

Yvonne Lott

## Costs and Benefits of Flexibility and Autonomy in Working Time:

### The Same for Women and Men?

#### Abstract

Using data from the German Socio-Economic Panel Study (SOEP, 2003, 2005, 2007, 2009, and 2011), the author scrutinizes the relations between women's and men's flexibility and autonomy in working time and two central work outcomes: overtime and income. Previously, research on flexibility and autonomy in working time mostly applied cross-sectional data ignoring individuals' self-selection into jobs. Furthermore, the association between flexibility and autonomy in working time and income has generally been neglected. Extending this literature, fixed-effects models show that flexible working time and working time autonomy are associated with an increase of overtime and income – but only for men. Whereas women in full-time positions also increase their time investment with working time autonomy and employee-oriented flexibility to a similar extent, they do not receive similar financial rewards. These results point to gendered costs and benefits of working time flexibility and autonomy. Working time autonomy in particular is a crucial factor that reinforces gender inequality at the workplace and adds to the relatively high gender pay gap in Germany.

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# 1 Introduction

Schedule control, the control over when to work, is one of three pillars of job control besides the control over where and how to work (Pocock, 2005). Studies show that flexible working time arrangements are positively related to schedule control (Hill, Tranby, Kelly, & Moen, 2013; Kelly, Moen, & Tranby, 2011). Moreover, flexible working time arrangements and schedule control are positively associated with work outcomes such as work commitment (Gallie, Zhou, Felstead, & Green, 2012), work-life balance (Hill, Hawkins, Ferris, & Weitzman, 2001; Richman, Civian, Shannon, Hill, & Breen, 2008, p. 186; Tausing & Fenwick, 2001) and health (Ala-Mursula, Vahtera, Kivimäki, Kevin, & Pentti, 2002; Ala-Mursula, Vahtera, Pentti, & Kivimäki, 2004). In addition, schedule control has been found to buffer the negative association between long work hours and work-family conflict (Hughes & Parkes, 2007).

Flexibility in working time is ambivalent, though (Peper, van Doorne-Huiskes, & den Dulk, 2005). In the literature, it is often referred to as the “myth of autonomy” (Felstead & Jewson, 2000), the “autonomy-control paradox” (Putman, Myers, & Gailliard, 2014) or the “ideological dilemma” (Golden & Geisler, 2006). All three concepts describe the phenomenon that flexible working time arrangements promise control for employees who feel autonomous, but who are not aware of the indirect control and pressure exerted on them by their organizations (Brannen, 2005). One result of this hidden control, as shown by ample studies, is that employees with flexible working time arrangements are at higher risk to work overtime (Banyard, 2010; Burchell, Fagan, O'Brian, & Smith, 2007; Gambles, Lewis, & Rapoport, 2006; Golden & Geisler, 2006; Hofäcker & König, 2012; Kelliher & Anderson, 2010; Lott, 2014; Richman et al., 2008). The empirical evidence also suggests that working time arrangements have different meanings for men and women and that men are primarily at risk for overtime work.

However, most of the studies used cross-sectional data to scrutinize the association between flexible working time arrangements and overtime. Women's and men's self-selection into jobs with these working time options due to time-constant unobserved characteristics is therefore generally ignored. In addition, most studies controlled for typical male and female labor market sectors, but did not account for different work fields within organizations. Moreover, these studies analyzed various flexible working time arrangements, primarily flexitime, but did not consider working time autonomy. Working time autonomy, however, might play a crucial role for the autonomy-control paradox, because whereas time boundaries are relaxed with working time flexibility, they are completely lacking with working time autonomy. Beckmann and Cornelissen (2014) analyzed the relation between these working time arrangements and overtime, but did not scrutinize the broader role of gender for the association between working time arrangements and overtime. The first aim of the study therefore is to scrutinize the relation between women's and men's flexibility and autonomy in working time and overtime. I use longitudinal data to examine outcomes of within-individual changes in flexible and autonomous working time. Do women and men increase their working time to a similar extent when changing from fixed schedules to working time flexibility or autonomy?

Working time flexibility and autonomy may not only be related to time costs. These working time arrangements might also go hand in hand with financial benefits. At the workplace, work-

related rewards exist (Adler, 1993, p. 452) that are generally interrelated. This, for example, was shown for the benefits of job authority, mainly in terms of earnings (Schiemann, Schafer, & Mclvor, 2013) – one of the most important work-place rewards. Because flexibility and autonomy of working time are means of employees' control, they can be considered work-related rewards, which might be associated with higher earnings. Research, however, shows that workplace benefits are shaped by gender and that men have higher earnings, work autonomy and job authority than women even in similar positions (Adler, 1993; Loscocco, 1989; Schiemann et al., 2013; Smith, 2002). The second aim of this study therefore is to analyze gender differences in the relation between financial rewards and working time flexibility and autonomy.

For the analysis of working time flexibility, I differentiate between means of employee-oriented and employer-oriented flexibility (Chung & Tijdens, 2013). Employee-oriented flexibility is flexitime, which provides the potential for employees' schedule control. This employee-oriented flexibility is in the focus of the analysis here. Employer-oriented flexibility, i.e. schedules that are flexibilized by the employer, is of less interest in the present study. I focus on Germany, where the split taxation system and other incentives, such as the childcare subsidy, foster the male breadwinner model and discourage partnered women's full-time employment. As a result, gender inequality in the labor market is relatively high. This is evident in one of the highest part-time employment rates for women of almost 38 % and one of the highest gender pay gaps of approx. 22 % in Europe (OECD, 2012, 2013). For the empirical analysis, I make use of the German Socio-Economic Panel Study (SOEP, 1984- 2012). I estimated fixed-effects models for the analysis of within-individual changes over time. In order to capture different effects of working time arrangements on earnings between and within individual workers, I estimated hybrid panel regression models that make distinct between- versus within-individual variation.

## 2 Background

### 2.1 The Gendered Autonomy-Control Paradox

The autonomy-control paradox says that the more autonomy employees have, the "harder they work, the more hours they devote", and the more organizations control their lives (Putman et al., 2014, p. 15). When employees have work autonomy, employers' control is not explicit, but rather indirect and hidden. One crucial mechanism of this hidden control is the norm of the ideal worker (Williams, Blair-Loy, & Berdahl, 2013) who works beyond 40 hours per week and is expected to sacrifice her or his personal life for the organization (Putman et al., 2014, p. 15). The ideal worker works full-time, has no duties or responsibilities outside work and is therefore able to apply her or his working time to the organizational demands. Overtime is seen as indicating employees' high work commitment and devotion to work. In such a work culture, overtime is rewarded by the employer as well as one's work colleagues. In addition, flexible and especially autonomous work arrangements are often accompanied by indirect measures to increase performance and output (Felstead & Jewson, 2000, p. 110). Measures such as teamwork, performance-related payments and target settings control employees who are 'officially' free to work whenever, wherever and however they wish (Gallie et al., 2012), but who are often expected to

work longer and more intensely. Relaxed or missing time boundaries then increase the risk of work intensification and overtime (Brannen, 2005).

Hypothesis 1: Changing from fixed schedules to flexitime or autonomy in working time is related to an increase of overtime.

However, various empirical results on the association between flexible working time arrangements and work intensification and overtime suggest that the autonomy-control paradox is gendered. With flexible and autonomous working time arrangements, men are primarily at risk to work longer and more intensely, while women more often seem to use their freedom to pursue activities outside the workplace (Burchell et al., 2007; Gambles et al., 2006; Hofäcker & König, 2012; Lott, 2014). Schedule control, for example, was found to foster women's health, not men's (Ala-Mursula et al., 2002; Ala-Mursula et al., 2004). The different meanings of flexible and autonomous working time for men and women are mainly explained by the unequal allocation of unpaid work within couples. Because women still have the main responsibilities for household tasks and care work (Cooke, 2011; van der Lippe, Ruijter, & Ruijter, 2011), they need the time flexibility and autonomy for the family or the household. Men, by contrast, have the opportunity to work overtime, since their wives often compensate at home (Moen & Yu, 2000, p. 296). Also, men identify more often with their work than women. As Williams et al. (2013, p. 212) put it: work consumes men's lives. Thus, the flexibilization of work arrangements risks leading to a traditionalization of gender arrangements where women use the flexible measures to reconcile family and work, whereas men increase their work effort when time boundaries are relaxed or missing (Gambles et al., 2006; Moen & Yu, 2000).

Hypothesis 2: Changing from fixed schedules to flexitime or autonomy in working time is related to an increase of overtime for men rather than for women.

But not only might women be more likely to use flexible and autonomous working time arrangements for activities outside the workplace. Women also work part-time much more often than men. Part-time work is a working time option which is used by 37.8 % of the female workforce in Germany (OECD, 2013) and which reinforces the traditional allocation of paid work within couples. Because women take on the lion's share of unpaid work and might identify more with other life spheres than men, their risk for overtime work is lower. Due to time demands outside of work and the importance of other life roles (Greenhaus, Collins, & Shaw, 2003), they are not able or do not want to sacrifice more time for work than necessary. Moreover, because part-time workers violate the full-time working norm, they are not considered ideal workers and are therefore not expected to increase their effort in support of organizational demands. When working full-time, however, employees meet and are expected to meet the norm of the ideal worker. In this case, women as well as men might have to comply with the expectations of the employer and colleagues and keep up with work demands in order to be ideal workers.

Hypothesis 3: Women and men in full-time positions are equally at risk to work overtime when changing to flexitime or working time autonomy.

## 2.2 Gendered Work-Related Rewards

Disregarding the higher risk of longer and more intense work hours associated with working time flexibility and autonomy, these working time arrangements can be considered work-related

rewards. Various work-related rewards exist at the workplace (Adler, 1993). One crucial type of reward that has attracted most researchers' attention is that of financial rewards, primarily earnings, since they are one of the determining factors for individuals' social position in societies. In addition, non-financial rewards, mainly job authority, but also challenging work, the variety of work tasks as well as job autonomy were in the focus of previous research (Loscocco, 1989; Schiemann et al., 2013; Smith, 2002). These studies indicate that workplace rewards are generally interrelated. Employees with job authority, for instance, often have more job autonomy and higher earnings (Schiemann et al., 2013). As Loscocco (1989) points out, people with the "best" jobs have access to work-related rewards. Schedule control is an essential dimension of job control and offers employees at least the possibility of combining work and the rest of life (Lewis & Rapoport, 2005). Thus, working time autonomy and flexibility are important work-related rewards for employees and might be financially rewarding. I therefore assume that these working time arrangements are related to higher earnings – disregarding whether employees receive other work-place benefits such as job authority.

Hypothesis 4: Flexitime and autonomy in working time are associated with higher incomes compared to fixed schedules.

Various studies, however, show that work-related rewards are not equally distributed between different groups of employees and that gender inequality exists with regard to access to these resources. Men more often have access to positions with job authority (Klaus & Yonay, 2000; Schiemann et al., 2013; Smith, 2002; Wright, Baxter, & Birkelund, 1995; Yaish & Stier, 2009), career opportunities (Adler, 1993) and higher incomes. On average, women earn around 22 percent less than men in Germany (OECD, 2012). Also, Adler (1993) found that gender inequality exists for job autonomy. Men are more likely to have conceptual autonomy as well as working time autonomy. Moreover, studies show that gender inequality also prevails regarding the benefits of work-related rewards. Women, for instance, often have lower income returns in positions with levels of job authority similar to those of men (Smith, 2002). Schiemann et al. (2013) also showed that job authority is not only more strongly related to income for men than women, but also to job autonomy and challenging work. Thus, even in similar positions, women seem to have less power and fewer resources than their male counterparts (Loscocco, 1989). Gender inequality might also exist with regard to the benefits of flexibility or autonomy in working time and women might profit less from these time arrangements. Because women might have lower income returns than men in similar positions, I assume that this gender difference prevails for full-time and part-time working employees.

Hypothesis 5: Flexitime and autonomy in working time are associated with a higher income mainly for men – even when women also work full-time.

Gender inequalities in work outcomes are often ascribed to the sex segregation of the labor market and workplaces, which results in women mainly working in positions with less access to work-related rewards (Schiemann et al., 2013). In their cross-national study, Wright et al., (1995) showed that discrimination is one crucial reason for this inequality and that women are offered fewer work-related rewards in similar positions. The analysis thus has to account not only for different sectors and the workplace hierarchy, but also for workplace segregation. To this end, within-individual variation, i.e. changes of working time arrangements for the same individuals over time, are estimated. It can be expected that employees mostly change work tasks and positions which correspond to their qualification and which are therefore located in the same field of



work. Thus the estimation of within-individual changes in working time arrangements is less biased by workplace segregation than the between-individual estimators that have been most often used in previous research. Moreover, within-estimates account for individuals' self-selection in jobs due to time-invariant characteristics. For example, more ambitious individuals may be more likely to have working time autonomy and higher earnings. Because the within-estimation controls for self-selection on time-invariant characteristics and most of workplace segregation, I assume that the association with income is similar for women and men when within-individual changes in working time arrangements are considered.

Hypothesis 6: The changes from fixed schedules to flexitime or working time autonomy are equally associated with an increase of incomes for women and men.

### 3 Method, Data and Sample

The data used are taken from the German Socio-Economic Panel (SOEP) (<http://www.diw.de/soep>). The SOEP is a representative panel study of German households which started in the Federal Republic of Germany in 1984 (Haisken-DeNew & Frick, 2005). In June 1990, following German reunification, the survey was expanded to include the territory of the former German Democratic Republic. Currently, over 12,000 households and 32,000 persons are interviewed every year.

The sample for this study contains 20,398 person-years for men and 19,695 person-years for women. All respondents who were employed at the time of the interviews are included in the analysis. Self-employed individuals were excluded from the analysis. In addition, the sample was restricted to individuals of working age from 18 to 65 years. Because working time arrangements were only observed in the years 2003, 2005, 2007, 2009 and 2011, the analysis is restricted to these years and the raw sample originally comprises 49,988 person-years. Thus the sample has 10,632 missing values (20 % of person-years). Working time arrangements were not observed for 2,927 person-years, education which I used as control variable was not available for 1,133 person-years and overtime was not measured for 6,572 person-years. Overtime was generated with the difference between contractual and actual working time per week and the missing values of overtime are mostly due to non-observed contractual working time which was only observed for 43,677 person-years of the original sample. The observations with missing values for working time arrangements do not vary in terms of socio-demographic factors, family or workplace characteristics. But those employees for whom overtime could not be measured earn a slightly higher annual income (around 10,000 euros more), are more often higher educated (16 % more) and less often have a permanent contract (25 % less), on average. The sample therefore misses some of the higher educated and slightly higher earning employees in precarious employment. The results for income might be slightly biased by the selection of employees with rather moderate earnings. Because job insecurity is associated with longer working hours (White, Hill, McGovern, Mills, & Smeaton, 2003), the sample might also lack harder working employees and overtime work might be slightly underestimated. Thus the estimates might be somewhat conservative with regard to financial benefits and time costs. Moreover, this group of employees who did not report their contractual working time also works more often with working time autonomy. For the present analysis, however, it is crucial to understand the extra time

effort employees invest in contrast to their contractual working time. Thus, I did not consider employees without the information on contractual working time.

### 3.1 Measures

#### Dependent variables

For the analysis of time costs, the dependent variable is overtime, which is measured as the differences between the actual working hours and the contractual working hours per week. For scrutinizing financial benefits, the dependent variable is income, defined as the individual annual pre-tax labor income including all wages and benefits such as overtime pay, bonus payments and holiday and Christmas payments. The individual income was adjusted for price changes. Income is used as a control variable in the model for overtime and vice versa.

### 3.2 Explanatory variable

The explanatory variable is working time arrangements. In the survey, respondents were asked "Which of the following working hours arrangements is most applicable to your work?" The possible answers are 1 = set by the company with no possibility of changes, 2 = flexible working schedules set by the company, 3 = hours entirely determined by employee and 4 = flexitime. The third category was used for measuring working time autonomy and the fourth category for measuring employee-oriented flexibility (flexitime). The second category measures employer-oriented flexibility. Fixed schedules are used as the reference category in the multivariate regression models.

### 3.3 Controls

The association between working time arrangements and income as well as overtime might be shaped by employees' work status. I therefore controlled for whether individuals are employees, professionals or civil servants, whether they have job authority (0 = no authority, 1 = management tasks and 2 = extensive leadership) and whether employees are in full-time or part-time positions or have minor employment. Education level (1 = primary education, 2 = secondary education and 3 = tertiary education) was also taken into account. For overtime, it may also be crucial whether employees have a permanent contract, which provides greater security, thus, there is a control for permanent contracts. In addition, overtime pay and bonus payment such as company profit share and performance related pay might encourage individuals to work more. Also, women might less often work in jobs where holiday or Christmas payments as well as company profit share and performance related payments are offered. Moreover, a second job increases the income as well as employees' work hours. Dummy variables which indicate whether employees have a second job, receive bonus payments, overtime pay or holiday and Christmas payments are included in the analysis.

Moreover, flexible working arrangements are more common in the public than in the private sector (Russell, O'Connell, & McGinnity, 2009) and women more often work in the public sector than men. A control was included for working in the public sector. In order to further account for the gender segregation of the labor market, controls for typical sectors with a higher share of

female employees (retail, health and education) and with a higher share of male employees (metal, chemistry and electronic industries) were also included. I also controlled for “post-Fordist workplaces” (Van Echtelt, Glebbeek, Lewis, & Lindberg, 2009), where indirect measures of control are more often applied. These are service industries and the insurance and banking sector.

Besides employment and workplace characteristics, household characteristics were also considered. In the model for overtime, the annual household income after taxes and transfers, equivalence-scaled for children aged fourteen or younger using the modified OECD scale, was used. Like individual income, household income was adjusted for price changes. There was also a control for the marital status (0 = cohabiting and 1 = married), the number of children (0 = no children, 1 = one child, 2 = two children and 3 = three and more children) and the age of the youngest child in the household (0 to 2 years and 3 to 4 years). In order to control for period effects, two dummy variables controlled for the years 2003 and 2005 as well as 2007 and 2009 (ref.: 2011). Also, age and age-squared were included in the analysis. Finally, changes in working time arrangements can be due to job change. Starting a new job might not only be related to a higher salary, but also to overtime, since employees have to become acquainted with the job or want to make a good first impression at the workplace. A control for job change is included for this reason. Table 1 shows all variables used in the analysis.

### 3.4 Models

Linear regression models with fixed effects (FE) were estimated for the analysis of overtime. FE models estimate variation within individuals, in this case changes in working time arrangements and overtime and income, respectively. The advantage of FE is that unobserved time-constant heterogeneity and thus the problem of self-selection due to time-invariant characteristics of individuals is eliminated in the estimation (Morgan & Winship, 2007). FE estimators are unbiased under the strict exogeneity assumption that explanatory variables are uncorrelated with the time-variant error term (Wooldridge, 2002). Because the exogeneity assumption may often be violated, the interpretation of FE results as causal effects has to be treated with caution. Still, FE estimators deal with the major problem of self-selection on time-constant unobserved variables and, thus, are less biased than cross-sectional analyses previously reported in the literature.

For the analysis of income, hybrid models were estimated. The hybrid model allows for the estimation of differences within groups and, at the same time, between groups (Schunck, 2013, p. 66). The hybrid model is based on the random effects model. This model includes time-constant variables, i.e. the cluster mean (between-estimates), and time-variant variables, i.e. the deviation from the cluster mean (within-estimates) (Allison, 2009). In the present study, the clusters are individuals. For example, working time arrangements are integrated as between-estimates which indicate the difference between fixed, flexible and autonomous arrangements across all individuals. At the same time, within-estimates are used which measure the differences between working time arrangements within each individual over time. The within-estimates measure change over time and are identical to FE estimates. With the hybrid model, differences between employees with different working time arrangements and changes of working time arrangements within individual employees over time can be estimated in one model.

**Table 1: Variables of the analysis (N=40,009)**

<b>Variables</b>	<b>Description</b>	<b>Mean/ Median</b>	<b>Std.</b>	<b>Min-Max</b>
Working time arrangements	Categorical variable indicating whether working time arrangements are fixed, flexi-bilized by employer, flexitime or self-determined	2	1.21	1-4
Overtime	Continuous variable indicating the difference between actually working hours per week and contractual weekly working hours	3.78	5.55	-38-56
Labor income	Continuous variable indicating the individual annual labor earnings include all wages and salary as well as overtime pay	30,916.02	22,651.82	0- 52,0968.5
Overtime pay	Dummy variable indicating whether employees' overtime is paid	0.06		0-1
Holiday/Christmas payments	Dummy variable indicating whether employees have a 13th and/or 14th wages	0.56		0-1
Bonuses	Dummy variable indicating whether employees receive any bonus payments	0.13		0-1
Second job	Dummy variable indicating whether employees have a second job	0.07		0-1
Work volume	Categorical variable measuring full-time, part-time and minor employment	1.30	0.55	1-3
Permanent contract	Dummy variable measures whether employees have a permanent working position	0.86		0-1
Civil servant	Dummy variable indicating whether individual is a civil servant	0.08		
Employee	Dummy variable indicating whether individual is a non-manual employee	0.24		0-1
Professional	Dummy variable indicating whether individual is working in high or low service professions	0.40		0-1
Job authority	Categorical variable indicating whether the individual has no job authority, management tasks or extensive leadership tasks	0 .21	0.44	0-2
Public sector	Dummy variable indicating whether individual works in the public sector	0.18		0-1
Service industries	Dummy variable indicating whether individual works in the service industries	0.04		0-1
Health and education	Dummy variable indicating whether individual works in the health or educational sector	0.20		0-1
Retail	Dummy variable indicating whether individual works in retail	0.12		0-1

Insurance and back	Dummy variable indicating whether individual works in the insurance and banking sector	0.04		0-1
Metal industries	Dummy variable indicating whether individual works in the metal industry	0.11		0-1
Chemical industries	Dummy variable indicating whether individual works in the chemical industry	0.03		0-1
Electronic industries	Dummy variable indicating whether individual works in the electronic sector	0.02		0-1
Age	Continuous variable indicating the age in years	43	10.48	18-65
Age squared	Square of age in years	1965.151	896.79	324-4225
Household income	Continuous variable indicating the equivalence-scaled annual household income for children aged fourteen or younger using the modified OECD scale	23,129.52	12,657.6	0 62,0189.2
Marital status	Dummy variable indicating whether the individual is married	0.63		0-1
Number of children	Categorical variable indicating whether the individual has no child, one child, two children or three and more children	0	0.89	0-3
Age baby	Dummy variable indicating whether the youngest child is up to two years old	0.04		0-1
Age young child	Dummy variable indicating whether the youngest child is three to four years old	0.04		0-1
Job change	Dummy variable indicating whether the individual has a job change	0.12		0-1
Years 2003 and 2005	Dummy variable indicating whether the survey year is 2003/2005 or 2011	0.41		0-1
Years 2007 and 2009	Dummy variable indicating whether the survey year is 2007/2009 or 2011	0.41		0-1

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Note: SOEP 2003, 2005, 2007, 2009, 2011.

## 4 Results

In the sample, employees work 3.78 hours overtime and earn 30,916 euro per year, on average (Table 1). 40 % are professionals and 24 % are non-manual employees. Most of them have no job authority, work in the public sector (18 %) and in health and education (20 %). The average age is 43 years. 63 % of the sample are married. The majority does not have children. Job changes were rare. Only 6 % have paid overtime and only 7 % have income returns from a second job. 13 % have bonus payments in the sample. 56 % receive holiday and/or Christmas payments.

16 % (1,790 observations) of employees with fixed schedules change to schedules flexibilized by the employer. 7 % (803 observations) change to flexitime and 4 % (435 observations from 210 men and 225 women) change to working time autonomy. Thus changes to working time autonomy seldom occur, but the number of observations is still sufficient for estimating within-variation. The standard deviation for the within-variation of overtime is 2.88 hours for all employees, 3.15 for men and 2.58 for women. The standard deviation for the within-variation of income is 6,761 euro – 7,418 euro for men and 6,006 euro for women.

Almost half (45 %) of the employees in Germany have fixed working time (Table 2). Women have fixed schedules slightly more often than men (46 % to 44 %) and this also applies to schedules flexibilized by the employer (about 23 % to 20 %). Men, by contrast, have slightly more often flexitime and working time autonomy. 11 % of male employees work with self-determined hours, but only 8 % of female employees. Around 23 % of all employees have flexitime, 22 % of women and around 24 % of men.

**Table 2: Women's and men's working time arrangements**

<b>Working time arrangements</b>	<b>All</b>	<b>Men</b>	<b>Women</b>
Fixed schedule	45.12	44.06	46.29
Employer's flexibility	21.93	20.16	22.75
Autonomy	9.87	11.17	8.44
Flexitime	23.62	24.62	22.52
N	40,093	20,398	19,695

Note: Column percentages weighted with cross-sectional weight; pooled sample; SOEP 2003, 2005, 2007, 2009, 2011.

All in all, working time autonomy is a rather rare time arrangement. Flexitime and employer-oriented flexible working time are more or less equally represented. Although women and men work with the various working time arrangements to a similar extent, there are small gender differences. Those working time arrangements with the least employee-oriented flexibility are slightly more often part of women's work, while men slightly more often have flexitime and

working time autonomy. Thus, women receive the two crucial work-related rewards – flexibility and autonomy in working time – slightly less often than men. The following sections present the findings for the relation between these working time arrangements and the increase of time costs and financial benefits.

## 4.1 Overtime

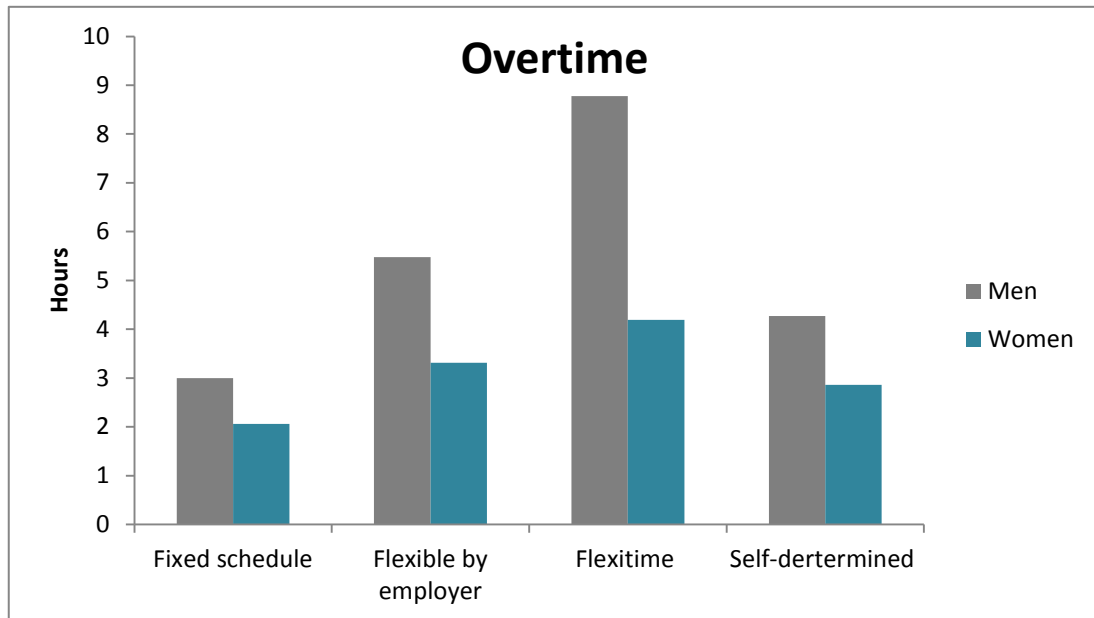
The descriptive results indicate that men work more overtime than women, on average (Figure 1). While men have the least overtime work with fixed schedules (3 hours), they work the most overtime with working time autonomy. In the latter case, when time boundaries are completely missing, men work almost 9 hours more than their contractual working time. Besides working time autonomy, men's overtime is also high when schedules are flexibilized by the employer. On average, men work more than 5 hours overtime in this time arrangement. With flexitime, the average overtime is only one hour more than with fixed schedules. For women, these tendencies are similar, but overtime is generally lower and the gaps between the different working time arrangements are smaller. With fixed schedules, women work 2 hours more, on average, with working time autonomy 4 hours. The average amount of overtime of one hour is similar for women's employer-oriented flexible schedules and flexitime.

The descriptive results point in the direction expected in Hypothesis 2. Men seem to be at higher risk to work overtime especially with working time autonomy. But does the observed gender difference prevail when controlling for various socio-economic and workplace-related factors as well as employees' self-selection in jobs and workplace segregation? And is the amount of overtime work more similar for women and men when only looking at employees in full-time positions?

Table 3 shows the findings of the multivariate analysis. The within-estimates for working time arrangements are highly significant in all estimated models. Model 1 is based on the sample for all employees. Changes from fixed schedules to one of the other time arrangements are associated with an increase of overtime. The lowest increase exists for flexitime. Employees who change to flexitime work only 39 minutes more per week, on average. With employer-oriented flexible schedules, however, employees work almost one hour (54 minutes) more. The highest increase can be observed for working time autonomy. On average, employees work almost one and a half hours more when they start to work with self-determined working time.

Hypothesis 1 can only be partly confirmed. The increase of overtime is primarily high for working time autonomy. As regards working time flexibility, it makes a difference whether flexibility is employee-oriented or employer-oriented. When employees have flexible schedules that they can control, their risk to increase their overtime is rather low. Thus, mainly working time autonomy is associated with a small, but distinct increase in overtime. Working time arrangements matter for the amount of employees' overtime work even when taking into account employees' self-selection into jobs with these time arrangements.

**Figure 1: Average overtime (in hours) for women and men with different working time arrangements**



Note: Mean hours for men and women weighted with cross-sectional weight; pooled sample; SOEP 2003, 2005, 2007, 2009, 2011.

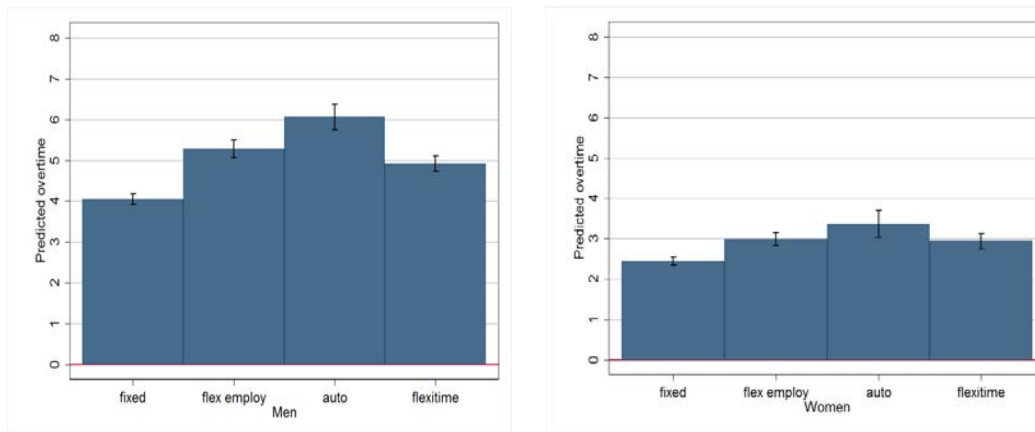
Model 2 and 3 were estimated for male and female employees separately (Table 3). Even though the overtime gaps between the different working time arrangements are smaller, the multivariate analysis confirms the descriptive results. Men work more overtime with all working time arrangements than women and the increase of overtime with working time flexibility and autonomy is higher for men than for women. Figure 2 shows the predicted overtime in hours for men (left) and women (right). For women, overtime is only slightly higher with employer-oriented flexibility, working time autonomy and flexitime compared to fixed schedules. Moreover, the predicted hours for these three time arrangements are not significantly different from each other. There is a slight increase of working time when women stop working in fixed schedules, but the type of arrangement is of less importance for their overtime work. This is different for male employees. For them, the amount of overtime is significantly different across the various working time arrangements. Men, on average, work more than 2 hours overtime with working time autonomy compared to fixed schedules. With employer-oriented flexible schedules, the figure is 72 minutes. With flexitime, they work approx. 54 minutes more per week. These fixed-effects are significantly different from the effects for women according to the Wald test. Thus, Hypothesis 2 can be confirmed in the multivariate analysis. Men are at higher risk to work overtime with all working time arrangements and especially with autonomy of working time.

Models 4 and 5 were estimated for full-time employed women and men only. The effects for men in full-time positions are comparable to those for all employees (Table 3). Since the majority of men work in full-time positions (over 95 % in the sample), the results do not differ between these two groups. 40 % of women in the sample, by contrast, have part-time positions and the



effects differ greatly between Model 3 for all female employees and Model 5 for full-time employed women. For the latter, significant differences in the amount of overtime exist across the various working time arrangements (Figure 3, right plot).

**Figure 2: Predicted overtime (in hours) with fixed schedules, schedules flexibilized by employer, working time autonomy and working time flexibility for men and women**

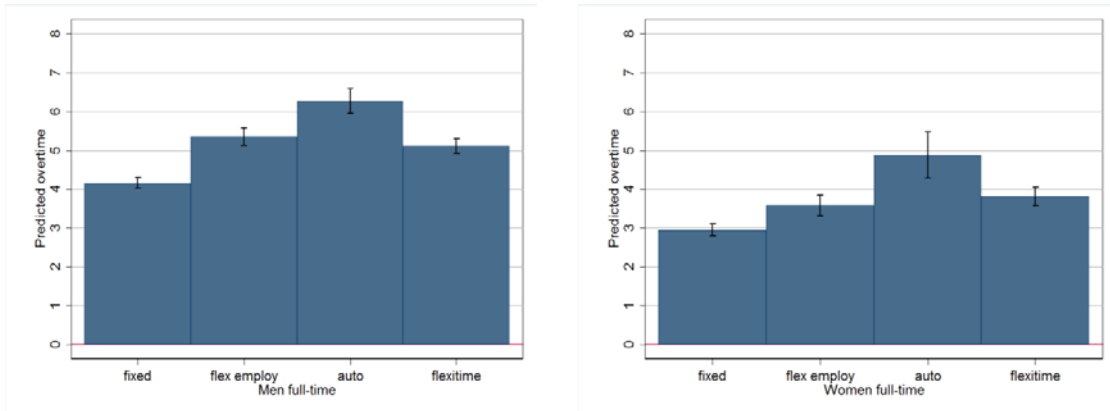


Note: Predicted overtime (in hours) based on predictive margins; fixed effects regression separately for men and women (full estimation results in Table 3); SOEP 2003, 2005, 2007, 2009, 2011.

Women in full-time positions increase their overtime work to a similar extent as do men when changing from fixed schedules to working time autonomy. They work 111 minutes more with self-determined schedules – only around 15 minutes less than men, who work more than two hours overtime, on average. These effects are significantly different between women and men according to the Wald test. The increase of overtime is the same for men and women with flexitime. There is no significant gender difference in coefficients. Hypothesis 3 can be confirmed. When working in full-time positions, women and men increase their working time to a similar extent with flexible and autonomous working time. They both have to comply with the norm of the ideal worker and, thus, invest similar time in work when time boundaries are relaxed or missing.

It should be noted that the only difference for women's and men's overtime in full-time positions is associated with employer-oriented flexibility. With this time arrangement, women in full-time positions only work about 36 minutes more than with fixed working time, whereas for men the increase is almost twice as much. Men have higher time costs with employer-oriented flexibility than women disregarding whether they work in full-time or part-time positions. Thus, also with the explicit control of flexible working time by the employer, men are at higher risk to increase their time effort in work.

**Figure 3: Predicted effort with fixed schedules, working time autonomy and working time flexibility for men and women in full-time positions**



Note: Predicted overtime (in hours) based on predictive margins; separately for men and women (full estimation results in Table 3); SOEP 2003, 2005, 2007, 2009, 2011.

**Table 3: Fixed effects regression predicting overtime (in hours) for men and women**

	All employees			Full-time employees	
	Model 1 All	Model 2 Men	Model 3 Women	Model 4 Men	Model 5 Women
<b>Working time arrangements</b>					
Fixed schedules	ref	ref	ref	ref	ref
Employer's flexibility	0.875*** (0.09)	1.229*** (0.15)	0.539*** (0.11)	1.197*** (0.15)	0.629*** (0.17)
Working time autonomy	1.492*** (0.14)	2.014*** (0.20)	0.911*** (0.19)	2.120*** (0.21)	1.924*** (0.34)
Working time flexibility	0.655*** (0.10)	0.871*** (0.15)	0.484*** (0.13)	0.953*** (0.15)	0.863*** (0.18)
<b>Work volume</b>					
Full-time	ref	ref	ref		
Part-time	-0.225 (0.14)	-1.060** (0.41)	-0.003 (0.15)		
Mini	-1.149*** (0.21)	-2.083*** (0.67)	-0.839*** (0.21)		
<b>Individual labor earnings</b>					
	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)	0.000*** (0.00)
<b>Overtime pay</b>					
	1.602*** (0.17)	1.652*** (0.22)	1.477*** (0.26)	1.750*** (0.22)	1.196*** (0.46)
<b>Holiday/ Christmas payments</b>					
	-0.048 (0.07)	-0.164 (0.11)	0.055 (0.09)	-0.120 (0.11)	-0.030 (0.13)
<b>Bonus pay</b>					
	0.022 (0.09)	0.064 (0.14)	-0.062 (0.12)	0.102 (0.14)	-0.196 (0.16)
<b>Second job</b>					
	-0.088 (0.13)	0.037 (0.21)	-0.178 (0.15)	0.101 (0.21)	-0.215 (0.27)
<b>Job authority</b>					
No authority	ref	ref	ref	ref	ref
Management tasks	0.711*** (0.14)	0.409** (0.19)	1.104*** (0.19)	0.371* (0.19)	1.119*** (0.25)
Extensive leadership	1.572*** (0.41)	1.134** (0.51)	2.184*** (0.70)	0.943* (0.50)	2.497*** (0.77)
<b>Permanent contract</b>					
	0.076 (0.10)	0.314* (0.17)	-0.129 (0.13)	0.378** (0.17)	-0.262 (0.20)
<b>Civil servant</b>					
	0.336 (0.59)	-0.084 (0.86)	1.045 (0.77)	-0.527 (0.87)	0.000 (1.10)
<b>Professional</b>					
	0.147 (0.14)	0.125 (0.19)	0.139 (0.20)	0.078 (0.20)	0.289 (0.27)

<b>Employee</b>	-0.025 (0.14)	-0.051 (0.23)	-0.021 (0.19)	-0.037 (0.24)	0.205 (0.28)
<b>Public sector</b>	-0.074 (0.09)	-0.398*** (0.15)	0.162 (0.11)	-0.362** (0.15)	0.250 (0.17)
<b>Services</b>	0.428** (0.18)	0.699** (0.32)	0.238 (0.20)	0.747** (0.33)	0.680** (0.35)
<b>Health and education</b>	0.180 (0.18)	0.107 (0.42)	0.218 (0.19)	0.295 (0.46)	0.273 (0.32)
<b>Retail</b>	0.074 (0.17)	-0.206 (0.29)	0.270 (0.20)	-0.186 (0.30)	0.981*** (0.32)
<b>Insurance and credit</b>	-0.550* (0.29)	-0.852 (0.52)	-0.364 (0.34)	-0.649 (0.57)	-0.412 (0.43)
<b>Metal</b>	-0.270* (0.16)	-0.176 (0.20)	-0.713*** (0.25)	-0.160 (0.20)	-0.226 (0.31)
<b>Chemistry</b>	-0.081 (0.29)	-0.102 (0.40)	-0.114 (0.37)	-0.099 (0.42)	-0.017 (0.51)
<b>Electronics</b>	-0.194 (0.22)	-0.041 (0.27)	-0.707** (0.33)	-0.146 (0.27)	-0.591 (0.38)
<b>Job change</b>	0.054 (0.10)	0.046 (0.16)	0.060 (0.12)	0.153 (0.17)	0.132 (0.19)
<b>Education</b>					
Lower education	ref	ref	ref	ref	ref
Middle education	-2.800** (1.15)	-3.588*** (1.30)	-0.441 (0.37)	-2.788** (1.16)	-0.542* (0.30)
Higher education	-0.692 (1.16)	-1.748 (1.17)	1.824*** (0.67)	-1.892** (0.96)	0.517 (0.77)
<b>Age</b>	0.056 (0.05)	0.139* (0.08)	-0.041 (0.06)	0.130* (0.08)	-0.084 (0.08)
<b>Age squared</b>	-0.002*** (0.00)	-0.003*** (0.00)	-0.000 (0.00)	-0.003*** (0.00)	0.000 (0.00)
<b>Household income</b>	-0.000 (0.00)	0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)	-0.000 (0.00)
<b>Married</b>	-0.093 (0.13)	0.073 (0.19)	-0.237 (0.17)	0.007 (0.19)	-0.428* (0.23)
<b>Children</b>					
No child	ref	ref	ref	ref	ref
One child	-0.342*** (0.10)	-0.466*** (0.15)	-0.204 (0.13)	-0.442*** (0.15)	-0.147 (0.21)
Two children	-0.483*** (0.13)	-0.567*** (0.20)	-0.406** (0.18)	-0.562*** (0.20)	-0.142 (0.33)

Three children and more	-0.433*	-0.648*	-0.191	-0.615*	0.282
	(0.24)	(0.34)	(0.31)	(0.34)	(0.66)
<b>Ages of youngest child until 2 years</b>					
	-0.052	0.111	-0.605**	0.112	-0.165
	(0.15)	(0.18)	(0.27)	(0.19)	(0.58)
<b>Ages of youngest child 3 to 4 years</b>					
	-0.071	-0.068	-0.144	-0.106	-0.718**
	(0.12)	(0.17)	(0.17)	(0.17)	(0.35)
<b>Years 2003 and 2005</b>					
	-0.617***	-0.698***	-0.523**	-0.688***	-0.535*
	(0.16)	(0.24)	(0.20)	(0.24)	(0.29)
<b>Years 2007 and 2009</b>					
	-0.147*	-0.088	-0.189*	-0.079	-0.209
	(0.08)	(0.13)	(0.11)	(0.13)	(0.15)
<b>Constant</b>					
	4.842***	4.576**	3.947**	4.641**	5.268**
	(1.58)	(2.21)	(1.77)	(2.19)	(2.33)
<b>R-squared</b>					
Within	0.0337	0.0420	0.0327	0.0382	0.0345
Between	0.1112	0.0693	0.1350	0.0624	0.1113
Overall	0.0967	0.0648	0.1096	0.0634	0.1100
<b>N</b>	40093	20398	19695	19447	10191

: Linear fixed-effects models with robust standard errors in parentheses; Dependent variable overtime; Model 1 and 2 employees excluding self-employed; Models 3 and 4 only for full-time employed; Results not weighted; \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; SOEP 2003, 2005, 2007, 2009, 2011.

## 4.2 Income

Even though working time flexibility and autonomy are related to an increase in time costs for men and full-time working women, they can be considered work-related rewards. Table 4 supports the assumption that employees with the “best jobs” have these rewards. The more job authority employees have, the less their working time is determined by the employer and the more potential they have to control their working time. Half of the employees without job authority have fixed schedules and 23 % have employer-oriented flexible schedules. Only about 21 % work with flexitime and less than 7 % have working time autonomy. Among respondents with management tasks and extensive leadership only 24 % and less than 21 % respectively have fixed schedules. Schedules flexibilized by the employer are also rare – less than 14 % for employees with management tasks and less than 9 % with extensive leadership have this time arrangement. By contrast, positions with management tasks are most often accompanied by flexitime (almost 38 %) and around a quarter of these employees have working time autonomy. Extensive leadership mostly goes hand in hand with working time autonomy. More than half of the employees in extensive leadership positions (almost 54 %) have autonomous working time. In this group, however, flexitime is less frequent than fixed schedules. Less than 9 % have work-

ing time that is flexibilized by the employer. Overall, working time flexibility and autonomy are mostly available in jobs with job authority. Are they also related to higher earnings? And do women and men profit from these time arrangements to a similar extent?

**Table 4: Working time arrangements and job authority**

<b>Working time arrangements</b>	<b>No job authority</b>	<b>Management tasks</b>	<b>Extensive leadership</b>
Fixed schedule	49.62	24.33	20.60
Employer's flexibility	23.09	13.77	8.84
Autonomy	6.42	24.18	53.74
Flexitime	20.88	37.73	16.82
N	32,232	7,263	634

Note: Column percentages weighted with cross-sectional weight; Pooled sample; SOEP 2003, 2005, 2007, 2009, 2011

Table 5 shows the within- and between-estimates for working time arrangements that are significant for all employees in Model 1 – except for schedules flexibilized by the employer. I first discuss the between-estimates. Employer-oriented flexible working time is not associated with higher earnings in any of the estimated models. This arrangement is accompanied by higher time costs for employees, but the latter do not receive higher earnings with this time arrangement. By contrast, employees with flexitime earn 2,677 euro per year more than with fixed schedules on average. With working time autonomy, the annual income is even 5,167 euro higher than with fixed schedules. Hypothesis 4 is confirmed. Employees with flexitime or time autonomy receive higher payments than employees with fixed working time, who might work in work fields with lower earnings and/or who might be less ambitious than employees in positions where flexitime or autonomous working time are offered by the employer.

Turning to the within-estimates (Table 5), when employees change from fixed schedules to working time autonomy, they have a financial benefit of 1,006 euros, and when they change to flexitime they earn 799 euros more, on average. The differences within individual employees are smaller than between employees with fixed, flexible and autonomous working time. A great share of the income difference thus might be either due to employees' self-selection in jobs with flexible and autonomous working time or due to different work fields within the organization, where the same working time arrangements are offered, but different levels of income are paid.

Interestingly, a considerable gender difference in financial benefits can be observed for flexibilized and especially autonomy with working time (between-estimates in Model 2 and 3 in Table 5). Men with flexitime earn 2,050 euro more per year and women even earn 3,573 euro more than with fixed schedules. With working time autonomy, the financial benefit is even greater – but mostly for men. The latter have 6,887 euro more income with autonomous working time, whereas women have only 2,029 euro. The financial benefit of working time autonomy is more

than three times higher for men than for women. For the latter flexitime is more profitable, but the gender difference in extra earnings with flexitime is not as great as with working time autonomy. Based on these findings for the between-variation,

Hypothesis 5 can only be partly confirmed. Whereas men indeed have higher earnings with working time autonomy than women when compared with the group of employees with fixed schedules, they have slightly fewer benefits with flexitime than women.

When looking at the within-estimates (Model 2 and 3 in Table 5), the gender difference is even larger. Whereas men have around 1,118 euro more income when changing from fixed working time to flexitime, this change increases women's income only by 472 euro. For working time autonomy, the gender difference is most striking. Men who start to work with autonomous schedules have a benefit of 2,058 euro in average. Women, by contrast, do not have any financial benefit. The effect is neither positive, nor significant. One could argue that this gender inequality in earnings is due to the high share of part-time employed women. But when only looking at the group of full-time employees (within-estimates in Model 4 and 5), the results are comparable. Full-time employed men earn 2,176 euro more per year with working time autonomy and 1,049 euro with flexitime. Full-time working women not only lack the financial benefits with working time autonomy, they also do not have higher earnings when changing to flexitime. The effect is not significant and at 313 euro also very small.

Thus even when taking employees' self-selection in jobs as well as gender specific work fields within organizations into account, we still find a difference in financial benefits. Hypothesis 6 is rejected. This finding is in line with the study by Wright et al. (1995) who showed that discrimination is one crucial reason for women's lack of work-related rewards. This might also be the case for financial benefits of working time autonomy and flexibility. Working time flexibility and especially autonomy have significant positive effects on men's income and thus add to the gender pay gap. Moreover, the differences of the between-estimates of women's and men's financial benefits are considerable and might be due to workplace segregation of gendered organizations (Acker & van Houten, 1992). Personality traits such as ambition and career orientation can, of course, also be a reason for the income differences between working time arrangements. However, we saw that even when controlling for unobserved time-constant characteristics such as ambition or career orientation, a difference in financial benefits prevails. Moreover the analysis of overtime revealed that women in full-time positions increase their time investment with flexible and autonomous working time to a very similar extent compared to men. Full-time working women seem to be similarly devoted to their work and like men try to comply with the norm of the ideal worker. This attitude, however, does not pay off for women. They increase their effort, but do not receive higher earnings.

## 5 Conclusion

The aim of the study was to reveal the relation between women's and men's working time arrangements and two work outcomes: time costs and financial benefits. The focus was on employee-oriented working time flexibility and working time autonomy, because these arrangements promise employees' schedule control in contrast to fixed schedules and working time which is flexibilized by the employer. The results are in support of the autonomy-control paradox. Even when controlling for differences between labor market sectors and work fields within organizations as well as employees' self-selection in jobs due to time-invariant characteristics, flexibility and working time autonomy are related to an increase of overtime. This is the case mainly for men who work on average two hours more per week when time boundaries are missing. Women increase their overtime to a far lesser extent. Only in full-time positions with flexitime or autonomous working time do women increase their working time like men. Full-time working women and men are expected to comply to the norm of the ideal worker and

have to meet the expectation of the employer and their colleagues. Thus, the gender difference of the relation between working time arrangements and overtime seems to be due to the much greater share of part-time work among women. It seems that part-time working women use the flexibility and autonomy potential for their duties and interests in other life spheres, whereas men, who mainly work in full-time positions, are more likely to work longer hours in more flexible work schedules. Thus full-time employment in combination with flexible and especially autonomous working time seems to be related to the risk of overtime work.

Furthermore, the study indicated that a considerable gender pay gap exists for different working time arrangements. Men profit more from flexitime and especially working time autonomy than women – even when the latter work full-time and have similar time costs. Because the sex segregation of the labor market and the workplace as well as self-selection on time-invariant characteristics in jobs was taken into account, discrimination might be one reason for the remaining gender pay gap and men's higher financial profit with flexible and mainly autonomous working time.

The present study problematizes the implementation of flexible and autonomous working time arrangements in full-time positions at the workplace. These time arrangements foster the traditionalization of paid and unpaid work within couples, where men often work full-time and women are mostly in part-time employment. Whereas flexitime is the least related to higher time investments, especially working time autonomy (and employer-oriented flexibility) increase men's time investment. For them, employer-oriented flexibility and missing time boundaries are related to time costs. At least men receive higher earnings with working time autonomy, whereas full-time working women do not receive a financial compensation. Thus working time autonomy not only traditionalizes intimate relationships, but also adds to the relatively high gender pay gap in Germany.

When working time autonomy is implemented at the workplace, social partners as well as works councils have to sensitize especially men to the risks of missing time boundaries. Also, they have to promote an equal distribution of financial rewards between women and men. In addition, working time that is flexibilized by the employer has to be avoided since it is related to men's higher time costs, but is not accompanied by financial rewards. Finally, social partners



and work councils should encourage men to work in part-time positions and should also stimulate part-time work options in more attractive jobs. We saw that the combination of working time flexibility and autonomy and full-time is most problematic in terms of time costs. The ideal worker norm applies to full-time workers rather than to part-time workers. Part-time workers are not ideal workers and part-time jobs are generally dead end positions, which are less attractive for men (Anxo, Fagan, Letablier, Perraudin, & Smith, 2007). However, part-time provides time resources to individuals who can invest these resources into other life spheres. This seems to be the case for female employees with flexible and autonomous working time. Moreover, part-time buffers the overtime effect of flexible and autonomous working time. When employees have more time resources, employees can compensate for overtime much easier. Future research is needed to further reveal the benefits of part-time work for the use of flexible and autonomous working time arrangements – especially for men. This could not be done with the data used in the present study, because the vast majority of men (more than 98 %) stayed in full-time within the observation period.

The present analysis had to deal with two other data limitations. First of all, the number of employees with working time autonomy is rather small. The number of observations is sufficient for the present analysis, but adding additional survey years which increases this number would contribute to even more reliable estimates. Researchers have to wait for the next waves of the SOEP which will incorporate the survey question for working time arrangements (expected for 2013 and 2015). Moreover, the analysis could only control for workplace segregation under the assumption that employees do not change between work fields. Also, the effects of workplace segregation as well as self-selection could not be disentangled from the estimation of within-variation. Unfortunately, information on specific work fields within organizations is not available in the data. The analysis therefore could not directly measure the importance of gendered organizations for the gender differences in overtime and earnings. Qualitative research that captures gender-specific work fields and differentiates between gendered work tasks even within one work field might compensate for this data problem.

Disregarding these limitations, the study revealed persistent inequalities in time costs and financial benefits between women and men and the role of working time arrangements. Because working time arrangements do play a role for women's and men's work outcomes, actors such as social partners, works councils and state policies have the opportunity to organize work in general and especially working time in ways that do not increase employees' time costs and that ensure financial benefits are equally distributed among all employees. Even though flextime is related to minor time costs and reinforces the gender pay gap, women's and men's costs are lowest and financial benefits more equal with this time arrangement. As regards time costs and financial rewards, working time autonomy is the worst option. Missing time boundaries are not only associated with men's higher time costs but with widening the gender pay gap.

**Table 5: Hybrid panel regression models predicting annual individual labor earnings for men and woman**

	All employees			Full-time employees	
	Model 1 All	Model 2 Men	Model 3 Women	Model 4 Men	Model 5 Women
<b>Working time arrangements (within)</b>					
Fixed schedules	ref	ref	ref	ref	ref
Employer's flexibility	164.822 (148.23)	136.190 (225.73)	180.437 (192.11)	180.504 (227.54)	13.842 (342.94)
Working time autonomy	1006.674*** (336.89)	2058.468*** (464.55)	-289.804 (467.88)	2176.418*** (484.85)	-174.171 (1029.45)
Working time flexibility	799.893*** (232.79)	1118.807*** (354.35)	472.475* (272.95)	1049.304*** (358.43)	313.722 (432.39)
<b>Working time arrangements (between)</b>					
Employer's flexibility	351.409 (298.93)	220.253 (494.01)	23.054 (296.14)	221.651 (522.44)	-360.385 (478.97)
Working time autonomy	5147.445*** (590.49)	6887.155*** (952.98)	2029.055*** (585.87)	7573.368*** (1050.37)	5656.500*** (1240.80)
Working time flexibility	2677.306*** (352.65)	2050.667*** (564.68)	3573.834*** (383.22)	2021.012*** (583.72)	3722.366*** (537.97)
<b>Work volume (within)</b>					
Full-time	ref	ref	ref		
Part-time	-6777.087*** (303.05)	-5153.804*** (995.53)	-6289.873*** (285.11)		
Mini	-9399.123*** (409.94)	-8817.803*** (1255.13)	-8501.328*** (399.39)		
<b>Work volume (between)</b>					
Part-time	-15287.810*** (258.31)	-14905.436*** (873.96)	-10621.890*** -10731.774***		
Mini	-17594.015*** (443.44)	-15075.909*** (1088.21)	(268.86) -14097.147***		
Effort (within)	133.601*** (20.12)	149.343*** (25.92)	(397.57) 92.131***	139.024*** (24.91)	113.695** (56.41)
Effort (between)	453.961*** (41.36)	426.289*** (53.96)	(31.89) 314.098***	430.697*** (55.59)	325.414*** (77.79)
<b>Overtime pay (within)</b>	611.846** (308.99)	1211.239*** (464.04)	(59.40) -449.525	1149.344** (475.27)	-851.609 (578.11)

<b>Overtime pay (between)</b>	1213.180**	1005.514	(305.02)	999.111	-922.281
	(527.00)	(716.17)	-35.724	(744.41)	(1060.27)
Holiday/ Christmas pay- ments (within)	1484.058***	1230.912***	(637.72)	1251.592***	1294.353**
	(184.25)	(228.80)	1671.313***	(233.89)	(545.05)
<b>Holiday/ Christmas payments (between)</b>	3208.416***	2850.524***	(287.85)	2826.779***	3304.813***
	(294.50)	(485.29)	3383.281***	(501.81)	(427.46)
<b>Bonus pay (within)</b>	3822.468***	4282.410***	(284.30)	4262.694***	3495.374***
	(273.19)	(408.74)	3027.520***	(414.03)	(426.16)
<b>Bonus pay (between)</b>	13412.296***	14820.912***	(317.77)	14624.823***	10220.494***
	(672.21)	(895.40)	9256.477***	(914.89)	(1341.80)
<b>Second job (within)</b>	1709.200***	2910.788***	(1031.76)	3718.284***	1.819.242
	(412.13)	(552.99)	683.693	(579.58)	(1696.61)
<b>Second job (between)</b>	3246.614***	4370.036***	(593.60)	4990.181***	1097.604
	(603.32)	(1066.51)	859.322*	(1248.54)	(1086.86)
<b>Job authority (within)</b>			(493.04)		
<b>No authority</b>	ref	ref	ref	ref	ref
<b>Management tasks</b>	1524.461***	1619.998***	1172.033***	1528.321***	884.104*
	(276.03)	(392.10)	(366.30)	(396.73)	(457.76)
<b>Extensive leadership</b>	5553.442***	5698.940***	5423.159***	5350.035***	5708.071***
	(1271.55)	(1680.53)	(1594.58)	(1696.99)	(1996.09)
<b>Job authority (between)</b>					
Management tasks	12538.535***	11304.848***	9763.704***	11553.270***	10115.963***
	(506.60)	(675.62)	(744.04)	(695.99)	(983.00)
Extensive leadership	49674.771***	50625.454***	30391.201***	50532.449***	30076.848***
	(3977.39)	(4163.80)	(10530.37)	(4162.99)	(11342.30)
<b>Permanent contract (within)</b>	1109.702***	1257.805***	1027.491***	1324.569**	1784.856***
	(262.52)	(482.83)	(259.04)	(515.34)	(473.59)
<b>Permanent contract (between)</b>	3274.036***	3662.673***	3205.212***	4338.619***	5016.072***
	(370.85)	(690.80)	(320.81)	(761.81)	(581.22)
<b>Civil servant (within)</b>	1.467.418	-165.578	3951.374***	-19.115	981.006
	(1022.67)	(1515.64)	(1310.79)	(1676.67)	(1511.09)
<b>Civil servant (between)</b>	8935.931***	8007.749***	8616.403***	8012.889***	9334.592***
	(443.46)	(667.38)	(600.53)	(696.71)	(820.47)

<b>Professional (within)</b>	534.503*	267.538	682.139	58.387	99.618
	(284.85)	(372.17)	(446.70)	(378.81)	(859.28)
<b>Professional (between)</b>	5120.376***	6491.296***	4833.616***	6513.847***	6247.744***
	(320.42)	(539.67)	(312.58)	(568.22)	(517.99)
<b>Employee (within)</b>	300.135	-154.267	458.793	-323.638	-79.591
	(282.29)	(472.90)	(382.74)	(463.76)	(756.79)
<b>Employee (between)</b>	2623.564***	3608.851***	3161.745***	3558.145***	3986.749***
	(261.97)	(616.43)	(239.98)	(648.73)	(423.08)
<b>Public sector (within)</b>	-225.346	-179.569	-238.582	-188.253	-1102.698*
	(220.44)	(314.92)	(303.75)	(323.40)	(567.26)
<b>Public sector (between)</b>	-316.702	-1146.577	247.969	-1326.584*	-64.700
	(383.95)	(731.94)	(354.45)	(801.54)	(570.74)
<b>Service industries (within)</b>	-157.853	-632.745	237.091	-930.136	579.255
	(497.53)	(932.34)	(482.27)	(970.99)	(834.73)
<b>Service industries (between)</b>	-1701.398*	-3001.471**	714.641	-3309.154**	734.232
	(869.58)	(1426.56)	(1086.24)	(1520.76)	(2110.18)
<b>Health and education (within)</b>	-533.232	-1474.572**	-202.369	-1505.882*	-441.342
	(340.28)	(747.07)	(367.89)	(858.49)	(736.92)
<b>Health and education (between)</b>	-85.474	586.382	1630.632***	326.578	1131.152**
	(349.75)	(886.82)	(308.04)	(970.06)	(490.41)
<b>Retail (within)</b>	-20.468	420.794	-272.325	259.098	-397.272
	(287.26)	(539.84)	(306.69)	(565.66)	(558.39)
<b>Retail (between)</b>	-3371.074***	-5102.128***	-1430.715***	-5927.779***	-3038.514***
	(358.66)	(672.05)	(334.83)	(722.34)	(558.41)
<b>Insurance and credit (within)</b>	2114.921*	2360.452	1872.777	1378.217	1382.383
	(1106.51)	(1973.94)	(1296.61)	(1646.99)	(2175.21)
<b>Insurance and credit (between)</b>	8779.461***	10801.850***	7106.249***	10858.042***	8796.460***
	(793.09)	(1381.90)	(746.65)	(1418.11)	(986.89)
<b>Metal (within)</b>	942.673**	880.207*	1158.670**	775.993	1368.202*
	(421.06)	(516.89)	(569.97)	(526.16)	(713.44)
<b>Metal (between)</b>	3796.231***	2744.093***	3095.943***	2859.244***	3754.445***
	(419.87)	(523.24)	(602.27)	(530.16)	(796.85)
<b>Chemistry (within)</b>	357.218	506.156	34.220	488.016	-606.912
	(753.75)	(1056.31)	(953.64)	(1055.24)	(1221.78)

<b>Chemistry (between)</b>	5827.847*** (951.37)	5722.441*** (1258.62)	5819.781*** (1307.35)	5632.524*** (1260.33)	6370.897*** (1551.82)
<b>Electronics (within)</b>	338.288 (499.54)	212.185 (617.12)	681.083 (684.89)	162.916 (629.86)	828.941 (782.05)
<b>Electronics (between)</b>	3954.472*** (882.84)	3001.998*** (1074.66)	3229.393** (1285.02)	2980.839*** (1095.18)	3571.909** (1761.62)
<b>Job change (within)</b>	-4566.967*** (279.65)	-4275.092*** (521.32)	-4424.354*** (269.20)	-4404.827*** (549.83)	-5220.160*** (426.54)
<b>Job change (between)</b>	-7351.889*** (389.17)	-9221.684*** (694.83)	-5542.402*** (365.70)	-10083.753*** (767.41)	-7055.738*** (661.40)
<b>Education (within)</b>					
Lower education	ref	ref	ref	ref	ref
Middle education	-2603.962* (1410.32)	-2.284.322 (1974.40)	-1.803.816 (1271.08)	-637.050 (2404.92)	-810.494 (715.29)
Higher education	2107.717 (1417.90)	2586.315* (1568.37)	3616.878** (1631.48)	2448.006 (1860.05)	2922.378** (1465.68)
<b>Education (between)</b>					
Middle education	-571.951*** (212.49)	-1175.274*** (335.92)	352.397* (209.90)	-1290.155*** (346.34)	470.906 (359.91)
Higher education	3143.563*** (431.74)	4607.393*** (729.66)	2824.100*** (423.50)	4804.291*** (766.56)	3006.521*** (632.74)
<b>Age (within)</b>	1741.840*** (113.98)	2011.551*** (180.01)	1521.390*** (133.37)	1964.468*** (187.26)	2096.810*** (200.46)
<b>Age (between)</b>	449.756*** (88.71)	370.994*** (136.04)	1088.232*** (85.77)	283.740* (145.35)	1191.078*** (117.55)
<b>Age squared (within)</b>	-18.511*** (1.25)	-21.679*** (2.05)	-16.031*** (1.31)	-20.909*** (2.14)	-21.368*** (1.88)
<b>Age squared (between)</b>	-1.999* (1.10)	-0.747 (1.69)	-10.957*** (1.04)	0.453 (1.80)	-11.814*** (1.44)
<b>Married (within)</b>	342.189 (281.36)	1053.905** (447.40)	-546.155 (334.90)	1022.550** (445.33)	-294.226 (427.92)
<b>Married (between)</b>	1241.663*** (259.08)	1870.318*** (450.86)	-481.364 (297.84)	1915.869*** (471.86)	-195.850 (456.82)
<b>Children (within)</b>					
No child	ref	ref	ref	ref	ref
One child	-509.140** (206.21)	-6.643 (315.96)	-1241.559*** (257.56)	85.773 (317.28)	-751.787* (386.92)
Two children	-85.348 (302.55)	1128.863** (441.07)	-1968.784*** (382.27)	1230.657*** (445.90)	-886.305 (673.49)
Three children and more	-921.861	-64.223	-2683.407***	-98.720	-1514.664

	(875.82)	(1354.75)	(610.53)	(1385.80)	(1337.21)
<b>Children (between)</b>					
One child	1836.710***	2514.560***	-1133.915***	2665.084***	-2139.754***
	(352.29)	(577.50)	(351.41)	(601.47)	(570.25)
Two children	4267.341***	6719.818***	-1777.371***	6773.137***	-2465.486***
	(509.93)	(858.38)	(395.33)	(893.97)	(886.23)
Three children and more	5202.087***	7434.077***	-2029.004***	7397.854***	-1.359.435
	(766.07)	(1175.68)	(606.46)	(1211.79)	(1932.58)
<b>Ages of youngest child until 2 years (within)</b>	-2253.196***	-491.325	-7212.736***	-414.709	-6112.254***
	(349.21)	(407.13)	(680.71)	(416.20)	(1353.37)
<b>Ages of youngest child until 2 years (between)</b>	-603.372	-2256.203*	-1.809.912	-2350.741*	-2387.794
	(896.63)	(1177.38)	(1107.79)	(1235.90)	(2022.68)
<b>Ages of youngest child 3 to 4 years (within)</b>	-777.731**	287.790	-2428.854***	273.215	-976.349
	(306.61)	(394.99)	(475.03)	(401.82)	(1207.52)
<b>Ages of youngest child 3 to 4 years (between)</b>	-636.637	-2810.329**	774.193	-2600.698**	2743.341*
	(721.27)	(1239.20)	(640.51)	(1291.55)	(1513.94)
<b>Years 2003 and 2005 (within)</b>	-281.061	-580.848	-28.315	-553.757	117.013
	(331.02)	(506.14)	(410.63)	(514.20)	(680.49)
<b>Years 2003 and 2005 (between)</b>	4362.999***	5198.544***	3074.638***	5584.167***	3827.898***
	(496.73)	(853.56)	(463.02)	(942.66)	(759.64)
<b>Years 2007 and 2009 (within)</b>	-791.339***	-836.398***	-783.471***	-834.414***	-747.235**
	(173.60)	(274.69)	(205.27)	(276.09)	(334.01)
<b>Years 2007 and 2007 (between)</b>	2287.030***	2870.617***	1605.371***	3092.716***	2414.015***
	(542.59)	(923.58)	(538.15)	(1031.46)	(912.14)
<b>Constant</b>	-1783.074	-824.259	-12128.916***	-457.448	-18332.922***
	(1718.37)	(2677.73)	(1742.70)	(2857.99)	(2389.74)

**R-squared**

Within	0.1309	0.1048	0.2000	0.0892	0.1114
Between	0.6301	0.6105	0.5963	0.5915	0.4785
Overall	0.6019	0.5746	0.5585	0.5615	0.4326

<b>N</b>	40093	20398	19695	19447	10191
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Note: Linear fixed-effects models with robust standard errors in parentheses; Dependent variable overtime; Model 1 and 2 employees excluding self-employed; Models 4 and 5 only for full-time employed; Results not weighted; \*p<0.10, \*\*p<0.05, \*\*\*p<0.01; SOEP 2003, 2005, 2007, 2009, 2011.

## 6 References

- Acker, J., & van Houten, D. S. (1992). Differential Recruitment and Control: The Sex Structuring of Organizations. In A. J. Mills & P. Tancred (Eds.), *Gendering organizational analysis* (pp. 15–30). Newbury Park: Sage Publications.
- Adler, M. A. (1993). Gender Differences in Job Autonomy: The Consequences of Occupational Segregation and Authority Position. *A Sociological Quarterly*, 34(4), 439–465.
- Ala-Mursula, L., Vahtera, J., Kivimäki, M., Kevin, M. V., & Pentti, J. (2002). Employee control over working times: associations with subjective health and sickness absences. *Journal of epidemiology and community health*, 56, 272–278.
- Ala-Mursula, L., Vahtera, J., Pentti, J., & Kivimäki, M. (2004). Effect of employee worktime control on health: a prospective cohort study. *Occupational environmental medicine*, 61, 254–261.
- Allison, P. D. (2009). *Fixed Effects Regression*. Thousand Oaks: Sage Publications.
- Anxo, D., Fagan, C., Letablier, T., Perraudin, C., & Smith, M. (2007). *Part-time work in European companies: Establishment survey on working time 2004-2005*. Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.
- Banyard, K. (2010). *The Equality Illusion: The Truth about Women and Men Today*. London: Faber and Faber.
- Beckmann, M. & Cornelissen, T. (2014). *Self-Managed Working Time and Employee Effort: Microeconomic Evidence (SOEP Papers No. 636)*. Berlin.
- Brannen, J. (2005). Time and the Negotiation of Work-Family Boundaries. *Autonomy or illusion? Time & Society*, 14(1), 113–131.
- Burchell, B., Fagan, C., O'Brian, C., & Smith, M. (2007). *Working conditions in the European Union: The gender perspective*. Dublin, Ireland.
- Chung, H., & Tijdens, K. (2013). Working time flexibility components and working time regimes in Europe: using company-level data across 21 countries. *The International Journal of Human Resource Management*, 24(7), 1418–1434. doi:10.1080/09585192.2012.712544
- Cooke, L. P. (2011). *Gender-Class Equality in Political Economies*. New York/London: Routledge.
- Felstead, A., & Jewson, N. (2000). *In work, at home: Towards an understanding of homeworking*. London, New York: Routledge.
- Gallie, D., Zhou, Y., Felstead, A., & Green, F. (2012). Teamwork, Skill Development and Employee Welfare. *British Journal of Industrial Relations*, 50(1), 23–46.
- Gambles, R., Lewis, S., & Rapoport, R. (2006). *The myth of work-life balance: The challenge of our time for men, women, and societies*. Chichester, England, Hoboken, NJ: John Wiley & Sons.
- Golden, A. G., & Geisler, C. (2006). Flexible work, time, and technology: ideological dilemmas of managing work-life interrelationships using personal digital assistances. *The Electronic Journal of Communication*, 16(3 & 4).
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63, 510–531.
- Haisken-DeNew, J. P., & Frick, J. (2005). *Desktop Companion to the German Socio-Economic Panel (SOEP)*.



- Hill, J. E., Hawkins, A. T., Ferris, M., & Weitzman, M. (2001). Finding an Extra Day a Week: The positive Influence of Perceived Job Flexibility on Work and Family Life Balance. *Family Relations*, 50(1), 49–58.
- Hill, R., Tranby, E., Kelly, E., & Moen, P. (2013). Relieving the Time Squeeze? Effects of a White-Collar Workplace Change in Parents. *Journal for Marriage and Family*, 75, 1014–1029.
- Hofäcker, D., & König, S. (2012). Flexibility and work-life conflict in times of crisis: a gender perspective. *International Journal of Sociology and Social Policy*, 33(9/10), 613–635.
- Hughes, E. L., & Parkes, K. R. (2007). Work hours and well-being: The roles of working-time control and work-family interference. *Work & Stress*, 21(3), 264–278.
- Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, 63(1), 83–106.
- Kelly, E. L., Moen, P., & Tranby, E. (2011). Changing Workplace to Reduce Work-Family Conflict: Schedule Control in a White-Collar Organization. *American Sociological Review*, 76(2), 265–290.
- Klaus, V., & Yonay, Y. P. (2000). The Effect of Occupational Sex Composition on the Gender Gap in Workplace Authority. *Social Science Research*, 29, 583–605.
- Lewis, S., & Rapoport, R. (2005). Looking backward to go forwards: the integration of paid work and personal life. In B. Peper, J. van Doorne-Huiskes & L. d. Dulk (Eds.), *Flexible working and organisational change. The integration of work and personal life* (pp. 298–328). North Hampton, Mass: Edward Elgar.
- Loscocco, K. A. (1989). The Interplay of Personal and Job Characteristics in Determining Work Commitment. *Social Science Research*, 18, 370–394.
- Lott, Y. (2014). Working-time flexibility and autonomy: A European perspective on time adequacy. *European Journal of Industrial Relations*,
- Moen, P., & Yu, Y. (2000). Effective Work/Life Strategies: Working Couples, Work Conditions, Gender, and Life Quality. *Social Problems*, 47(3), 291–326.
- Morgan, S. L., & Winship, C. (2007). *Counterfactuals and causal inference: Methods and principles for social research*. New York: Cambridge University Press.
- OECD. (2012). *Gender equality in Education, Employment and Entrepreneurship: Final Report to the MCM 2012*. Paris.
- OECD. (2013). *OECD Labour Force Statistics 2013*. Retrieved from [http://dx.doi.org/10.1787/oecd\\_ifs-2013-en](http://dx.doi.org/10.1787/oecd_ifs-2013-en)
- Peper, B., van Doorne-Huiskes, J., & Dulk, L. d. (Eds.). (2005). *Flexible working and organisational change: The integration of work and personal life*. North Hampton, Mass: Edward Elgar.
- Pocock, B. (2005). Work-life 'balance' in Australia: Limited progress, dim prospects. *Asia Pacific Journal of Human Resources*, 43(2), 198–291.
- Putman, L. L., Myers, K. K., & Gailliard, B. M. (2014). Examining the tensions in the workplace flexibility and exploring options for new directions. *Human Relations*, 67(4), 413–440.
- Richman, A. L., Civian, J. T., Shannon, L. L., Hill, J. E., & Breen, R. T. (2008). The relationship of perceived flexibility, supportive work-life policies, and the use of formal flexible arrangements and occasional flexibility to employee engagement and expected retention. *Community, Work & Family*, 11(2), 183–197.

- Russell, H., O'Connell, P. J., & McGinnity, F. (2009). The Impact of Flexible Working Arrangements on Work-life Conflict and Work Pressure in Ireland. *Gender, Work and Organization*, 16, 73–97.
- Schiemann, S., Schafer, M. H., & Mclvor, M. (2013). The rewards of authority in the workplace: do gender and age matter? *Sociological Perspectives*, 55(75-96).
- Schunck, R. (2013). Within and between estimates in random-effects models: Advantages and drawbacks of correlated random effects and hybrid models. *The Stata Journal*, 13(1), 65–76.
- Smith, R. A. (2002). Race, Gender and Authority in the Workplace: Theory and Research. *Annual Review of Sociology*, 28, 509–542.
- Tausing, M., & Fenwick, R. (2001). Unbinding Time: Alternate Work Schedules and Work-Life Balance. *Journal of Family and Economic Issues*, 22, 101–119.
- Van der Lippe, T., Ruijter, J. de, & Ruijter, E. R. W. de. (2011). Persisten Inequalities in Time Use between Men and Women: A Detailed Look at the Influence of Economic Circumstances, Policies, and Culture. *European Sociological Review*, 27(2), 164–179.
- Van Echtelt, P., Glebbeek, A., Lewis, S., & Lindberg, S. (2009). Post-Fordist Work: A Man's World? *Gender and Society*, 23(2), 188–214.
- White, M., Hill, S., McGovern, P., Mils, C., & Smeaton, D. (2003). 'High-performance' Management Practices, Working Hours and Work-Life Balance. *British Journal of Industrial Relations*, 41, 175–195.
- Williams, J. C., Blair-Loy, M., & Berdahl, J. L. (2013). Cultural Schemas, Social Class, and the Flexibility Stigma. *Journal of Social Issues*, 69(2), 209–234.
- Woolridge, J. M. (2002). *Introductory Econometrics. A modern approach*. Mason, Ohio: Thomson South-Western.
- Wright, E. O., Baxter, J., & Birkelund, G. E. (1995). The gender gap in workplace authority: A cross-national study. *American Sociological Review*, 60, 407–435.
- Yaish, M., & Stier, H. (2009). Gender Inequality in Job Authority: A Cross-National Comparison of 26 Countries. *Work and Occupations*, 36(4), 343–366.

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