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DUTCH MOTHERS' RETURN TO WORK AND THE RE-ENTRY EFFECT ON WAGE

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ABSTRACT

The European Union's aim for higher female participation rates will primarily be reached through re-entry. This article analyses the re-entrants' motives, re-entry chances and its impact on wages for the Netherlands, using three data sets. The ending of the motherhood role is the most referred motive. Financial motives are cited by re-entrants with short interruptions. Significant positive factors for re-entry chances are the presence of teenage children, an age up to 45 and a high education. A negative factor is the condition of working locally. OLS regressions reveal that being a re-entrant has a large negative effect on women's wages, and so has each extra year of a career break.

JEL CLASSIFICATION: J13, J16, J21, J24, J31

KEYWORDS: women; wages; career break, motherhood; re-entry

1. INTRODUCTION

In March 2000, the European Council in Lisbon set a target for the net participation of women in the European Union of more than 60% including jobs for less than 12 hours a week by the year 2010, assuming a participation of 50% in 2000. The Dutch cabinet wants to achieve more, though; it is aiming for a participation of women in the workforce of 65% by 2010, without counting jobs for fewer than 12 hours a week. The optimism to reach this goal is primarily based upon the steady growing labour force participation rates of women from 36% in 1988 to 51% in 1999 (>=12 hrs a week, see Statistics Netherlands, 2000). A continuation of the employment relation after giving birth and re-entry after a career break due to motherhood are the most important factors behind this growth. It was not until recently, that the percentage of women becoming a housekeeper when they had children outnumbered the percentage of

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women that continued their job after giving birth. Therefore, there exists a large labour reserve in the female population aged 16-64, and women's re-entry decisions will have a large impact on the female labour force participation rates in the years to come. The processes of re-entry however have not been studied to a large extent.

This paper focuses solely on the re-entry of women into the labour force. It aims to gain insight in processes of re-entry following a career break due to motherhood. The aims of the paper are twofold. Firstly, the motives of women for re-entering and the chances of re-entering will be analysed. Secondly, the impact of re-entry on women's wage levels will be analysed. Section 2 provides a short overview of the literature at stake. Section 3 describes the data and models used. Section 4 details the re-entry decisions, while section 5 analyses the wage effects. Finally, conclusions are drawn.

2. Women's Re-Entry in the Labour Market

2.1. Previous research regarding re-entry

In examining the processes of women's re-entry into the labour force, two problems arise, notably the lack of academic research and the lack of representative data with a unequivocal definition of re-entry. Focussing on the first issue, women's labour supply in the Netherlands have been studied a number of times (Siegers, 1985; Hartog and Theeuwes, 1986; Mol et al., 1988; Van Soest, 1990; Woittiez, 1990; Renes, 1991; Maassen van den Brink, 1994; Van der Klaauw, 1996; Grift, 1998; Mertens, 1998; Vlasblom, 1998; Aldershof, 1999; Wetzels, 2001). All of these studies are based on cross information gathered prior to 1992 except for the study by Wetzels (2001) which is based on panel data covering the period 1985- 1996. Some studies have focussed clearly on women's decisions to withdraw from the labour market, but only few have examined women's decisions to re-enter (see Allaart and De Voogd-Hamelink, 1994 for a review). Wetzels (2001) studies return to work after giving birth studying a period of up to 5 years.

The oldest research on re-entrants that is known to us is the study on the job commitment of Belgian women performed by Elchardus and Martin (1985). More specifically, the research concentrated on the influence of the division of tasks, the degree of control over the work itself and other aspects of the working situation. Their research revealed that the higher the quality of work in a profession prior to exiting the job market, the greater the chance of re-entry.

Dutch research has concentrated primarily on estimating the numbers of female re-entrants, mostly based on representative samples such as the Labour Force Survey by Statistics Netherlands and the OSA labour supply panel. The OSA panel enables a comparison with the work status that existed two years prior to the survey (Allaart and De Voogd-Hamelink, 1994). The study shows that 60% of the women who entered or re-entered the workforce from 1984-1990 from the non-participating, job-seeking

or immediately graduated categories had no more than lower vocational education. For those who found employment among the job-seekers category, that figure is over 50% and among female school-leavers the number is 35%. A majority of the female re-entrants ends up in the non-commercial services industry including government. Of the 30% who find work in the services industry, two-thirds are in the trade, hotel and catering industry. It is noteworthy that re-entrants end up in a relatively stable employment relation. The number of job changes is minimal compared to the numbers for the ex-job seekers and the school-leavers. The OSA panel allows for a comparison of intended behaviour, because in the 1990 wave people were asked if they thought they would be seeking a job at some future point (Allaart et al., 1992). A logistic regression analysis using the 1992 wave reveals that, for non-participating women with a child between the ages of 0-18, age had the biggest, negative, effect on the likelihood of participation. This likelihood was positively affected by a higher than average education and a domestic situation in which the woman was single -or widowed as opposed to cohabiting or married. Having a youngest child up to the age of four increases the likelihood of participation. If the youngest child is older, then the likelihood drops; this drop is, in turn, greatest for youngest children who are older than 12. Re-entrants seem to mostly start working in organisations where women already constitute more than 75% of the employees (Allaart et al., 1992).

Other Dutch research has focused primarily on the specific conditions that women set in accepting paid work for the specific sectors where there are shortages of personnel, such as the healthcare sector. Vogels and Portegijs (1992) show that the most important criteria that women use in choosing a job are time preferences followed by location preferences. This was confirmed in a recent study by Van Til et al. (2001). The latter research covered nurses and care workers who do not work in the healthcare sector. The conditions given most frequently for re-entering the healthcare sector had to do with working times; being able to work at suitable times and the desire to enter into an employment contract for a limited number of hours. Another common condition that was given was being able to take retraining and refresher courses. About two thirds of the nurses and care workers who may want to return prefer to work during regular working hours in the daytime. Just under two thirds have a preference for a permanent employment relationship. These are also the kinds of conditions that played a role in the attempt by the Ministry of Education and Science to get certified teachers to return to teaching in 1989 (Klaassen, 2000). In this drawing on the 'silent reserve', 150,000 people, mostly women, were summoned to return to work in education. The attempt was very unsuccessful because of the conditions set by the women. Only 1,000 of the 5,100 people, who were immediately available, wanted to join a replacement pool without imposing further conditions. Other women wanted to replace at no more than two or three schools so that they could build some times with their workplace. They wanted good supervision and the preference for primary or upper secondary education had to be honoured. And their preference was for a permanent position. The reserve of certified teachers is large enough, but their conditions with regard to working times, location preference and permanent contracts for a fixed

number of hours were difficult to implement. In general, these kinds of conditions could be an explanation for the finding of Belderbos and Teulings (1989) that of all the job seekers with primary and secondary education, the potential re-entrants have the smallest chance of finding a job within a year.

2.2. The barriers to re-entrer

The concept of 're-entry' implies that a person once again finds paid work after a career break due to motherhood. However, Statistics Netherlands does not identify the 'female re-entrant' as such. In its Labour Force Survey it refers to the potential labour supply. Three survey questions are used to identify the potential labour supply among those who at the time of the survey do not hold a job of at least 12 hours a week. These questions are (1) do you want a job of at least 12 hours a week; (2) are you able to participate at short notice, that is within four weeks; (3) have you been actively seeking work in the preceding four weeks. The group that meets all three requirements is defined unemployed. The group that wants to have a job, but cannot begin at short notice or has not been actively seeking for a job is defined as the potential labour supply. These barriers to paid work will be labelled with 'not able' and 'not seeking'. Except for those in education and for the category disabled/early retirement, Statistics Netherlands distinguishes four segments, notably participating, unemployed, potential labour supply, and not-participating.

In 1999, nearly 2.7 million women, that is 51 percent of the female population aged 15-64, is employed for at least 12 hours a week (Table 1). Another 13 percent are in education, and 2 percent are disabled or early retired. The remaining group has either no job at all (27%) or a job of less than 12 hours a week (7%). Together the latter two groups count 1.75 million women, of which 0.5 million, thus 10 percent of the female population aged 15-64, are classified in the segments unemployed or potential labour supply. Among them, 172,000 women want a job and have been seeking work in the preceding four weeks. The reasons why they still have no work are probably linked to their qualifications, with the conditions they place on a job or with the manner they use to seek their preferred job. More than 181,000 women that want to work are unable to start at short notice; this concerns probably women who are unable to perform paid work due to childcare responsibilities, but would like to, at least in the long term. Probably, this group has the best chance of participation if the obstacle of 'not able' is removed. Finally, 167,000 women want and are able to work at short notice, but are not seeking for a job. This group can participate in the labour market if their route to it is eased or if jobs present themselves. For women who belong to the potential labour supply 'not able to' and 'not seeking' form two barriers to take up paid work. It is not known whether they ever succeed in finding a job, and if so, how long it takes them.

TABLE 1. CATEGORIZING THE FEMALE POPULATION AGED 15-64 (OWN CALCULATIONS BASED ON LFS DATA 1999 STATISTICS NETHERLANDS)

women aged 15-64	x 1000	%	no job + job < 12 hrs a week (1,410 + 343=1,753))	x 1000	%
employed >= 12 hrs a week	2,684	51%	wants job >=12 hrs + begin at short notice + seeking	172	10%
in education (appr.)	700	13%	wants job >=12 hrs + begin at short notice +not seeking	167	10%
disabled/early retired	126	2%	wants job >=12 hrs + not able to begin at short notice	181	10%
no job (appr)	1,410	27%	does not want job >= 12 hrs + has no job	930	70%
job <12 hours a week*	343	7%	does not want job >= 12 hrs + has job < 12 hours	303	
total	**5,263**	**100%**	**total**	**1,753**	**100%**

Notes: * This group includes only women aged 25 and over, because we assume that in the age group 15-24. the categories ' in education and job < 12 hours a week' overlap

The group that does not want a job for 12 hours or more can be called 'permanent housewives'. This group consists of 930,000 million women who are not at all in paid employment and 303,000 women who have a job for less than 12 hours a week. It is not known how many of this latter group nevertheless re-enters the labour market in a job of 12 hours or more. It is also not known whether the non-participating women will take up a job without indicating that they want a job (Van der Valk and Vogels, 1990). The LFS has retrospective information on the persons' employment status in the preceding year, but in case a person's status has changed, information is lacking why this transition has taken place. Therefore, it is not possible to categorize newcomers in the labour force as previous non-participants or as job seekers. In conclusion, the definition of the potential labour supply does not allow for a full identification of the 'silent reserve' among non-participating women. When taking the limitations of the LFS into account, the potential labour supply of women can be examined. A break down of this group into age, ethnic origin and level of education in relation to the barriers 'not able' and 'not seeking' reveals that the potential labour supply is greater amongst the women aged 25-44 than in the age range 45-64 (7.7% versus 5.9%). In the group 25-44 years, 4.3% are unable to begin at short notice and 3.3% are not seeking work. In the group aged 45-64, 2.6% are not able and 3.3% are not seeking. It can be assumed that the younger age group is 'not able' because the care for children acts as a major barrier to paid work, whereas in the older age group the barrier

probably relates to insufficient qualifications, care for grandchildren, or voluntary work. In both age groups the higher educated women are over represented. They have invested in education and therefore may be more likely to re-enter once they have taken the barrier of being 'not able'. Altogether, around half of the potential labour supply indicates 'not able' as a barrier to paid work, and this barrier is more apparent among ethnic minority women and among the women aged 25-44. When it comes to the barrier 'not seeking', the break down reveals that compared to the younger women in the potential labour supply the older women are more often 'not seeking', and so are the lower educated. The reasons why these women are not seeking are 'lack of result' and 'other reasons' in equal measure. Particularly the women aged 45-64 cite often the chief reason as 'lack of result', which means that they have had problems finding a suitable job.

2.3. The chance of re-entry

Most common, the analysis of the chance of re-entry is based on the theory of human capital. In this theory participation in the labour market depends on the comparison between the salary that can be earned in the labour market and the reservation wage ('shadow wage'). This logical framework for the female labour supply is based on 'not able to' because of caring for children, and 'not needing to' because of a partner's income, and 'to be able to' given the highest achieved educational level and 'to need to' given the household income. 'Not able to' is regarded positively if the productivity in the household is greater than the productivity in the labour market. The model is based on the reality of a breadwinner situation and an unequal distribution of childcare and the provision of the income between men and women. If care duties are organised, education once again becomes the indicator of ambition and the likelihood of a 'good' salary.

Most economic models that aim to predict the chance of participation in the labour force by women use as explanatory variables the age of the woman, her level of education, her wage base, her partner's income, and the number and age of children in the household. A great deal of international economic research has been done in this area, mostly on cross section data. In the case of re-entrants, it appears to be important to research the extent to which their perception of the chance of gaining a job contributes to success in finding one (Renes, 1991). One factor in this is the number of jobs offered per year in relation to the speed and possibility of recruiting employees. A notable point for analysis that has not actually been investigated in the standard comparison is the extent to which human capital ages during a break from work and in what ways and to what extent this can be explained by the duration of the break. The accumulation of the re-entrants' human capital has been interrupted and it is not clear whether an update is necessary and if so of what type, and in what form and what the new or changed requirements placed on employees are. It is also unclear what the precise effect of the duration of the interruption is on the re-entrant's human capital in relation to the demand for human capital. It is a major issue that requires extensive research. It has, though, been shown in various studies that the quality of the work experience in the labour market decreases with age.

2.4. The impact of re-entry on women's wages

Many studies have been published on the gender wage gap. Yet, before understanding the gender wage gap, it is necessary to understand wage differentials in the female work force, in particular the understanding of what is referred to as the 'family pay gap'. Are wage differentials between childless women and women with children due to the effects of motherhood, number and age of children, part-time working hours, career break, duration of the break, or to allocation to jobs particularly suited for women's demands to reconcile work and family life? In academic research attempts have been undertaken to gain insight in this issue only recently (Datta Gupta and Smith, 2001, Joshi et al., 1999, Wetzels, 2002). Here, focus is on the impact of a career break in explaining the wages of women with children.

Interrupting a labour market career is expected to affect hourly wage negatively, because of human capital accumulation forgone and tenure forgone. In addition this time out may depreciate human capital (Mincer and Polacheck, 1974), although empirical evidence on human capital depreciation is not unambiguous (Datta Gupta and Smith, 2001). Furthermore, Albrecht et al. (1999) cast doubt on depreciation as the sole explanation of the negative coefficient on time out in earnings functions as they estimated for Sweden. If human capital depreciation is the most important explanation for the negative effect of time out on wages, then one would expect that this would be confirmed by all types of time out due to unpaid household work (parental care or other care). However their results reject this hypothesis. On the other hand, job specific human capital may imply less loss of human capital among those taking parental leave as compared with those who take household time. However, as Albrecht et al. (1999) reason themselves, this argument does not explain the different effects according to gender. They suggest that employers may use leave taking behaviour as a signal of future career commitment. Since long-term leave such as in Sweden is not an option for most workers in the Netherlands we can unfortunately not analyse this.

Anticipation to future career break(s) leads to choosing (or to be assigned to) careers with less potential for training and hence flatter earnings experience profiles (Gronau, 1988). On average young Dutch women invest longer in education, postpone or refrain (involuntary) from children, and therefore have shorter career breaks or at least postpone career breaks compared with their mothers. Partly this is explained by increasing labour force participation and hesitation to have children. Flat career paths in the beginning of a career are more often chosen by women who are solely in favour of motherhood. In recent years the proportion of re-entrant women with a long career break is growing in the Dutch labour market. Women who re-entered the labour market in 1999 after a career break of at least one year, on average had not participated in the labour market for 11 years (Wetzels and Tijdens, 2001; Allaart and De Voogd-Hamelink, 1994). Dekker et al. (2000) and Wetzels and Tijdens (2001) find a strong negative effect of previous non-participation or unemployment on women's wages.

3. Data and Definitions

3.1. Data

This paper aims to gain insight in processes of re-entry following a career break due to motherhood, notably the motives and chances of re-entering, and the impact of re-entry on women's wage levels. There is no data set available that allows for analyses of both issues. The Labour Force Survey only partially provides information about the barriers for non-participating women to re-enter the labour market. Therefore, we use three different data sets targeting at specific groups. The first data set is used to examine both the motives of women for re-entering, and the chances of re-entering. The second data set is used to analyse the chances of re-entry. The third data set has been used for analysing the effect of re-entry on women's wage levels. The data sets will be discussed below.

3.2. The FNV re-entrants-survey

The estimates of re-entry and the proportional hazard of re-entry are based on analyses of the so-called FNV re-entrants-survey (FNV, 2000). The FNV is the largest trade union confederation in the Netherlands. For this survey, the female re-entrants were contacted in various ways. Firstly, on 27 June 2000, the FNV held a 'telephone day' on which re-entrants could talk about their experiences of re-entering the workforce. Women who called were asked if they would complete a questionnaire, and 135 did so. Secondly, the FNV collaborated with the Start employment agency to send the questionnaire to women who were registered with the agency as re-entrants. Of the 7,000 questionnaires sent out, 1,756 were sent back. Thirdly, the FNV placed the questionnaire on its website. Roughly 80 people accessed it in this way. The data set consists of women who are seeking work or, in any event, are keeping the trade union or Start informed of their labour market status and who are thus communicative about their re-entry. Of the total 1,971 questionnaires that were completed, a number of respondents did not meet the definition of a re-entrant as defined by the FNV: a woman who wants to work but who has not participated in the labour market for a minimum of one year. For the analyses, 1,926 observations have been included, which fall into two groups. The first group (n=594) consists of women who still did not have a job in June/July 2000; they are called the potential re-entrants. The second group (n=1,332) consists of women who by contrast had succeeded in finding a job at that time. They are called the successful re-entrants.

The FNV re-entrants data is particularly useful for an analysis of the motives of women at the time they consider re-entering, thus the transition from non-participating to actively participating in paid work. These women correspond to the category in the potential labour supply that reports that they can start work at short notice. This cross-sectional data set is used to analyse the motives of women who consider or recently have considered to re-entering the labour force. The data set is also used to predict the likelihood of a woman to successfully re-enter the labour market.

3.3. The 1998 OSA labour supply panel

The OSA labour supply panel is a data set collected by the Dutch Organisation for Strategic Labour Market Research (OSA). We use the 1998 data, which is a cross section of a representative sample of the Dutch labour force in 1998. The OSA labour supply panel data are a suitable source for analysing the chances of re-entry, because the data set contains information on the work status at the time of the survey and retrospective information about the work status in the two years prior to that, including the transitions made in the intervening period. As such, it provides insight into the re-entry of women from the categories of 'job seekers' and 'non-participants' into paid work. Re-entrants, then, are women who did not have a job two years ago, and were unemployed or non-participating, and had managed to find paid work as of the time of the survey. There are not many respondents who made such a transition, however, and, more importantly, the list of questions is not specifically targeted at this group. The 1998 data set includes information on 907 women who are not participating in the labour force, 88 women who were not participating in 1996 but are in paid work in 1998, and 91 women who were unemployed in 1996 and are in paid work in 1998. The women who have made a transition primarily belong to the age group 25-44, and have an educational level comparable to those working women in the CBS data. More than 20% of them have no children living at home, and of those women who do have children living at home their children are generally older than six.

3.4. The women's wages survey 2000/01

The Women's Wages Indictor 2000/01, abbreviated in Dutch to VLW2000/01, surveyed working women (Tijdens, 2001). The questionnaire was enclosed for subscribers to the three largest women's magazines, it was enclosed in trade union newsletters and magazines, and women could take part in the poll on two websites. From September 2000 to May 2001, a total of 15,508 usable questionnaires were returned, a little more than half of which were returned via the Internet. This survey extensively covered the area of wages, and it had detailed work history questions. The respondent was asked if she had had no paid work for a period longer than one year. Opportunity was given to tick one or more reasons for a career break. Almost four in ten women had interrupted their careers. The reasons given in the majority of cases were related to raising children and looking after the home. A small group gave other reasons, of which interruption due to unemployment was the most commonly cited, followed by courses or education. A small group of women only started paid work at least one year after the birth of their first child. Here, the term re-entrant is used to denote the women who have interrupted their careers due to motherhood, including the women who first worked after giving birth. Altogether, 24% of the women were re-entrants. The VLW2000/01 data are particularly useful for examining the impact of re-entry on women's wages.

To ascertain how representative the VLW2000/01 was, its distributions as regards to working hours, age, education, and industry were compared to distributions of the female workforce in wage employment, as reflected in the Labour Force Survey 2000, which is

held on an annual basis by Statistics Netherlands. The LFS does not provide detailed information on individuals working less than 12 hours a week. This group is severely underrepresented in the VLW. Limiting the comparison to women in jobs of 12 hours and over, the distribution over 12 industry classes reveals that 6 classes show an over- or underrepresentation of less than 2 percent points, 5 classes with 2 – 5 percent point. The wholesales and retail are underrepresented by nearly 7 percent points. As regards to education, the differences between the VLW and the LFS vary from 2 to 8 percent points. Women with primary school, lower vocational education, and upper vocational education are underrepresented, whereas the women with ordinary secondary education, high vocational college and university education are overrepresented. As regards to age group and working hours group, the deviation from the LFS in almost all cells is below 2 percent points, except for a slightly higher underrepresentation of the 15-24 years old in jobs of 20 hours and over, and an overrepresentation of nearly 7 percent points for the 25-34 years old in full-time jobs. In conclusion, the VLW-sample resembles the population rather well, but only for those employed for 12 hours a week or over. The women in jobs of less than 12 hours are severely underrepresented in the sample, and since no statistics are available as regards to their distribution over industry and education, the comparison leads to the conclusions that the analyses have to be limited to women in jobs of 12 hours and over. Altogether, there are not sufficient arguments to weight the sample.

3.5. Comparison of data sets: characteristics of re-entrants

Table 2 presents a comparison of LFS characteristics and the characteristics of the three data sets with regard to age, education and family situation. The columns in Table 2 detail the characteristics for the participating women, the potential female labour supply, and the non-participating women. It also presents the characteristics of the women who have made a transition in the period 1996 to 1998.

The Table reveals that the women who defined themselves as potential or recent re-entrant in the FNV survey are on average older than the women who re-entered the labour force according to the OSA survey. When comparing the participating women and the potential labour supply, it appears that the latter group is on average older, less educated, and less often single or couple without children at home, but in their home they have more often children aged 6 to 12 or children aged 13 to 17. The re-entrants from the FNV survey are somewhat older and on average less highly educated than the re-entrants from the OSA database, but there are also few re-entrants with a low educational level. Relatively often, the re-entrants have children in the 6-12 age group and aged between 6 and 17 years old.

TABLE 2. COMPARISON OF FOUR DATA SETS; PERCENTAGES FOR AGE, EDUCATION AND FAMILY SITUATION

	CBS (LFS)			OSA			FNV			VLW
	Partici-pating	potential	non-partcipat	np& sw 9-96	trans. np-pw	trans. sw-pw	trans.pw	trans. pw after 96	potential	Partici-pating
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Age										
15-24(%)	14.3	14.1	23.0	2.0	3.4	16.5	0.1	0.1	0.2	6.2
25-44(%)	59.1	54.3	28.2	44.7	81.1	63.8	59.5	66.8	60.3	66.6
45-64(%)	26.7	31.6	48.8	53.2	18.2	19.8	40.5	33.1	39.6	27.2
Education										
Lo(%)	5.9	17.8	24.0	12.0	2.3	7.4	1.8	1.6	2.7	0.7
Lbo/mavo(%)	19.5	30.2	37.1	54.9	37.1	51.9	51.5	49.1	53.6	18.4
Mbo/havo(%)	45.5	35.9	29.8	25.3	33.7	28.4	33.8	36.6	30.7	41.9
Hbo(%)	21.1	12.1	7.8	6.4	19.1	9.9	12.9	12.8	13	27.9
Wo(%)	7.8	2	1.2	1.4	7.9	2.5				9.7
Family situation										
Single no children				9.9	4.6	15.4	19.5	16	26.4	18.4
Couple no children				45.2	22.8	34.1	19.5	16	26.4	37.3
Child 0-5(%)				5.3	10.2	8.8	12.3	18	16.7	15.3
Child 6-12(%)				13.8	20.5	14.3	28.5	43.2	33.6	15.1
Child 13-17(%)				10.7	13.6	15.4	29.7	22.9	23.2	17.9
N x1.000 pers	2.684	348	1.933	907	88	91	1329	831	531	15,508

Source: Own analysis of data from CBS 1999; OSA 1998; FNV re-entrants 2000; VLW 2000/01. Categories participating, potential and non-participating according to the CBS definition. OSA data by type of transition (trans.sw-pw=from seeking work to paid work; trans.np-pw=from not participating to paid work) in the period 9-96 to 9-98. FNV survey: trans.pw= transition to paid work. Trans pw after 1996=transition after 1996 to enable a comparison with OSA database. VLW participating to enable a comparison with CBS;

Age: represents the complete labour force. CBS data includes individuals in full-time education in the category non-participating; OSA excludes individuals in full-time education. If we split the age category 25-45 in 25-35 and 35-45 than the proportion in category 35-45 is much higher (52.8 in column 7) than in OSA (37.4 (col.6) or 46.6(col.5))

Education (educ.): Lo primary educ., Lbo/mavo lower vocational/intermediate secondary educ.; Mbo/havo intermediate vocational/higher secondary educ.; Hbo: higher vocational educ.; Wo higher educ.: university; FNV data: Hbo and WO are merged.

Family situation: FNV data couple no children: no children living at home (older than 18)

4. Women's Motives and Chances for Re-Entry

4.1. The motives for re-entry

Before making estimates of the chance of re-entry, we will first analyse the six motives for re-entry, surveyed in the FNV re-entrants data set. The most frequently cited motives for re-entrants to participate are 'my children are growing up/becoming more independent'. To a lesser extent the motives 'because of the social contacts', 'I want to develop myself', 'because the income is needed' and 'I want to be financially independent' are cited. 'I have spare time' is cited the least frequent. This indicates that for re-entrants getting the job done due to motherhood plays the greatest role in their re-entry decisions. From a break-down of the motives by educational level, it appears that low-educated re-entrants cite financial motives much more often than re-entrants with higher or higher vocational education. The motive 'to develop myself' is cited more often by the higher educated. Vice versa, the motives 'more spare time' and 'because of social contacts' are cited less by the higher educated. The motive that children are becoming more independent is cited a little more often by the low and highly educated than by the re-entrants educated to intermediate level.

When categorised by the duration of the re-entrants' most recent break from paid work, it appears that the financial motives are primarily cited by those re-entrants with the shortest time away from the workplace, that is by the successful re-entrants with an interruption of between one and five years and by the potential re-entrants with an interruption of one year. The motive 'to develop myself' is primarily cited by the re-entrants who have interrupted their working careers for between two and five years. When the increasing independence of children is cited by successful re-entrants it is primarily those who have interrupted their careers for a period of between five and ten years. Of the potential re-entrants, those with a break of just one year or more than ten years cite this reason most. The motive 'more spare time' is cited increasingly as the duration of the break increases. The motive 'because of social contacts' is cited frequently even by women with a short interruption. This probably reflects their missing their circle of work friends when the break from work occurred not so long previously.

It appears that in the majority of cases the re-entrants need not to participate for the sake of income. If income plays a role in the decision to re-enter, then on average it is the salary of the 'second earner' that is in question. The ending of the motherhood role is mostly referred to, though the motive appears also partly to be related to educational level and to the duration of the break from work. The woman's human capital (education, when she last stopped paid work) and the opportunity costs ('children are growing up') appear in any event to offer the best explanation for the chance of a woman re-entering. In estimating the chance of participation, we include the motives via these variables.

4.2. The chance of re-entry

The motives women mention for their re-entry decision may very well be a rationalisation of underlying processes. To examine what determines whether a woman returns to the labour

market at a given moment after an interruption of at least one year it is assumed that the decision to re-enter is influenced by:

1. Personal characteristics: highest achieved educational level, age, age on last exiting the workforce, number of years' break, accumulation of human capital during the break such as by following courses (how many, how long and subject matter), participation in social networks (voluntary work).

2. Domestic characteristics: social position of partner, if any, partner's income and education, number and ages of children.

3. Wider socio-economic environments: accessibility and availability of search channels, economic situation at the time at which 'able to' and 'want to' coincide, availability, quality and cost of social services such as the purchase of child care, leave arrangements and the like.

The status whether or not a woman returns to paid work after a break of at least a year is represented as Y (Y=1: woman has re-entered, Y=0: woman has not re-entered). Personal and domestic characteristics are represented by X. The relative influence of each of these characteristics on the decision to re-enter is represented by the coefficient b. To relate the determinants of re-entry Xb to the actualisations, an assumption must be made about the distribution of the outcomes. We assume a logistic distribution. Then, by applying econometric techniques the relative weightings b for the various variables in X on the chance of re-entry are determined.

Using the logit model, the estimation results are presented as log odds ratios. This ratio can be interpreted as meaning that a value less than one means that the variable concerned reduces the chance of the transition to paid work in comparison with the group that has been taken as a reference group (the base group, indicated by 'base' in the tables). A value greater than one means that the chance of re-entry is greater for individuals with that characteristic than for the reference group. The specification of the model takes into account age, education, age of children, voluntary work and activities or courses followed. Since age and education are related, as are education and the age of the mother on the birth of the first child, we have also estimated models in order to research the effects of these relationships on the chance of working. These estimation models are available upon request by the authors. The model has been estimated for two different samples. At first, the OSA-data is used to model the chance that women who in 1996 were not participating have re-entered the labour force two years later, in 1998. At second, the model is estimated using the FNV re-entrants data of women who define themselves as recent or potential re-entrants.

Using the OSA-data, the chance for a woman to re-enter the labour force from the status of non-participation appears to be significantly affected by age (Table 3). Compared to women over 45, women younger than 45 years of age are five times more likely to re-enter. It is striking that there is little difference between the women younger than 35 years

of age and the women aged 35-45. Compared to the low educated, a high education level more than doubles (2.3) the chance of re-entry. But education to an intermediate level has no significant effect on re-entry in comparison with a low-level education. A child aged 13-17 also doubles the chance of re-entry in comparison with a child under six years old. A child in the 6-12 age group has the same effect as a child under six years old. Children in other age groups have no significantly different effect to children aged 0-6. Following a course (after September 1996) doubles the chance of re-entry compared to women who have not done so. Women engaged in voluntary work at the time of the survey in September 1998 have 50 percent less chance of re-entry than women who reported that they were not engaged in voluntary work at that time. Two explanations for this are possible: women in voluntary work have less success in finding a job because they search less actively as they spend their time on voluntary work; women who do not succeed in finding a job become active in voluntary work.

TABLE 3. FACTORS DETERMINING THE CHANCE OF SUCCEEDING IN FINDING A PAID JOB IN THE PERIOD SEPTEMBER1996–SEPTEMBER 1998, FOR WOMEN WHO WERE NOT IN PAID WORK IN SEPTEMBER 1996 (LOGIT MODEL). ODDS RATIO AND Z VALUES.

All women not in paid work and not in education in September 1996	odds ratio	z
Age younger than 35 years	4.992	5.48
Age between 35 and 45 years	5.019	5.28
Age older than 45 (base)	1	
Education is voc. uni./uni	2.329	2.74
Education is pre-uni./intermed. voc.	1.122	0.51
Education lower (base)	1	
Child 6-12	1.635	1.62
Child 13-17	2.003	2.32
Child 0-12	0.831	-0.42
Child 6-17	2.440	2.63
Child 0-5 (base)	1	
Dummy: Course followed	2.214	3.41
Base (no course followed)	1	
Dummy Voluntary work	0.558	-2.55
Base (no voluntary work)	1	
Loglikihood	-334.10	
Wald chi2(7)	94.13	
Prob " chi2	0.000	
Pseudo R2	0.1542	
N	**907**	

Source: Own calculation based on OSA 1998. The dependent variable=transition from not in paid work to paid work took place after September 1996 until September 1998. Dummy child 0-5 =1 means that there is at least one child in the household and that the child/children is/are in the age group 0-5. Ditto for the ages 6-12 and 13-17.

(Notes: continued)
The dummy that indicates whether a course was followed is 1 if the woman followed the course after September 1996. The dummy voluntary work indicates that the woman was engaged in voluntary work in September 1998

When estimating the chance of re-entry using the FNV re-entrants survey, which concerns women who define themselves as (potential) re-entrants, Table 4 reveals that age and education no longer appear to have a significant effect. However having a child aged 6-18 has a positive significant effect on the probability of re-entry, and the chance of succeeding in finding a job is higher when the child is between 13-18 years old compared to when the child is between 6-12 years old. In looking for a job, a number of employment conditions can act as a criteria ceiling, such as part-time working hours, commuting distance, or the timing of work. From Table 4, it appears that working locally is the only condition that has a negative and highly significant effect on the chance of succeeding in finding a job after exiting the work force. The condition of working locally reduces the chance of re-entry by 27% in contrast to those women who do not cite it. The condition of part-time work reduces the chance of re-entry by 17% in contrast to those women who do not cite it. However this condition is not highly significant, which is in line with the fact that part time work is widespread in the Netherlands. Of course, the conditions the woman applies, like working locally or during school hours, have a relationship with the conditions the demand side can and wishes to grant. A foremost factor is employment trends: the demand in the labour market for new personnel can make it easier for women looking for work to find a job. As such an extension of the research would not only require an initial analysis of the number of jobs in the period that we are studying, but also the willingness of employers to offer jobs that meet the conditions women apply. For example hospitals which are in short supply of nurses offer jobs with adjusted working hours and working time to attract and hire re-entrants with the required qualifications.

TABLE 4. FACTORS DETERMINING THE CHANCE OF SUCCEEDING IN FINDING A PAID JOB AFTER EXITING THE WORKFORCE (LOGIT MODEL). ODDS RATIO AND Z VALUES.

All re-entrants	Odds ratio	Z
Age younger than 35 years	0.771	-1.36
Age between 35 and 45 years	1.027	0.20
Age older than 45 (base)	1	
Dummy Education =high	1.059	0.349
Dummy Education =intermediate	1.211	1.626
Education low (base)	1	
Youngest child 0-5 (base)	1	
Youngest child 6-12	1.382	2.09
Youngest child 13-18	1.501	2.17
Youngest child "18	0.952	-0.22

TABLE 4. CONTINUED

All re-entrants	Odds ratio	Z
Condition part-time	0.831	-1.63
Condition locally	0.783	-2.22
Condition during school hours	0.835	-1.32
Loglikihood	-1083.05	
LR chi2(10)	26.33	
Prob > chi2	0.0033	
Pseudo R2	.012	
N	**1777**	

Source: Own calculation based on FNV re-entrants survey, 2000. Low education: lower than secondary school; intermediary education is secondary school; High education =higher vocational education or university. Condition: condition successful re-entrant say to be important in their job now; condition which potential re-entrant poses to accept work.

5. THE IMPACT OF A CAREER BREAK ON WOMEN'S WAGE LEVELS

In the previous section, it appeared that the re-entry decisions were definitely not primarily driven by financial motives. Conditions for re-entry refer to working hours, commuting distance, the timing of work, or the possibility of teleworking. Does this give ground to the assumption of a trade-off between working conditions preferences and wages? This section deals with the last part of this assumption, notably the impact of re-entry on women's wages. Using the VLW2000/01 data, women's hourly wages have been explained with OLS regression analyses for all women in employment, for re-entrant women only, for women who have no children (yet), and for women with children but no career break (Table 5). The estimates are based on Mincer (1962, 1963, 1974). Further research into the effects of a career break will draw on Mincer and Ofek (1982) and Mincer and Polacheck (1974).

For the equations, the wages have been converted into hourly wage rates based on the number of hours per week and corrected for the period covered by the payment, which is usually one month, but could be four weeks or one week. Women without children earn less than women with children. The respective mean gross hourly wages are €12.3 and €13.1. Compared to women with children who have worked continuously, re-entrants have on average far lower wages (€13.9 and €12.1). The re-entrants have been with their current employer for a shorter period of time. They also have fewer years of education, and this gap is increasing for younger cohorts of women. The re-entrants have more children living at their home, but they less often have a child under the age of four. Working hours for women with children however hardly vary across the two groups (26 versus 25 hours a week).

Table 5 reveals that each extra year of education has a positive effect on the hourly wage, and the effects are of approximately equal size for all four, though highest for the continuously working women with children. Compared to the re-entrant women, each extra year of age has a much higher effect on the wages of women who have no children (yet). Each extra year with the current employer affects re-entrants' wages twice the size of the effect for women who have no children.

Being a re-entrant has a large negative effect on women's wages, and so has each extra year that a career break lasts. Having a supervisory position pays off similarly for all groups. The continuously working women profit most from working in a large firm, whereas re-entrant women hardly gain from firm size. The women with a continuous working career profit also most from working with male colleagues, whereas this is to a far lesser extent the case for the re-entrants women. All women gain from being promoted, though the re-entrant women profit most. The women with children, whether they are re-entrant or have worked continuously, profit from being employed in the healthcare sector.

TABLE 5. COEFFICIENTS OF THE LINEAR REGRESSION FOR THE LOG GROSS HOURLY WAGE FOR ALL WOMEN IN WAGE EMPLOYMENT, FOR RE-ENTRANTS (WOMEN WITH CHILDREN AND CAREER BREAK), FOR WOMEN WHO HAVE NO CHILDREN (YET), AND FOR WOMEN WITH CHILDREN BUT NO CAREER BREAK (IN ALL CASES WOMEN IN JOBS>=12 HOURS A WEEK)

	All women in wage empl. N=11,160		**Re-entrants only N=2,118**		**Women no children (yet) N=5,299**		**Women with children no career break N=3,350**	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
(Constant)	1.805	0.041	2.342	0.182	1.702	0.055	2.138	0.104
Number of years' education	0.052	0.001	0.047	0.003	0.048	0.002	0.056	0.002
Age	0.049	0.002	0.019	0.008	0.064	0.003	0.031	0.005
Age squared	-0.001	0.000	0.000	0.000	-0.001	0.000	0.000	0.000
Years with current employer	0.006	0.000	0.007	0.001	0.003	0.001	0.005	0.001
Re-entrant (yes/no)	-0.104	0.007						
Career break in years			-0.009	0.001				
Supervisory role (yes/no)	0.073	0.006	0.058	0.013	0.065	0.008	0.087	0.011
Firm size (1=<10, .., 10=>5,000)	0.023	0.002	0.009	0.004	0.022	0.002	0.030	0.003
Most colleagues in similar positions are men (yes/no)	0.062	0.006	0.044	0.015	0.055	0.007	0.074	0.011
Has been promoted, current employer (yes/no)	0.035	0.005	0.049	0.012	0.037	0.007	0.024	0.010
Employed in healthcare sector (yes/no)	0.017	0.006	0.043	0.013	-0.010	0.010	0.031	0.011
Number of hours worked	-0.003	0.000	-0.001	0.001	-0.006	0.001	-0.002	0.001
	R	**R Square**	**R**	**R Square**	**R**	**R Square**	**R**	**R Square**
	0.609	0.371	0.549	0.301	0.648	0.419	0.558	0.311

Notes: Own analysis of data from VLW2000/01

Discussion and Conclusion

The European Union aims at an increase in women's participation rates. In the Netherlands, women's re-entry decisions will contribute most to this goal. In this article, we first analysed the motives for re- entry and the chances of re- entry, using data from a survey of self-defined potential and recent re-entrants and one wave of the representative OSA-Labour Supply Panel. The ending of the motherhood role is mostly referred to. Financial motives are primarily cited by re-entrants with an interruption of at most five years. While estimating the chances for a woman to re-enter the labour force, in two data sets the presence of teenage children women appears to be the most relevant factor. According to one data set women younger than 45 year are five times more likely to re-enter than women over 45, and a high educational level more than doubles the chances of re-entry compared to a low educational level. Conditions for re-entry refer to part-time working hours, short commuting distances, and only working during school hours. The conditions for re-entry give ground to assume a trade-off between working conditions preferences and wages. Using the Women's Wages Indicator Survey 2000/01 data, the OLS regressions reveal that being a re-entrant has a large negative effect on women's wages, and so has each extra year that a career break lasts. The women with a continuous working career profit also most from working with male colleagues, whereas this is to a far lesser extent the case for the re-entrants. All women gain from being promoted, though the re-entrant women profit most. The women with children profit from being employed in the healthcare sector, whether they are re-entrant or have worked continuously.

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