational, and governmental ownership. Jobs in the private sector are generally considered to be less flexible and less family-friendly than jobs in the public sector, and we would therefore expect husbands in the private sector to share less of the everyday chores and thus to be less supportive of their wife's full-time work. Presumably, this will result in her being less satisfied with a full-time job than a wife with a husband in the public sector. On the other hand, jobs in the private sector are generally better paid, but these differentials should be picked up by husband's income, which is included as a covariate in the model.

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⁴ Information on non-standard hours is also available in the survey, but the question is only put to ¼ of the sample each time. If we restrict the analysis to those who had answered this question, the sub-sample of married women with an employed husband would be greatly reduced.

5. Results

The analyses are carried out in two steps: First, we analyse all female full-time employees regardless of marital status, and next we analyse the subgroup of married women. We have estimated two main versions of the logit model for all full-time employees. The first (Model I) only includes the woman's personal characteristics, while the second (Model II) also includes job-related characteristics. However, one job-related variable, working-hours arrangement, could not be included for the full sample, as this question was put to only ¼ of the respondents each quarter. We have therefore also estimated a third model (Model III) for the reduced sample that answered the question on working-hours arrangement. When analysing married women, we first include the husband's individual characteristics (Model IV), and secondly we also include his job-related characteristics (Model V). None of the models for married women include her job-characteristics, however, as test runs showed that this was of little importance for the outcome of the husband's variables. All estimates are reported as odds ratios. This means that the coefficient of a reference group of categorical variables is set to 1, while coefficients above 1 indicate a positive effect and coefficients below 1 indicate a negative effect.

5.1. All female full-time employees

The results for all female full-time employees are displayed in Table 1. Turning first to our human capital indicators, age and education, we notice that women aged 35 and above seem to be less satisfied with full-time work than the reference group of women in their late twenties. As argued above, one problem with age as an indicator of human capital accumulation is that it also may reflect other unobservable attributes like e.g. health and vitality. Since the effect is estimated to be negative in our case, it seems that the latter features dominate. However, part of the reason may also be that age is not always a good proxy for human capital accumulation, since both educational activities and employment interruptions weaken the correlation between age and employment experience. For education, we do find the expected positive gradient of higher human capital, but it is significant only for women with a long university education (minimum five years of university studies). For this group we can conclude that they are more often satisfied with full-time work than women with low education (primary school only).

In line with our predictions, we also find that women's satisfaction with full-time work vary with family obligations. Working full time is clearly less popular among women who have children and particularly among those who have pre-school children aged 0-6 years. Having controlled for the presence of children in the household, there is no significant difference between those who are married (the reference group) and those who have been previously married, but women who are cohabiting

have slightly lower odds, and women who have never been married have higher odds of contentment than married women. The latter result indicates that married women face other time demands than never-married women, and this makes full-time work less attractive. The difference between married and cohabiting women are harder to explain, however, unless cohabiting women have higher expectations to and are less satisfied with the partner's contribution to household work. If cohabiting women feel less secure in their relationship, full-time work may also be perceived as more of a necessity than a true preference.

Table 1. Logit-estimates of women's contentment with full-time work. Norwegian full-time employees 25-54 years. Odds ratios

Age (ref: 25-29 years) 30-34 år 0.869 0.854 0.782 35-39 år 0.650 0.615 0.643 40-44 år 0.650 0.615 0.643 45-49 år 0.654 0.654 0.601 0.655 50-54 år 0.601 0.655 0.601 0.655 0.601 0.655 0.601	Covariates	Model I	Model II	Model III
35-39 år 0.701 0.671 0.584 40-44 år 0.650 0.615 0.643 45-49 år 0.744 0.693 0.681 50-54 år 0.654 0.601 0.653 0.681 50-54 år 0.654 0.601 0.653 0.681 0.654 0.601 0.653 0.681 0.654 0.601 0.653 0.681 0.654 0.601 0.653 0.681 0.601 0.653 0.681 0.601 0.653 0.681 0.601 0.653 0.681 0.601 0.653 0.681 0.601 0.653 0.681 0.601 0.653 0.681 0.686 0.663 0.687 0.664 0.663 0.664 0.666	Age (ref: 25-29 years)			
40-44 år 0.650 0.615 0.643 45-49 år 0.744 0.693 0.681 50-54 år 0.654 år 0.6654 0.601 0.653 Education (ref: primary school)	30-34 år	0.869	0.854	0.782
45-49 år 0.694 0.693 0.681 50-54 år 0.654 0.601 0.653 Education (ref: primary school) Secondary school 1.025 1.002 1.020 University, short 1.204 1.123 1.190 Univiversity, long 1.613 1.516 1.297 Children (ref: no children below age 16) Youngest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 1-15 years 0.801 0.803 0.683 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.936 0.916 0.936	35-39 år	0.701	0.671	0.584
So-54 år Co.654 Co.601 Co.653	40-44 år	0.650	0.615	0.643
Education (ref: primary school) Secondary school 1.025 1.002 1.020 University, short 1.204 1.123 1.190 Univiversity, long 1.613 1.516 1.297 Children (ref: no children below age 16) Youngest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 1-15 years 0.801 0.803 0.683 Marital status (ref: married) Ummarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839 Condition of the product of the prod	45-49 år	0.744	0.693	0.681
Secondary school 1.025 1.002 1.020 University, short 1.204 1.123 1.190 Univiversity, long 1.613 1.516 1.297 Children (ref: no children below age 16) Torngest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) 1.342 1.328 1.572 Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.96	50-54 år	0.654	0.601	0.653
University, short 1.204 1.123 1.190 Univiversity, long 1.613 1.516 1.297 Children (ref: no children below age 16) Toungest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) 1.342 1.328 1.572 Routh-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trondelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.0636	Education (ref: primary school)			
Univiversity, long	Secondary school	1.025	1.002	1.020
Children (ref: no children below age 16) Youngest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) 0.801 0.803 0.683 Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2.006/2 0.714 0.715 0.703 2006/3 0.757 <td>University, short</td> <td>1.204</td> <td>1.123</td> <td>1.190</td>	University, short	1.204	1.123	1.190
Youngest child 0 years 0.444 0.427 0.416 Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) 0.801 0.803 0.683 Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.757 0.810 2006/3	Univiversity, long	1.613	1.516	1.297
Youngest child 1-2 years 0.417 0.409 0.399 Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 <t< td=""><td>Children (ref: no children below age 16)</td><td></td><td></td><td></td></t<>	Children (ref: no children below age 16)			
Youngest child 3-6 years 0.578 0.572 0.583 Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.0	Youngest child 0 years	0.444	0.427	0.416
Youngest child 7-10 years 0.905 0.896 0.663 Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Youngest child 1-2 years	0.417	0.409	0.399
Youngest child 11-15 years 0.801 0.803 0.683 Marital status (ref: married) 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Youngest child 3-6 years	0.578	0.572	0.583
Marital status (ref: married) 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Youngest child 7-10 years	0.905	0.896	0.663
Unmarried 1.339 1.332 1.520 Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Youngest child 11-15 years	0.801	0.803	0.683
Cohabiting 0.866 0.868 0.906 Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Marital status (ref: married)			
Previously married 1.175 1.173 1.038 Region (ref: Oslo/Akershus) Image: Region (ref: Oslo/Akershus) Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	Unmarried	1.339	1.332	1.520
Region (ref: Oslo/Akershus) I.342 I.328 I.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916		0.866	0.868	0.906
Hedmark/Oppland 1.342 1.328 1.572 South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916	Previously married	1.175	1.173	1.038
South-Eastern Norway 0.743 0.740 0.887 Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916				
Agder/Rogaland 0.815 0.808 1.029 Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916	Hedmark/Oppland		1.328	1.572
Western Norway 0.861 0.869 1.016 Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916	South-Eastern Norway			0.887
Trøndelag 1.034 1.040 0.990 Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916	Agder/Rogaland	0.815	0.808	1.029
Northern Norway 0.923 0.915 0.975 Period (ref: 2007/4) 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916				
Period (ref: 2007/4) 2006/1 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916		1.034	1.040	0.990
2006/1 0.636 0.636 0.614 2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.916		0.923	0.915	0.975
2006/2 0.714 0.715 0.703 2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839				
2006/3 0.757 0.757 0.810 2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839				
2006/4 1.025 1.023 1.225 2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839		0.714	0.715	
2007/1 1.020 1.019 1.039 2007/2 0.916 0.916 0.839	2006/3		0.757	0.810
2007/2 0.916 0.916 0.839				
2007/3 1.002 1.001 0.879				
	2007/3	1.002	1.001	0.879

Covariates	Model I	Model II	Model III
Occupation (ref: senior managers and professionals ¹)			
Teaching		0.777	1.037
Professional and practical nursing		0.776	0.943
Other prof. and practical health and social workers		0.651	0.813
Other high school professionals		0.886	0.980
Clerical work, sales and services		0.918	1.022
Other occupations		0.825	0.917
Type of enterprise (ref: private)			
Municipal administration		1.309	1.181
County administration		1.179	0.879
Government administration		1.092	1.158
Number of employees (ref: 200+)			
1-10		1.008	0.944
11-19		0.840	0.977
20-49		1.076	0.969
50-99		1.023	0.971
100-199		0.951	0.936
Unknown		1.528	2.043
Type of contract (ref: temporary)			
Permanent		1.150	1.290
Working-hours arrangement (ref: ordinary daytime)			
Shift/rotation			0.720
Other non-standard hours			0.842
Likelihood Ratio	306.0	350.7	101.9
DF	29	45	47
N	21167	21167	5255

¹⁾ Except nurses and health professionals Coefficients in bold: Significant at 5 per cent level. Coefficients in italics: Significant at 10 per cent level.

The cultural and normative dimensions supposed to be reflected in the regional variable only partly turn up as expected. The negative coefficient for Agder and Rogaland is not quite significant, but is an indication that women in these more traditional and religious counties are less happy with full-time work. The only region in which women are clearly less satisfied with full-time work than in the greater Oslo area is South-Eastern Norway. As this is also a region with fairly traditional family values and relatively much part-time work, it could be that full-time work is perceived as less attractive in such surroundings. The estimated period trend is as expected, confirming that women's satisfaction with full-time work increased with the economic up-turn in 2006-2007. This is in line with our descriptive findings, but it is interesting to see that the result also holds in a multivariate analysis. As argued above, it probably reflects the fact that it may be easier to get the working hours one prefers when the labour market is tight and the demand for labour is high.

Next, let us turn to the estimates for the job-related characteristics in Model II. When occupation is concerned, we find that teachers, nurses and in particular other health and social workers are less content with full-time work than women who are senior managers and professionals (the reference

group). Other health and social workers comprise both health professionals like medical doctors and dentists, other health associate professionals like radiographers, dieticians, and dental assistants, and personal care workers like child-care assistants. A common characteristic of all groups is that they consist of occupations that generally have quite strict working schedules, and jobs in the health and social sector also often involve shift or rotas and hours beyond ordinary day-time work. In addition, many of the occupations are low paid. Little autonomy, low job-flexibility and low pay may thus be some reasons for the greater dissatisfaction with full-time work in these occupations.

Moreover, we find that women in the private sector (the reference group) clearly are less satisfied with their full-time job than women in the municipal sector. The estimates for the other public sector groups (county and government administrational) point in the same direction, but these estimates are not significant. As argued before, the lower contentment among full-time workers in private enterprises possibly reflects that the working conditions in this sector are generally less flexible and less family-friendly than in the public sector. After controlling for occupation and type of enterprise we find no noticeable differences in contentment between full-time workers in firms of different size (number of employees). Nor do we detect any difference between employees on permanent and temporary contracts, which is a bit surprising.

Last, we turn to Model III which is estimated on a smaller sample. As shown in Table 1, the estimate for shift and rota is negative and significant, confirming that women who work such hours clearly are less satisfied with full-time work than women who work ordinary day-time. The coefficient for other non-standard hours is also negative, but not quite significant. Moreover, we notice that the estimates of other job-related variables turn insignificant in this model, and this is not just because the model is estimated on a smaller sample, as the estimates are smaller in numerical value as well. The conclusion is thus that the lower contentment with full-time work in certain occupations such as teaching, nursing and social work primarily is associated with the extensive use of shift- and rota and other non-standard hours in these jobs.

5.2. Married full-time employees

Table 2 contains the estimates for married women. The wife's individual characteristics mainly serve as control variables in these models, and we shall not comment more on these results here, just point out that due to the smaller sample, these estimates are generally less significant than in Table 1. Turning to the results for the husband's individual characteristics in Model IV, we notice that the association with husband's age is somewhat mixed. The women who are least content with full-time

work are those whose husbands are 35-44 years. The estimate for women with husbands aged 60-73 years is equally negative, however, but not significant due to the smaller size of this age-group. These age effects are not easy to interpret. The higher contentment among women with the youngest husbands may perhaps reflect that younger men have more equal gender-role attitudes and practices, but the lack of a negative effect for those with husbands aged 45-59 casts some doubt on this interpretation. A somewhat more speculative suggestion is linked to the life-stage of husbands aged 35-44. This is a period with many competing demands on their time both career-wise and family-wise, and this may cause more disagreement and quarrelling between spouses about the division of labour. Thus, there may still be unobserved sides with their life-situation at this point that make the wives less content with full-time work, even if we control for children in the family and the husband's employment activity and working hours, as we do in Model IV and V.

The wives of university educated husbands seem to be more content with full-time work than the wives of husbands with less education, but the estimate is significant only for husbands with short university education. A positive estimate also appears for the wives of husbands who regard themselves as mainly employed. Together these findings suggest that more human capital and more labour market resources on the husband's part have a positive influence on the wife's satisfaction with full-time work. This apparently renders more support to the social capital theory of common support and assistance between the partners than to the specialisation and comparative advantage theory of New home economics. However, in accordance with economic theory there is a negative effect of the husband's income, which corroborates that economic resources and economic opportunities also play a role. Women are less likely to be happy with full-time work if they are married to a husband with higher income, and similar results have also been obtained by other authors (e.g. Merz, 2002).⁵ Interestingly, if the husband regards himself as mainly unemployed the estimated coefficient is also positive and even larger than if he is mainly employed, but this result is not quite significant due to the small size of the group. In this case we propose that economic considerations are also at stake, as the wife may be more content with full-time work just because her contribution to the family economy is more needed.

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⁵ Other studies use other income measures, like own income or household income. Most of these studies report that higher own income or family income make women less interested in increasing their hours and more interested in decreasing them (Clarkberg and Moen, 2001; Reynolds, 2003 and 2005), while a previous Norwegian study (Kitterød, 2007) finds no effect of household income on women's preferences for shorter working hours. Using wage instead of own income, Merz (2002) finds that women with higher wages are more interested in increasing their hours above actual hours than women with lower wages. This apparently opposing result may be a result of using wage as model covariate instead of income. See also footnote

Table 2. Logit-estimates of Norwegian *married* women's contentment with full-time work. Odds ratios

Covariates	Model IV	Model V
	All married	Married with em-
	women	ployed spouse
Age (ref: 25-29 years)	1.116	1.070
30-34 år	1.116	1.079
35-39 år	0.802	0.774
40-44 år	0.862	0.877
45-49 år	0.931	0.873
50-54 år	0.750	0.710
Education (ref: primary school)		
Secondary school	0.924	0.729
University, short	0.847	0.674
University, long	0.979	0.744
Children (ref: no children below age 16)		
Youngest child 0 years	0.529	0.511
Youngest child 1-2 years	0.416	0.400
Youngest child 3-6 years	0.709	0.691
Youngest child 7-10 years	1.286	1.242
Youngest child 11-15 years	0.874	0.837
Region (ref: Oslo/Akershus)		
Hedmark/Oppland	1.033	0.989
South-Eastern Norway	0.609	0.625
Agder/Rogaland	0.764	0.752
Western Norway	0.755	0.797
Trøndelag	0.947	1.007
Northern Norway	0.764	0.761
Period (ref: 2007/4)		
2006/1	0.605	0.613
2006/2	0.638	0.604
2006/3	0.677	0.684
2006/4	0.934	0.897
2007/1	0.802	0.796
2007/2	0.844	0.831
2007/3	0.944	0.923
Husband's age (ref: 15-34)	0.5	0.525
35-44	0.609	0.615
45-59	0.970	0.991
60-73	0.538	0.574
Husband's educational level	0.230	0.571
Secondary school	1.171	1.195
University, short	1.736	1.802
University, long	1.609	1.695
Age difference between spouses (ref: fairly equal)	1.009	1.093
Husband younger (at least 5 years)	1.269	1.312
Husband older (at least 10 years)	1.609	1.312
The state of the s	1.009	1.200
Educational level difference between spouses (ref: same) Husband less education	1 100	1 105
	1.123	1.105
Husband more education	0.954	0.925

Covariates	Model IV	Model V
	All married	Married with em-
	women	ployed spouse
Husband's main activity (ref: other activity)		
Employed	1.876	
Unemployed	2.319	
Husband's log income (NOK) last year	0.944	0.950
Husband long weekly working hours (ref: < 45 hrs)		0.819
Husband's industry (ref: other industries)		
Agriculture, forestry, fishing		1.070
Mining, manufacturing, transport, communication		0.903
Trade, hotel and restaurant		1.034
Health and social work		1.075
Husband's employment status (ref: self-employed or family worker)		
Salaried employee		1.208
Husband's type of enterprise (ref: private)		
Municipal		0.910
County administrational		0.992
Governmental		1.018
Lambda		
Libelihaad Datie	167.0	1717
Likelihood Ratio	167.9	161.7
DF	39	46
N	8697	8240

The estimated effects of the difference in age and educational level between the spouses do not render much support for bargaining power as a determinant of working-hours satisfaction among married female full-timers. Having controlled for both partners' own age, the most contented full-time workers are in fact those who have a husband who is quite a bit older (at least 10 years). Possibly this is a reflection of him being at a stage in his working career where he has more flexibility job-wise and is more able and willing to support his wife's employment. Still, the coefficient for wives with a younger husband is positive, and even if non-significant, the sign of this estimate is as expected from bargaining theory. The same is true of the estimate for the educational difference between the spouses as we observe a positive sign if the husband has less education than his wife and negative sign if the husband has more education than his wife. But formally this evidence is weak as the estimates are not significant in statistical terms.

Finally, let us turn to the analysis of the subgroup of married women with an employed husband (Model V). The only significant estimate related to the husband's job-situation concerns his weekly working hours, where we find that wives clearly are less content with their full-time job if the husband works very long hours (more than 45 hours per week). This is not surprising, as practical considerations imply that long hours for both spouses entail more stress and time pressures for the

family. Verbarkel and de Graaf (2009) argue for example that there may be a maximum of working hours that a couple can handle, and if the wife works full time and the husband works considerably more, the couple may find themselves very close to or beyond this limit. Consequently, the wives in such couples may be more dissatisfied with full-time work than wives in couples with a less demanding time-schedule.

6. Summary and conclusion

The present Norwegian labour market is characterised by a large demand for female labour, and in the future this demand is predicted to increase rapidly due to a growing population of elderly people. As Norwegian women already have a very high employment rate, it is unlikely that it is possible to raise this rate very much in the future. On the other hand, a large proportion of employed women still work part time, and many take long employment interruptions in connection with childbirth and childrearing. When exploring ways to raise female labour supply, an obvious place to look is therefore how to encourage women to return faster to the labour market and work longer hours. Since more full-time work would alleviate the lack of labour in many sectors of the economy, an interesting question is what makes full-time workers content with their working hours. This is the theme addressed in this paper based on recent information on both preferred and contractual working hours from the Norwegian Labour Force Surveys.

Somewhat surprisingly, we find a high degree of contentment with full-time work among Norwegian women. About 90 per cent of female employees report that they are satisfied with their present full-time contract. This is higher than among female part-timers where the corresponding proportions are about 80 per cent among those who work long part time and about 70 per cent among those who work short part time. The proportion preferring longer hours thus exceeds the proportion preferring shorter hours. This is contrary to the findings of previous research, both national and international, which suggests that the mismatch in women's working hours more often is due to a preference for shorter rather than for longer hours.

The next question is whether it is possible to identify factors that make women satisfied with full-time work. To do so, we have run a multivariate regression model where the dependent variable has two possible outcomes, content or not content with present contractual hours, and included a set of individual and job-related explanatory variables that are believed to affect this outcome. We also consider the importance of the husband's characteristics and labour market situation based on a sub-

group of married women. When women's own personal characteristics are concerned, we find that those who are younger, have never been married, have no children or no young children in the household, or are highly educated are more content with full-time work than other women. As for job-characteristics, we find more contentment among senior managers and professionals than among teachers, nurses and other health and social workers. As the latter occupations are characterised by less autonomy, stricter time schedules and more non-standard working hours including shift and rota work, lack of flexibility may be one reason for the lower contentment in such jobs. This assumption is supported when we control for working-hours arrangement in the model. The estimated effect of shift and rota work then turns out strongly negative, and the former differences between the occupational groups disappear. Finally, we observe a positive development over the period studied, which indicate that contentment increases in business cycle upswings, and some regional differences that probably are due to variations in the cultural and normative climate.

The final query is what these results tell us about the answer to our initial question of what makes full-time working women satisfied with their working hours. Certainly it is not possible to change people's personal characteristics, but the fact that marital status and presence of young children still affect women's satisfaction with full-time work in present-day Norway is somewhat of a paradox, especially in the light of the vast expansion of family policies facilitating women's employment the last couple of decades. In our opinion, an important clue here is the role of the partner, as much research-based evidence indicates that gender equality has proceeded further in society than in the home. In the next step of our analysis we therefore address the impact of the partner, but with the available data we are only able to study women who are married, not cohabiting women. Nor is there any information on the division of household labour or on attitudes to women's labour force participation and full-time work in the NLFS, but at least we can illuminate the importance of the husband's personal characteristics and his labour market situation and working hours.

The results show that the wives of university educated husbands more often are satisfied with a full-time job than the wives of husbands with less education, and if the husband is mainly employed, the wife is more likely to be content than if he is not actively engaged in the labour market. This indicates that a husbands' human and social capital facilitates women's full-time employment, which corroborates the arguments of social capital theory that the partners benefit from mutual assistance and support. However, if a husband works very long hours, this is clearly detrimental to his wife's full-time satisfaction. A combined input of weekly working hours exceeding two full-time jobs may

obviously be difficult for the family to handle, and shorter hours on the husband's part could then contribute to make women more content with full-time work.

The finding that job flexibility and working-hours arrangement seem to be so important for women's satisfaction with full-time work is also worth noticing. This suggests that over-employment in the Norwegian labour market is mainly caused by restrictions imposed by the employer (traditional lumpiness), and not by job designs and organisational incentives that lure employers to work more than they prefer because of a shift of focus from working a certain number of hours to bringing a project to a successful ending or finishing a particular task before the deadline (new lumpiness) (van Echtelt et al., 2006). However, overwork in the latter sense is probably more related to actual working hours than to contractual hours, and therefore difficult to capture with our data, which compare preferred working hours to contractual hours.

Since shift and rota and other work schedules outside ordinary day-time obviously decrease women's full-time satisfaction, a greater focus on work arrangements that introduce more flexibility into such jobs may be one way to go to make full time a more attractive choice for women. Of course it will never be possible to discard shift and rota and other non-standard hours in industries that depend on such schedules, but one aspect worth considering is whether a general reduction of contractual full-time hours to somewhat less than 37 hours per week would be feasible in some low-flexible shift and rota jobs. In the present situation, part-time work may be one way for women to secure more flexibility into an otherwise low-flexible, non-standard schedule. A somewhat shorter full-time contract could then be one measure that would encourage more part-time workers to take on a full-time job.

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