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## **Part-Time Jobs: What Women Want?**

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January 2010

# Part-Time Jobs: What Women Want?

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## ABSTRACT

### Part-Time Jobs: What Women Want?\*

Part-time jobs are popular among partnered women in many countries. In the Netherlands the majority of partnered working women have a part-time job. Our paper investigates, from a supply-side perspective, if the current situation of abundant part-time work in the Netherlands is likely to be a transitional phase that will culminate in many women working full-time. We analyze the relationship between part-time work and life satisfaction, and between job satisfaction and preferred working hours using panel data on life and job satisfaction for a sample of partnered women and men. We also utilize time-use data to consider the distribution within the household of market work and housework, and discuss the work specialization hypothesis in this context. Our main results indicate that partnered women in part-time work have high levels of job satisfaction, a low desire to change their working hours, and live in partnerships in which household production is highly gendered. Taken together, our results suggest that part-time jobs are what most Dutch women want.

JEL Classification: J22, I31, J16

Keywords: part-time work, happiness, satisfaction, working hours, gender

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## 1 Introduction

Across OECD countries there are big differences in the share of part-time work in employment among prime age female workers. In 2007, the female part-time share of women workers aged between 25 and 54 years ranged from a high of 60% in Switzerland and 54% in the Netherlands, to a low of 9% in Greece. An interesting question is whether or not the current situation of plentiful part-time work in some countries is likely to be an intermediate stage en route to a greater proportion of women in full-time jobs.

There are two opposing views on the efficiency implications of so many women working part-time. The negative view is that part-time jobs imply wastage of resources and under-utilization of investments in human capital, since many part-time working women are highly educated.<sup>1</sup> The positive view is that, without the existence of part-time jobs, female labor force participation would be substantially lower since women, confronted with the choice between a full-time job and zero working hours, would opt for the latter.

Against this background, the purpose of our paper is to investigate, from a supply-side perspective, if the current situation of abundant part-time work in the Netherlands is likely to be a transitional phase culminating in many women working in full-time jobs. Our econometric analysis, using panel data on life and job satisfaction of a sample of partnered women and men, assumes that dissatisfaction with a particular work status is likely to lead to changes in working hours in the future. In addition, we utilize time-use data to consider the distribution of market work and housework within the household. We also discuss the work specialization hypothesis in this context. If the Netherlands is characterized by little gender-stereotyping about working roles, we would expect to see that, on average in our sample of partnered households, the male share of domestic work is increasing in the female partner's share of market work. If this is not the case, it suggests that there is a gendered division of household and market labor within the family unit.

Our approach differs from that in earlier studies that investigate whether or not part-time work represents a stepping stone between nonwork and full-

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<sup>1</sup> In the UK, for example, transitions into part-time work are associated with occupational downgrading (Connolly and Gregory, 2008), and part-time work is associated with a pay penalty (Manning and Petrongolo, 2008).

time employment. For example, Blank (1989) used US data from the Panel Study of Income Dynamics to explore transitions between the states of full-time, part-time or nonwork over the period 1976-1984 for a sample of women aged 18 to 60 in 1976 who were either household heads or spouses. Blank found that three out of four women over the 9 years remained predominantly in that state and that very few women use part-time work as a stepping stone from nonwork to full-time work. In Sweden, Sundström (1991) shows that part-time work has not marginalized women but instead has increased the continuity of their labor force attachment, strengthened their position in the labor market and reduced their economic dependency. Continuous part-time employment has replaced work interruptions during child rearing years. Moreover the growth in part-time work has not been followed by increasing difficulties for women working part-time to shift to full-time work (Sundström, 1991). Thus the initial increase in part-time work in Sweden might be viewed as a transitional phase leading to many Swedish women working full-time.<sup>2</sup>

In the Netherlands, the number of part-time jobs has expanded rapidly over the past decade, due to a gradual change in policy causing barriers for part-time employment to be removed. Laws were implemented that made part-time work more attractive. In 1993 the statutory exemption of jobs of less than one-third of the normal working week from application of the legal minimum wage and related social security entitlements were abolished. Currently, most taxes are neutral and social security benefits are usually pro rata. In 1995 unions and employers signed the first proper collective agreement for temporary workers. In 2000 a right to part-time work law was introduced. Because government introduced legislation ensuring that the rights of part-time workers are properly protected, part-time work is not limited to marginal jobs but is a feature of mainstream employment (Portegijs and Keuzenkamp, 2008). According to Portegijs et al. (2008), the part-time job in the Netherlands was born in the 1950s when, in response to shortages

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<sup>2</sup> Sweden's childcare system is also likely to have played an important role in this process. In 1999, Sweden's public expenditure on formal daycare and pre-primary education amounted to 1.9% of GDP, as compared with 0.6% in the Netherlands. The OECD average was 0.7% (see Jaumotte, 2004). Booth and Coles (2009), using a panel of OECD data, show that public expenditure on childcare is positively correlated with female participation and with years of education.

of young female staff, firms began to offer part-time jobs to married women.<sup>3</sup> Currently, about 40% of women with part-time jobs are mothers of young children who work part-time because they either prefer this, or have no choice but to provide childcare themselves.<sup>4</sup> However, almost half of the part-time working women are over 40 and no longer have young children. Many women in “small” part-time jobs prefer to work longer while many women in “large” part-time jobs prefer to work shorter hours. A part-time job between 20 and 27 hours a week would be women’s preferred choice (Portegijs et al., 2008).

Apart from supply-side factors, changes in labor demand may have been important too. Euwals and Hogerbrugge (2004) distinguish between dynamic flexibility – adjustment to the business cycle – and organizational flexibility – adjustment to non-standard working hours. They conclude that dynamic flexibility cannot explain the strong growth of part-time employment, but the need for organizational flexibility, related to the shift from manufacturing to services, might have contributed. Bosch et al (2008) analyze the growth of part-time work distinguishing between age, calendar time and cohort effects. They find that the incidence of part-time work has increased over successive generations at the expense of full-time and small part-time jobs. As a result, the average working hours of working women remained stable over successive cohorts. Finally, Bosch and Van der Klaauw (2009), analyzing the effects of a 2001 tax reform which made work much more financially attractive for women with a high-income partner, find that women even slightly reduced their working hours in response to receiving a higher after-tax hourly wage.

Previous studies are important in charting patterns of work mobility, which can be used as a basis for predicting future behavior using comparative static techniques. However we choose in the present paper to adopt the alter-

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<sup>3</sup> According to Portegijs et al. (2008), in countries like Spain, the UK, Germany and France, governments aim to make part-time work more attractive for *employers*, while the Netherlands and Sweden are the only countries where policy aims at making part-time work more attractive for *workers*.

<sup>4</sup> Bussemaker (1998) provides a fascinating account of the evolution of public childcare in the Netherlands. She notes that: “Childcare provisions were not seen as part of the new [postwar] social welfare arrangements, but rather the absence of such facilities was proof of the achievement of the welfare state.” While Sweden developed its childcare policies in the 1970s, in the Netherlands these were developed in the 1990s and earlier Dutch publicly-financed childcare was directed only to “emergency provisions for ‘defective’ families.” Bussemaker (1998: 79).

native approach described above, in which we use couple's (dis)satisfaction with working hours and the division of responsibilities within the household to make inferences about expected future working behavior of partnered women.

The majority of part-time workers in the Netherlands are those with family responsibilities. Therefore we focus on partnered individuals in our empirical analysis. Now that most women in the Netherlands work part-time, an important question is whether part-time jobs are indeed what women want. This paper investigates in detail whether indeed Dutch women want part-time jobs. The paper is set-up as follows. In the next section we briefly review previous studies looking at the relationship between part-time work and partnered life and job satisfaction. We also summarize the relevant institutional framework in the Netherlands and compare the extent of part-time work in the Netherlands with other OECD countries. Section 3 presents a fixed effects empirical analysis of the relationship between part-time work and life satisfaction. Section 4 investigates job satisfaction and working hours preferences, while Section 5 analyses time use from a household perspective. Section 6 concludes.

As will be seen, our main results indicate that partnered women in part-time work in the Netherlands have high levels of job satisfaction, a low desire to change their working hours, and they live in partnerships in which household production is with highly gendered. Taken together, these results suggest that part-time work in the Netherlands is here to stay, at least in the near future.

## 2 Background

### 2.1 Previous studies of partnered work and satisfaction

Self-reported measures of life and job satisfaction are widely used measures of well-being, and have been shown to be closely related to a range of other potentially more objective measures of happiness (Frey and Stutzer, 2002). While there is a large and growing economics literature on the determinants of various components of satisfaction and happiness, few studies have explicitly investigated how part-time work status affects family life satisfaction, and we briefly summarize these below.



Women may prefer part-time work because it satisfies their hours preferences given their constraints. Although part-time work could increase hours satisfaction, it might not necessarily increase job satisfaction. For example, Connolly and Gregory (2007) and Manning and Petrongolo (2007) show that part-timers in Britain are doing more menial work at lower pay than if they were full-time. So if part-time jobs are bad jobs, overall job satisfaction might be lower. What about the effect of part-time work on overall life satisfaction? This is unclear *a priori*. Part-time work is likely to provide flexible working and caring hours while maintaining an individual's social connection. On the other hand, working part-time might be intrinsically unsatisfying, affording little in the way of future advancement and characterized by low prestige. Consequently part-time work might reduce life satisfaction through this avenue. Ultimately it is an empirical issue as to which effect dominates.

In our previous work - Booth and van Ours (2008, 2009) - we studied preferences concerning part-time work in the UK and Australia respectively. In Booth and van Ours (2009) we used Australian panel data and focused on a sample of partnered men and women. Our results indicate that, conditional on observed characteristics, partnered women's *life satisfaction* is reduced by working full-time, especially so if their weekly hours are greater than 40. However, female life satisfaction is increasing if their partners are working fulltime, and they are particularly happy if their partners are working 35-50 hours per week. In contrast, male partners' life satisfaction is unaffected by their partners' market hours, but is significantly increased if they themselves are working full-time and especially so if they are working 35-50 hours. Thus it seems that full-time work for men in the region of 35-50 hours is the major contributor to both partners' life happiness, but that female part-time work has an asymmetric effect. Men do not mind what their partners do in terms of working hours but women are happiest with part-time work.

In Booth and van Ours (2008) we investigated the same relationships using British panel data for partnered men and women. Life satisfaction of British men is influenced only by whether or not they have a job. Life satisfaction of British women without children is unaffected by their hours of work, while women with children are happier if they have a job. Apparently British women are happy about their part-time job even though this does not increase their overall life satisfaction. It is interesting that we also found that work increased partnered male life satisfaction. In this sense, the finding

for female life satisfaction parallels that of men.

## 2.2 Part-time work across the OECD

Across the OECD there are big differences in the share of part-time work in employment among prime age female workers (25-54 years). Figure 1a gives an overview of cross-country differences in part-time and total employment rates for prime age women in 2007.<sup>5</sup> The part-time employment-population rate ranges from a low 10% in Finland to a high 47% in Switzerland. The total employment-population rate ranges from 60% in Italy to 83% in Switzerland.

The main suspects contributing to the observed differences in part-time work across OECD-countries are institutional arrangements and union resistance.<sup>6</sup> Part of the opposition to part-time jobs is based on the idea that they are created at the expense of full-time jobs, with part-time jobs being inferior. From an international overview of part-time work, the OECD (2001) concludes that hourly earnings in part-time jobs are lower than in full-time jobs, while employer-provided training is less frequent in part-time jobs than in full-time jobs.<sup>7</sup> Nevertheless, Figure 1a shows that there is a positive association between part-time work and total employment. Figure 1b shows that this relationship also holds if changes are considered. Norway and the UK are at one extreme. In Norway over the period 1997-2007, the part-time employment rate declined and the total employment rate hardly changed, while the UK experienced a small decline of the part-time employment rate and a small increase in the total employment rate. At the other extreme are Belgium, Germany and Italy. In those countries the increase in the part-time employment rate was about 10% while the total employment rate also increased by 10%; that is, the increase in participation is completely due to the increase in part-time employment.

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<sup>5</sup> Employment rates are defined as the ratio of employment and population in the relevant group. The data in Figure 1 are from the OECD Labor Force Statistics. Note that Eastern-European economies, which have very low part-time employment rates are ignored.

<sup>6</sup> For a recent analysis of the determinants of part-time work in EU countries, see Buddelmeyer, Mourre and Ward (2004).

<sup>7</sup> This has to do with the cost of training of part-time workers being as high as of full-time workers while the benefits are less, due to the shorter working hours. Furthermore, part-time workers are often more mobile than full-time workers, which also reduces the benefits of training.

Many part-time workers have no desire to work full-time. In the Netherlands, for example, in 2007 only 3% of female part-time workers preferred full-time work. An interesting negative correlation exists between the share of part-time working females preferring full-time work and the share of females working part-time (Figure 1c). In Italy and Spain, where in 2007 only about 15% of females worked part-time, 30% of them preferred a full-time job. It would seem that, in a situation where there are many part-time workers, part-time work is more attractive.<sup>8</sup> If part-time women in the Netherlands exhibited a strong preference for full-time jobs, part-time jobs might be viewed simply as a “stepping stone” into full-time work. That this is not the case is a first indication that part-time employment in the Netherlands may not be a transitory phase.

### 3 Part-time work and life satisfaction

To analyze the relationship between part-time work and life satisfaction among Dutch partnered women, we use information collected by CentER data through an Internet-based panel.<sup>9</sup> Within each household, all individuals aged 16 or over are interviewed about work, income, health and a number of other demographic attributes. We have data on fourteen annual waves (from 1993 to 2006). Our sample is restricted to married or cohabiting couples, in which the female partner is aged between 23 and 50 years in 1993. In addition, couples in which the male partner is older than 60 in 2006 are dropped.

Important questions in the survey concern health and happiness. The question about health is specified as follows: “*In general, would you say your health is: 1 poor, 2 not so good, 3 fair, 4 good and 5 excellent*”. The question about happiness in the CentER data is specified as follows: “*All in all, to what extent do you consider yourself a happy person*” with the possible answers: 1 very unhappy, 2 unhappy, 3 neither happy nor unhappy, 4 happy, 5 very happy. This type of life satisfaction question is a widely used measure of well-being, and Frey and Stutzer (2002), *inter alia*, have shown it to be

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<sup>8</sup> This may have to do with unions being more interested in representing part-time workers once their number is large enough. Or, it may be that part-time work can only grow if it is sufficiently attractive for workers.

<sup>9</sup> See for more information about the CentER data panel: [www.centerdata.nl/en/](http://www.centerdata.nl/en/)

closely related to a number of other potentially more objective measures of happiness.

The upper part of Figure 2 presents a histogram of normal weekly working hours in the main job for men and women, respectively. Working hours are divided into four categories; small part-time jobs (1-20 hours per week), part-time jobs (21-32 hours per week), full-time jobs (33-40 hours per week) and large full-time jobs (more than 40 hours per week). About 35% of the women do not work and very few women work more than 40 hours a week.

Table 1 presents the distribution of life satisfaction of partnered men and women. More women are ‘very happy’ than men, but more men report being ‘happy’ than women. The average value for life satisfaction is about the same. In Table 2, the averages of life satisfaction values for workers stratified by hours of work are presented. The lower part of Figure 2 gives a visual representation of the relationship between life satisfaction and weekly working hours. Women have on average a higher value for life satisfaction than men for every category. Men are less satisfied if they work less. For men there is a clear positive relationship, while for women life satisfaction seems to be almost independent of hours of work.

In our empirical analysis we use an ordered logit model in which we introduce individual fixed effects  $\alpha_i$  and individual specific thresholds  $\mu_{ij}$ :

$$\Pr(y_{it} = j) = \Lambda(\mu_{ij} - \alpha_i - \beta'x_{it}) - \Lambda(\mu_{i,j-1} - \alpha_i - \beta'x_{it}). \quad (1)$$

Ferrer-i-Carbonell and Frijters (2004) show that, by choosing for every individual a specific barrier  $k_i$ , the fixed effects ordered logit specification can be reformulated as a fixed effects binomial logit. So instead of a common cut-off point, individual-specific cut-off points are chosen. This reformulation allows Chamberlain’s method to be used and removes the individual-specific effects  $\alpha_i$  as well as the individual specific thresholds  $\mu_{ij}$  from the likelihood specification.<sup>10</sup>

Table 3 presents the parameter estimates of fixed effects ordered logit estimates. As shown, own health has a positive and significant effect on life

<sup>10</sup> In our estimates we use  $k_i = \Sigma_t y_{it}/n_i$ , where  $n$  is the total number of observations of individual  $i$ . All observations for which  $y_{it} > k_i$  are transformed into  $z_{it} = 1$ , all observations for which  $y_{it} \leq k_i$  are transformed into  $z_{it} = 0$ . Alternatively, we used  $z_{it} = 1$  if  $y_{it} \geq k_i$  and  $z_{it} = 0$  if  $y_{it} < k_i$ . This hardly affected the parameter estimates.

satisfaction whereas the health of the partner is irrelevant.<sup>11</sup> The estimates in the first column show that men have a higher life satisfaction if they work more than 20 hours per week. Men also prefer their spouses to work part-time. For women (see estimates reported in the third column) only their own health matters, and their life satisfaction is independent of whether or not they work, or how many hours they work. Table 3 also shows that introducing family income as explanatory variable does not alter the results. Family income has no significant effect on life satisfaction and the other parameter estimates are little affected.<sup>12</sup> However, the inclusion of household income does reduce the statistical significance of the hours of work variables.

In summary, men are happiest if they work in a large part-time or a full-time job. They are also happier if their partner works in a part-time job, although once household income is accounted for their life satisfaction is unaffected by their partners' hours. While women are indifferent with respect to their own working hours and the working hours of their partner, once household income is accounted for, their life satisfaction is reduced by working 40 or more hours.

Since partnered female life satisfaction is largely unaffected by their own hours of work, it seems that there is unlikely to be a strong desire to change working status from part-time to full-time in order to improve the quality of their lives. This is again suggestive of part-time work not being a transitory phase to full-time work.

## 4 Job satisfaction and preferred working hours

To study job satisfaction and preferred working hours, we use data from the OSA labor supply panel, a biennial panel survey of a representative sample of Dutch households.<sup>13</sup> The panel covers a broad range of work and life course

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<sup>11</sup> As in our previous analyses for Australia and the UK, partnered health is only significant in a cross-sectional setting. This may have to do with assortative mating or common behavior (health food, exercise et cetera).

<sup>12</sup> We also investigated whether presence and age of children affects life satisfaction, but found no evidence of this. This is line with our analysis of Australian life satisfaction where we find that only hours of work have a statistical significant effect on life satisfaction (Booth and Van Ours, 2009)

<sup>13</sup> For more information about the OSA labor supply panel, see: [www.tilburguniversity.nl/osa/](http://www.tilburguniversity.nl/osa/)

related items. To make the sample comparable to the CentER data panel, we restrict the OSA sample to female age between 22 and 49 in 1992, while couples in which the male partner is older than 60 in 2006 are again dropped.

The data contain information about job satisfaction and preferred working hours. The question about job satisfaction is specified as follows “*How satisfied are you all in all with your work?*” with the possible answers: 4 very satisfied, 3 satisfied, 2 dissatisfied and 1 very dissatisfied. As shown in Table 1 few men and women are in the lowest categories while more than half of the workers is in category 3. Table 2 shows the relationship between hours of work and job satisfaction. For women there is a slight increase in job satisfaction with working hours. For men, job satisfaction is lowest if the job is 21 to 32 hours per week. Men who work more than 40 hours per week on average have the highest job satisfaction. Table 4 shows the parameter estimates of the fixed effects logit model for job satisfaction.<sup>14</sup> Male workers have the lowest job satisfaction if they work more than 21-32 hours per week. They have the highest job satisfaction if they work fewer than 21 hours per week, but none of the hours category parameter of the job satisfaction is different from zero at conventional levels of significance. Female workers have the highest job satisfaction if they work 33-40 hours per week. Introducing wage satisfaction as explanatory variable for job satisfaction shows that this has a positive effect while the parameter estimates of the hours categories are hardly affected.

Table 5 presents a crosstabulation of preferred working hours separately for men and women. About 9% of women want to work more hours and 12% want to work less. For men, 12% wants to work more and 21% wants to work less. To analyze preferred working hours, we use a fixed effects logit model in which the dependent variables are indicators for whether workers want to work fewer hours or want to work longer hours. Table 6 shows the parameter estimates. Clearly preferences to work more decrease when working hours increase and similarly preferences to work less increase with hours worked.

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<sup>14</sup> Although here too we investigated cross-partner effects, we did not find any evidence of these effects being present. The OSA data contain information about health but only since the year 2000. Therefore we did not include health status as one of the explanatory variables. Estimated over a shorter time period, good health has a positive effect on job satisfaction for both men and women. From the sample of women, we removed the 5 women who worked more than 40 hours per week.

Figure 3 presents working hours preferences, i.e. sample percentages of employees who wanting to work more and less by actual hours of work. Clearly, most partnered individuals working long hours would prefer to work less, while most partnered individuals working short hours would prefer to work more. It is interesting to see the “equilibrium” hours of work, i.e. the number of hours at which there are as many individuals wanting to work fewer hours as there are individuals wanting to work longer hours.<sup>15</sup> To determine this “crossing point”, we estimated a linear probability model of the probability of wanting to work more and the probability of wanting to work less, with the number of weekly working hours and calendar time as the independent variables. This is given as:

$$\begin{aligned}\Pr(h_{it}^+) &= \gamma_0^+ + \gamma_1^+ h_{it} + \gamma_2^+ t + \varepsilon_{it}^+ \\ \Pr(h_{it}^-) &= \gamma_0^- + \gamma_1^- h_{it} + \gamma_2^- t + \varepsilon_{it}^-\end{aligned}\quad (2)$$

where  $h$  denotes the actual weekly working hours and  $\Pr(h_i^+)$  ( $\Pr(h_i^-)$ ) denotes the probability of wanting to work more (fewer) hours. From equations (2) the “equilibrium” of preferred working hours  $h_t^*$  can be calculated as

$$h_t^* = \frac{\gamma_0^+ - \gamma_0^- + (\gamma_2^+ - \gamma_2^-)t}{\gamma_1^- - \gamma_1^+} \quad (3)$$

Because we are interested in the evolution of preferred working hours over time we estimate equation (2) over a separate sample covering the period 1985-2006 using information about men and women who aged 25-54 years and working 1-45 hours per week at the time of the survey. We estimate equation (2) using a linear probability model. Table 7 shows the parameter estimates. As before, we find that with an increase of actual hours of work both men and women are less likely to prefer working more and more likely to prefer working less. Over time for both men and women preferences for working more and for working less go down. For men the drop in the preference of working more is larger than the drop in preference for working less. This indicates that over time the “equilibrium” hours of work goes down for men. For women the calendar time parameter estimates for working more and for working less are about the same size. This indicates that the “equilibrium” hours of work for women hasn’t changed over time. Based on the parameter

<sup>15</sup> Note that this is an “equilibrium” at the extensive margin of expanding or reducing working hours as the number of preferred hours of work are not taken into account.

estimates presented in Table 7 we calculate that in 2005 the “equilibrium” hours of work for women would have been 21.7 hours per week, while for men it would have been 32.5 hours, coming down from 36.9 hours in 1985.

All in all, we conclude that our main results indicate that partnered women in part-time work in the Netherlands have high levels of job satisfaction, and a low desire to change their working hours. Again, this is evidence of part-time work not being a transitory phase on the route to full-time work.

## 5 Time use – a household perspective

Theories of household behavior, such as that put forward by Becker (1965), predict that partnered households will be characterized by specialization of labor, whereby in the extreme case one partner engages fully in home work and the other in market sector work.<sup>16</sup> Part-time jobs provide a means of combining domestic and market production, whilst maintaining workforce skills or experience capital for the future. Part-time work thereby facilitates incomplete specialization by either gender. The specialization hypothesis predicts gender differences in working hours because partners within a household specialize (completely or incompletely) in either market work or house work. However, the prediction is symmetric: if one partner specializes in market work, the other will specialize in home production and in principle there is no *a priori* reason why the partner specializing in market work should be female or male.

In contrast, the *gender identity hypothesis* of Akerlof and Kranton (2000) is based on the idea that gender matters. Here the distribution of household work and market work is determined by gender-specific ‘utility’. According to this approach, since individuals operate within society’s constraints, their happiness and the gender division of labor could be powerfully affected by

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<sup>16</sup> Incomplete specialization, in which both partners perform part of the home work and part of the market work, may arise because of non-linear production functions or because cost functions associated with skills investment are characterized by economies of scope. Non-linear production functions might arise if there is activity-specific fatigue or boredom, implying diminishing marginal productivity in each activity. Cost functions characterized by economies of scope occur if investment in market skills reduces the cost of investing in home skills (see Rosen, 1983). Under incomplete specialization there will be a monotonically declining relationship between the share of house work done by one partner and that same partner’s share of market work.



social custom and conditioning. It is possible that – controlling for income – part-time jobs could make partnered women happier than either full-time work or no work, because such jobs allow them to gain esteem through working, while obtaining social and self approbation from being with and caring for their families and their homes.

Using information from Time Use Surveys in the years 2000 and 2005, Figure 4 shows the relationship between hours of housework as a function of hours of market work of the woman for couples with a full-time working man.<sup>17</sup> The household activities incorporated within the “housework” measure include the following: preparation of lunch/dinner, making table ready for dinner, doing the dishes, vacuum cleaning, cleaning windows/doors, doing the floors, cleaning toilet/bathroom, waxing floor and cleaning furniture, cleaning the beds, washing clothes, drying clothes, ironing clothes, fixing clothes and watering plants (inside the house).

The figure shows that, as hours of market work increase, male hours of housework remain almost constant. For women, hours of housework decline as hours of market work increase, but they do so at less than one for one. Indeed, initially extra market hours do not lead to a decrease of housework hours, but beyond 12 weekly hours of market work there is approximately half an hour reduction of housework for every additional hour of market work. Clearly, the marginal hours burden is about 0.5 for women, providing support for the gender identity hypothesis.

In summary, we conclude from this analysis of time-use data that there is a clear gender bias in the division of labor within the household. In households where the male works full-time, an increase in market work of the female leads to a less than proportional decrease in her housework while her partner’s housework stays constant. Thus the degree of specialization is partial and non-symmetric. This finding suggests gender-stereotyping in market and house work roles, *ceteris paribus*. That Dutch men and women appear on average satisfied with this state of affairs, at least according to the findings of the previous two sections looking at market work and its relationship to life and job satisfaction, suggests that part-time female work patterns are

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<sup>17</sup> This type of information is not available for earlier time use surveys. Although the earlier surveys provided information on hours in household activities, they did not distinguish between the housework done by each partner. For more information about the Dutch Time Use Surveys (TBO) see: <http://easy.dans.knaw.nl/dms>

here to stay, at least in the short term.

## 6 Conclusions

In the Netherlands, the majority of working women have a part-time job. There are two opposing views on the efficiency implications of so many women working part-time. The negative view is that part-time jobs imply wastage of resources and under-utilization of investments in human capital, since many part-time working women are highly educated. The positive view is that, without the existence of part-time jobs, female labor force participation would be substantially lower, since women confronted with the choice between a full-time job and zero working hours would opt for the latter. This study investigated whether, from a supply-side perspective, the current situation of abundant part-time work in the Netherlands is a transitional phase that will end in many women working in full-time jobs. In our analysis we focused on partnered individuals and the relationship between hours of work and life satisfaction. Furthermore, we investigated preferences for working hours and considered the distribution of market work and housework within the household.

With regard to life satisfaction, we find that men are happiest if they work in a large part-time or a full-time job. They are also happier if their partner works in a part-time job, although once household income is accounted for their life satisfaction is unaffected by their partners' hours. While women are indifferent with respect to their working hours and the working hours of their partner, once household income is accounted for their life satisfaction is reduced if they work 40 or more hours. Both men and women who work in small jobs prefer to work more, while those working in jobs with long working hours prefer to work less. Using data on preferred working hours, we calculated the number of hours at which there is an "equilibrium" in the sense that the number of individuals wanting to work more is as big as the number of individuals wanting to work less. For women the "equilibrium" number of weekly working hours is about 21, while for men it is about 32. Finally, when investigating the division of labor within the household, we conclude that there is a clear gender bias. In households where the male works full-time in the market sector, an increase in market work by the female is associated with a less than proportional decrease in her housework while the partner's

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housework stays constant. Thus the degree of specialization is partial and non-symmetric. In combination, the evidence leads us to conclude that the current situation with most women working in part-time jobs is unlikely to be a transitional phenomenon. Partnered female part-time labor in the Netherlands is here to stay.

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## **8 Tables & Graphs**

Tab. 1: Distribution of life satisfaction and job satisfaction by gender (%)

a. Life satisfaction								
	5	4	3	2	1	Total	Mean	N
Men	21.0	68.8	9.4	0.8	0.1	100.0	4.10	3757
Women	24.7	64.5	10.3	0.5	0.0	100.0	4.13	3697
b. Job satisfaction								
	4	3	2	1	Total	Mean	N	
Men	36.8	55.2	6.5	1.5	100.0	3.27	9965	
Women	38.9	53.4	6.5	1.2	100.0	3.30	6542	

Note that the information on life satisfaction is based on the CentER data panel (1993-2006) where the categories are 1 = very unhappy, 2 = unhappy, 3 = neither happy nor unhappy, 4 = happy, 5 = very happy. The information on job satisfaction is based on the OSA labor supply panel (1992-2006) where the categories are 1 = very dissatisfied, 2 = dissatisfied, 3 = satisfied, 4 = very satisfied.

Tab. 2: Average life satisfaction and job satisfaction by working hours (%)

a. Life satisfaction					
Hours	0	1-20	21-32	33-40	40+
Men	3.82 (195)	3.96 (83)	4.10(188)	4.12 (2876)	4.12 (415)
Women	4.11 (1187)	4.12 (1159)	4.15 (665)	4.19 (454)	4.13 (232)
b. Job satisfaction					
Hours		1-20	21-32	33-40	40+
Men		3.27 (151)	3.17 (450)	3.26 (6816)	3.43 (342)
Women		3.25 (2526)	3.31 (1744)	3.31 (988)	3.45 (38)

In parentheses: number of observations; Note that the information on life satisfaction is based on the CentER data panel (1993-2006); the information on job satisfaction is based on the OSA labor supply panel (1992-2006).



Tab. 3: Life satisfaction; parameter estimates fixed effects ordered logit model

Variable	Men		Women	
<i>Own situation</i>				
Health	0.31 (2.3)**	0.35 (2.1)**	0.33 (2.8)**	0.32 (2.3)**
Hours 1-20	-0.44 (0.6)	-0.31 (0.3)	-0.17 (0.7)	-0.36 (1.1)
Hours 21-32	1.33 (2.5)**	1.29 (1.7)*	-0.15 (0.5)	-0.53 (1.3)
Hours 33-40	0.82 (2.0)**	0.70 (1.3)	-0.40 (1.0)	-0.66 (1.4)
Hours 40+	0.92 (2.0)**	0.62 (0.9)	-0.43 (1.0)	-0.92 (1.8)*
<i>Partner</i>				
Health	0.16 (1.3)	0.18 (1.2)	0.08 (0.6)	-0.07 (0.5)
Hours 1-20	0.53 (2.1)**	0.53 (1.6)	-0.06 (0.1)	0.30 (0.3)
Hours 21-32	0.51 (1.6)	0.15 (0.4)	0.01 (0.0)	-0.02 (0.0)
Hours 33-40	0.22 (0.6)	0.09 (0.2)	-0.09 (0.3)	0.21 (0.4)
Hours 40+	0.14 (0.4)	0.00 (0.0)	-0.17 (0.4)	0.17 (0.3)
Log(Family income)	–	0.16 (0.6)	–	0.03 (0.1)
Observations	1562	1098	1657	1198
Individuals	411	298	445	330

Note: based on CentER data panel (1993-2006); all estimates include dummy variables for year of survey.

Tab. 4: Job satisfaction; parameter estimates fixed effects ordered logit model

Variable	Men		Women	
21-32 hours	-0.24 (1.2)	-0.24 (1.1)	0.29 (2.4)**	0.27 (2.2)**
33-40 hours	-0.14 (1.5)	-0.13 (1.4)	0.45 (2.8)**	0.45 (2.7)**
40+ hours	-0.16 (0.8)	-0.21 (1.0)	–	–
Wage satisfaction	–	0.42 (7.5)**	–	0.42 (6.4)**
Observations	5384	5348	3338	3294
Individuals	1357	1349	925	916

Note: Fixed effects ordered logit specifications; based on the OSA labor supply panel (1992-2006); all estimates include dummy variables for year of survey.

Tab. 5: Distribution of hours satisfaction by gender (%)

Hours satisfaction - Men					
Working hours	1-20	21-32	33-40	40+	Total
Wants to work more	43	11	16	3	12
Satisfied with working hours	54	72	59	25	67
Wants to work less	3	17	25	62	21
Total	100	100	100	100	100
Hours satisfaction - Women					
Working hours	1-20	21-32	33-40	40+	Total
Wants to work more	26	8	6	0	9
Satisfied with working hours	66	70	44	33	79
Wants to work less	8	22	50	67	12
Total	100	100	100	100	100

Based on the OSA labor supply panel (1992-2006).

Tab. 6: Working hours preferences; parameter estimates fixed effects logit model

Variable	Wants to work more		Wants to work less	
	Men	Women	Men	Women
21-32 hours	1.37 (2.3)**	-1.43 (5.6)**	0.20 (0.3)	1.51 (5.9)**
33-40 hours	-0.69 (1.9)*	-2.57 (5.2)**	1.66 (2.3)**	2.73 (8.5)**
40+ hours	–	–	2.43 (3.1)**	2.15 (2.4)**
Observations	1829	1085	2384	1269
Individuals	480	309	661	379

Based on the OSA labor supply panel (1992-2006); all estimates include dummy variables for year of survey.

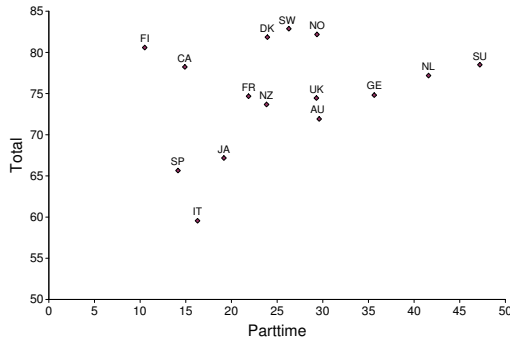
Tab. 7: Working hours preferences; parameter estimates pooled cross-section

Wants to work	Men		Women	
	More	Less	More	Less
Constant	0.667 (14.5)**	-0.156 (5.2)**	0.403 (25.9)**	-0.092 (8.2)**
Hours/10	-0.125 (10.9)**	0.098 (12.7)**	-0.094 (25.9)**	0.145 (29.8)**
Time/10	-0.062 (14.4)**	-0.012 (2.0)**	-0.045 (7.8)**	-0.057 (8.8)**
Observations	11,991		8076	
Individuals	5027		3817	

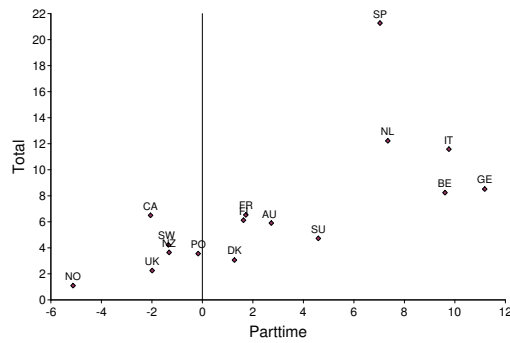
Based on the OSA labor supply panel (1985-2006); time = calendar time in years (1985=0). Men and women aged 25-54 at the time of the survey and working 1-45 hours per week;  $t$ -values based on standard errors accounting for clustering of observations.

Fig. 1: Employment rates women aged 25-54; 2007, 1997-2007(%)

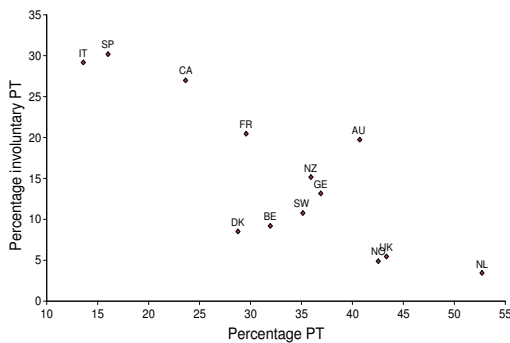
a. Parttime and fulltime employment rates; 2007



b. Changes in employment-population rates; 1997-2007



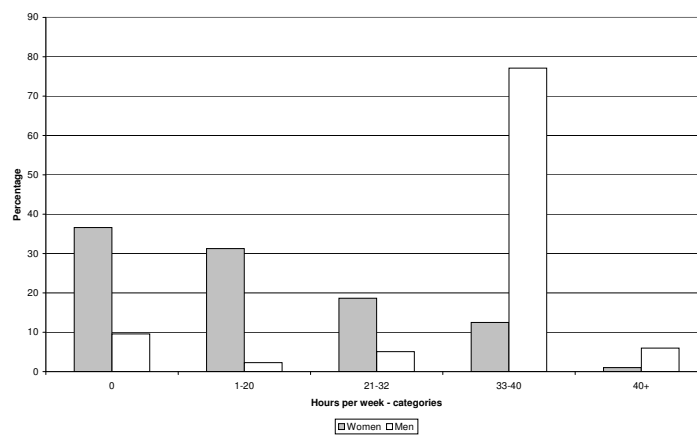
c. Share of parttime work and percentage of involuntary parttimers



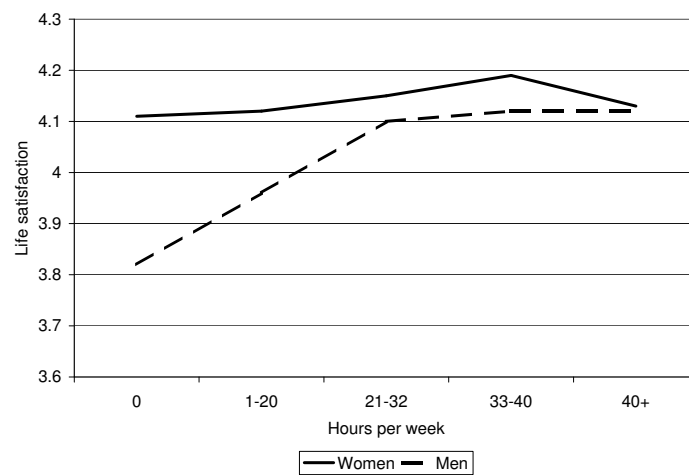
Note: Data for France concern 2006; the mnemonics for the countries are AU=Australia, CA=Canada, DK=Denmark, FI=Finland, FR=France, GE=Germany, IT=Italy, JA = Japan, NL=Netherlands, NZ = New Zealand, NO=Norway, SP=Spain, SW=Sweden, SU=Switzerland, UK=United Kingdom.

Fig. 2: Weekly working hours and life satisfaction

## a. Weekly working hours

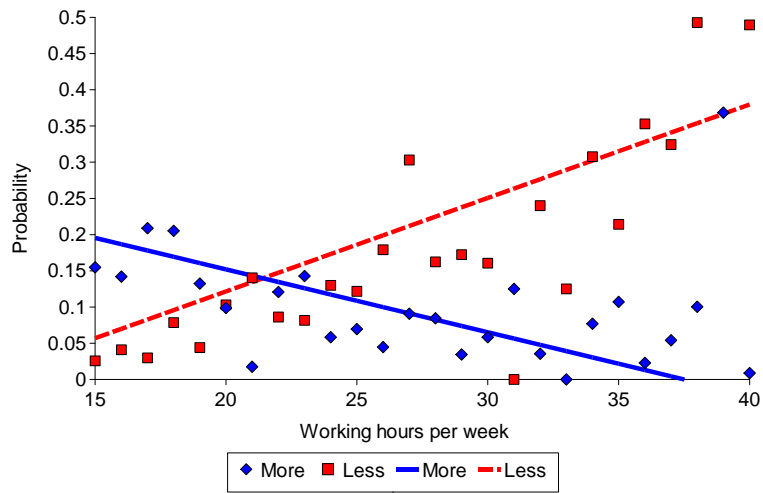


## b. Life satisfaction by weekly working hours

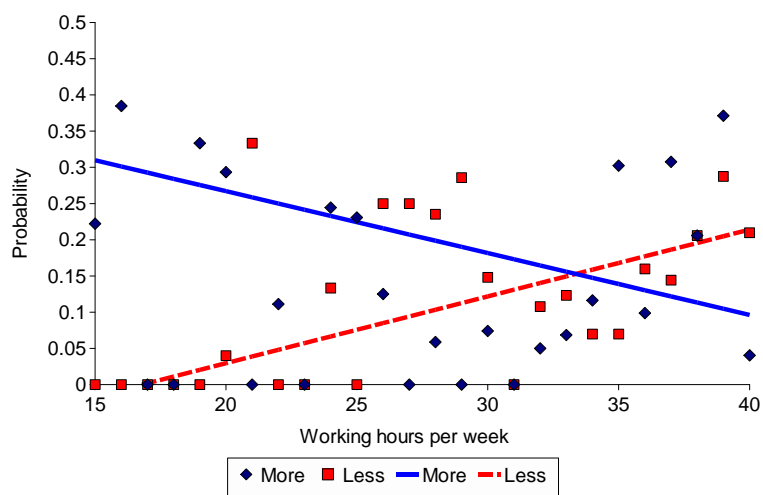


Note: based on the Center data panel (1993-2006).

Fig. 3: Working hours; wanting more – wanting less  
a. Women



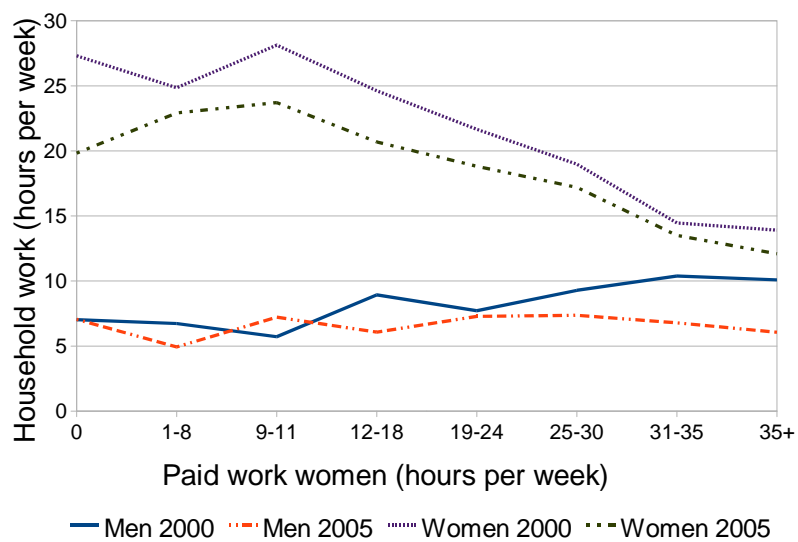
b. Men



Based on the OSA labor supply panel (1992-2006)



Fig. 4: Hours of housework by hours of women's market work; 2000 and 2005



Based on Time Use Surveys 2000 and 2005