# VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS DEPARTMENT SOCIOECONOMICS

# Reduction of Working Time in Austria

A Mixed Methods Study Relating a New Work Time Policy to Employee Preferences

#### Thesis

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**Master of Science** 

by

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# **Abstract**

This project examines current prohibiting and supporting factors determining employees' desire to reduce working time. It draws on theoretical concepts based on the notion of endogenous preferences, meaning that they are subject to adaptations in response to external factors.

Following a mixed methods approach, we combine quantitative and qualitative research techniques. The quantitative part contains a regression model that applies several factors for explaining the mismatch between preferred and actual working hours by using data from the Austrian Microcensus 2012. The regression results are scrutinized by qualitative interviews among employees of the electrics/electronics industry in Austria, who had the possibility to opt for the leisure option ("Freizeitoption"). This novel work time policy, first implemented via the collective agreement 2013, enables workers and salaried employees to individually choose between a wage increase and equivalent leisure time.

This research project comprises two innovative elements. First, the mixed methods approach allows for a comprehensive study of preferences for work time reduction. Whereas the quantitative analysis generates an understanding of the factors associated with a preference for work time reduction, the qualitative approach provides insights into the perceptions of individuals regarding their preferences to reduce work hours. Moreover, it allows us to contextualize the regression results and to explain unexpected quantitative findings. Second, the leisure option was introduced only in May 2013, and by now, no study exists about individuals' perceptions on this new policy instrument.

Quantitative results suggest that employees who prefer shorter weekly working hours are older, higher educated and work longer actual hours in white-collar positions in bigger business premises. Also, women living in multiple earner households and mothers of young children prefer to work less, while men are unaffected by these variables, which supports the 'male breadwinner' model. Qualitative results indicate that employees with higher educational levels tend to reduce working time, as leisure and family time constitute intrinsic values for them. Moreover, money is valued from a long-term, security perspective, which implies that some employees prefer not to decrease their working hours although they are living in a good financial situation. Also, the shift in assessing work performances by output indicators instead of time measures can be regarded as a major obstacle for work time reductions.

The insights gained by this project contribute to policy debates by providing a better understanding of the circumstances inducing employees to reduce working hours, an issue increasingly discussed in the context of various aspects of sustainability.

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# 1 Introduction

In the 1930s, John M. Keynes predicted in his essay *Economic Possibilities for our Grandchildren* that in one hundred years, the standard of life would be four to eight times as high. Industrial societies would have solved the "economic problem" by then, allowing people to work not more than 15 hours per week in order to satisfy their needs. The additional leisure time would allow people to spend more time on leisure, social relationships and on advancing their knowledge (Keynes, 1933).

Whereas economic output has multiplied during the last century, reductions in work time have been marginal compared to Keynes' forecast. However, working time reduction might have advantageous effects in several respects and has been a major issue in the discourse on sustainability. Concerning economic aspects, shorter work hours have the potential to mitigate unemployment, as work can be distributed among more people. This might also diminish pressures on growth, as relatively high levels of employment are enabled even in times of weak growth (Marterbauer, 2011). Regarding ecological impacts, shorter work hours might reduce environmental pressures. According to several studies, there is a positive relationship between hours worked and the amount of energy consumed (Rosnick and Weisbrot, 2006), greenhouse gas emissions (Nässén and Larsson, 2010), and the ecological footprint. The rationale behind this is, first, the reduction in production, income and consumption as a consequence of shorter work hours (Schor, 2005). Second, the additional time available might induce more sustainable lifestyles as many time-saving consumer decisions are environmentally harmful (New Economics Foundation, 2010). Apart from possible economic and ecological advantages, a reduction in work hours might increase quality of life (Alesina et al., 2005; Kasser and Brown, 2003), enhance a fair distribution of work - not only between employed and unemployed, but also between men and women and paid and unpaid work (Kopatz, 2012) - and enable people to participate and engage more in society (New Economics Foundation, 2010).

It is important to note that the actual effects of work time reductions are highly uncertain, depending heavily on accompanying policy measures and the prevailing institutional circumstances. Nevertheless, there is justified hope that shorter work hours may facilitate releasing at least some of the prevailing tensions in the economic, ecological and social sphere (Kallis et al., 2013).

Apart from the insecurities related to its impacts, the question arises if employees actually regard shorter working hours as beneficial for them. Reductions in working time do not only result into more available leisure time, but might also imply income cuts, which in turn restricts employees' consumption possibilities. It is thus essential to take into consideration people's work time preferences when discussing the issue of shorter work hours. In this context, a remarkable innovative element has been implemented within the collective agreement 2013 of the electrics and electronics

industry in Austria, namely the so-called leisure option ("Freizeitoption"). It allowed employees to individually choose between a wage increase of about 3% and additional leisure time of around 5 hours per week (FEEI, 2013a, 2013b).

This in Austria yet unique arrangement offers an exceptional possibility to actually analyze the factors that encourage people to either opt for additional leisure time or money. Studying this case provides us with novel insights on the circumstances that were relevant to employees' actual decision. Until yet, there is one scientific study dealing with this case which is based on surveys conducted among works council representatives (Soder, 2014). Thus, this research project is the first one addressing the said leisure option that also examines how employees argue their decision.

Following a mixed methods approach, we combine quantitative and qualitative methods. In our quantitative analysis, we use data from the Austrian Microcensus 2012 in order to examine the factors associated with a preference for working fewer hours. In parallel, we conduct qualitative interviews with employees from the electrics and electronics industry in Austria to contextualize our quantitative findings and to explore the perceptions of circumstances and consequences, in short the meanings to individuals. After having completed each empirical part separately, we combine our results to get a comprehensive understanding on the preference and on the actual decisions for working less.

This thesis is structured as follows: After providing an overview on the previous research and a theoretical framework on work time preferences (Chapter 2 and 3), we introduce the leisure option as case to be analyzed in our study (Chapter 4). An introduction to the empirical part is presented in Chapter 5, which is followed by the quantitative analysis of the preferences for working less (Chapter 6) and a qualitative analysis of the actual decision for working shorter hours (Chapter 7). In both empirical sections, we first provide a description of the methods and data used. We then proceed with presenting our results, which is followed by a summary of the respective empirical part. We conclude by synthesizing our results and discussing our joint findings (Chapter 8).

Matthias Nocker is responsible for the quantitative empirical part (Chapter 6) and Stefanie Gerold for the qualitative empirical part (Chapter 7). The remainder of this thesis has been written in cooperation.

# 2 Previous Research

A substantial body of empirical research reveals existing *mismatches* between employees' preferred and actual hours of paid work (Altonji and Paxson, 1987; Bell and Freeman, 2001; Bielenski et al., 2002; Bloch and Taylor, 2012; Bluestone and Rose, 1997; Clarkberg and Moen, 2001; Drago et al., 2009; Echtelt et al., 2006; Eurofound, 2012; Golden and Gebreselassie, 2007; Jacobs and Gerson, 2001; Otterbach, 2010; Reynolds, 2003; Reynolds and Aletraris, 2006; Reynolds and Johnson, 2012; Schor, 1991; Väisänen and Nätti, 2002). As mismatches can be interpreted as a *preference for change* in work hours, this literature is closely related to studies on employees' preference formation (Böheim and Taylor, 2003; Fagan, 2001; Sendi et al., 2007; Steiber, 2006; 1996; Van Wanrooy, 2005). A vast share of these studies is of quantitative nature, analyzing social surveys on a micro level. But critiques were raised in the past on studying work hour mismatches purely on a quantitative basis.

In this section, we present four strands of studies on work hour mismatches. First, many studies aim at quantifying work hour mismatches on a national level. A second branch of studies explains mismatches by socio-economic factors on the individual level. We present most stable findings regarding variables commonly used for predicting the preference for working less. Third, some studies have shown that work time preferences are subject to variation over time and shall be thought as endogenous. Lastly, we present studies that critically challenge the possibility of studying work time preferences with quantitative means only.

#### 2.1 Detecting Work Hour Mismatches

Usually, quantitative studies aiming at detecting and explaining work hour mismatches are conducted in regions for which high quality panel survey data is available, such as Europe (e.g., Bielenski et al., 2002; Böheim and Taylor, 2004; Eurofound, 2012; Otterbach, 2010), the US (e.g., Barnett et al., 2009; Bloch and Taylor, 2012; Reynolds and Aletraris, 2006) or Australia (e.g., Drago et al., 2009; Wooden et al., 2009). Results show that a significant share of employees display work hour mismatches. This share was found to be 40% for Britain (Böheim and Taylor, 2004), and up to 50% for the US (Golden and Altman, 2008). In a cross-countries analysis, Otterbach (Otterbach, 2010) finds that the share of employees displaying work hour mismatches ranges from about 25% to 60% of the working population, with wealthier countries positioned at the lower end and low-income countries at the top end of that range. Hence, employees in richer countries seem to have more possibilities to realize their preferred working time. Also, there is a clear association of the country's GDP and the direction of the mismatch. In poorer countries employees tend to prefer longer hours, whereas in more affluent countries they prefer shorter ones. Unfortunately, Otterbach (2010) did not examine the case of Austria.

To the best of the authors' knowledge, recently only a single study by Eurofound (2012) using the European Working Conditions Survey has examined work hour mismatches for Austria. It was found that around 37% of the Austrian employees prefer different hours than actual ones. Around 30% want to work less, while around 7% would like to work more.

In summary, all investigated countries display a significant part of the employed population with positive or negative work hour mismatches – a finding that seriously challenges a core assumption of standard economics: the frictionless labor markets. Instead, these results suggest that the institution of employment is highly rigid resulting in an constrained choice of working hours (Clarkberg and Moen, 2001; Reynolds and Aletraris, 2006). Policy initiatives, like the leisure option, aiming to increase the flexibility and freedom to choose, create a possibility for people to adapt to their preferred amount of working hours (Lee, 2004; Lee and McCann, 2006). The notion of mismatch, furthermore, leads to the concepts of overemployment (people work longer than they prefer to) and underemployment (people work shorter than they prefer to). Although unemployment and underemployment have traditionally played a central role, altering the distribution of paid work also needs to address the overemployed (e.g. Bielenski, Bosch, and Wagner 2002).

### 2.2 Relation of Mismatch to Socio-Economic Factors

Another endeavor of studies on work hour mismatches is to explain the discrepancy between people's preferred and actual working hours. Several factors were identified that seem to be related to the wish to work less. Higher educational attainment, higher number of weekly working hours, higher occupational position and living in a dual-earner household are the most stable factors that are found to increase employees' preference for reducing actual working hours (Bielenski et al., 2002; Böheim and Taylor, 2004; Clarkberg and Moen, 2001; Echtelt et al., 2006; Golden and Gebreselassie, 2007; Jacobs and Gerson, 2001; Moen and Dempster-McClain, 1987; Otterbach, 2010). Among these factors the effect of actual working hours is most salient.

The relation of other factors with a preference for working less is found to be more ambivalent. Concerning a person's age, for example, it is found that older employees are more likely to prefer shorter hours (Bloch and Taylor, 2012), while others detect the reverse effect (Bielenski et al., 2002) and sometimes no clear association can be identified (Golden and Gebreselassie, 2007). Furthermore, the effect of financial incentives varies across different studies and its effect depends on gender. For example, financial security does not affect male working time mismatches. However, females in financially secure households want to reduce more (Bielenski et al., 2002). Bloch and Taylor (2012) detect a similar pattern with reversed gender roles: Higher income is related positively to a wish to work less for men. For women, no relationship can be detected. Also, a positive

relationship between financial incentives and negative work hour mismatches can be identified (Clarkberg and Moen, 2001).

Acknowledging the gendered structure of working time decisions, many studies highlight the gender division of labor by running separate models for women and men (e.g., Clarkberg and Moen, 2001; Otterbach, 2010) or using several dummies for capturing the effect of gender and relationship (e.g., Drago et al., 2009). Also, parenthood and its effect on mothers and fathers were examined. After the arrival of children mothers are found to prefer decreased working hours, while fathers' working hours are largely unaffected. However, if so, fathers tend to prefer longer working hours (Eggebeen and Knoester, 2001). This pattern has become known as the child mismatch hypothesis. Lately, however, it was shown that empirical evidence offers only mixed support for this hypothesis (Reynolds and Johnson, 2012). Further, the importance of gender, relation and household variables is stressed in the literature, as work time decisions were found to be made not on an individual basis, but in coordination with other household members (Jacobs and Gerson, 2001).

# 2.3 Working Time and Preference Endogeneity

According to Juliet Schor, preference endogeneity manifests itself in the fact that preferences are asymmetric regarding desired levels of current and future income. Surveys show that although people are not willing to decrease current income, they prefer to reduce future income in order to obtain more leisure time (Schor, 2005). Schor also identifies a dynamic inconsistency in preferences over time by comparing US surveys on work satisfaction at two different points in time. According to surveys conducted around 1980, a majority of workers was contented with their current combination of income and leisure time, but was eager to trade off future income in order to achieve more free time. However, in later years the same employees again expressed their satisfaction about current levels of work hours and income, although their former preferences had not been fulfilled as average hours worked have increased during this period (Schor, 1991). This evidence suggests that preferences adjust to current levels of income, and that people resist reductions of current consumption. With regard to a political feasible strategy to reduce work hours, the target should not be to cut employees' current levels of income and consumption, but to channel future productivity gains into more leisure time instead of higher wages (Schor, 2005).

# 2.4 Critique of the Quantitative Approach

Concerns were raised with regard to analyzing work time preferences only by quantitative methods, as this implies that people are able to express their true preferences. Conversely, preferences are far more fluid and ambivalent, because people face structural constraints within and outside their

employment relation that crucially shape their preferences and even make it hard to envision realistic working alternatives.

In this context, (Fagan, 2001) argues that the analysis of survey data on work time preferences often neglects employment and welfare state conditions, dominant ideologies and social norms, or the individual's current circumstances, which are crucial aspects for the formation of preferences. Also, the fact that individuals' perceptions about feasible alternatives have an impact on preferences should not be disregarded. On these grounds, Fagan develops a framework for the interpretation of work time preferences, taking into account a person's present situation and the societal working time regime. Moreover, she proposes to supplement quantitative analyses with more detailed, qualitative forms of interviews. This is also suggested by (Campbell and Wanrooy, 2013), who examine work time preferences of employees engaged in long working hours. They argue that stated working time preferences are subject to instability, i.e. they vary widely according to the phrasing of the question and may shift over time for the same individual although actual hours or personal circumstances remain the same. In their study combining quantitative data with qualitative interviews, they show that a great part of the interviewees conveyed uncertainty and ambivalence, which can be explained by the multiple, often contradictory ideas many employees have, especially regarding the constraints and feasibility of decreasing their work hours. Obviously, quantitative survey data may provide valuable insights into work time preferences; however, the above findings suggest that researchers should be aware of undertaking rigid interpretations that misconceive the meaning and overstate the significance of stated preferences. In fact, working time preferences can be regarded as a "black box" (Golden and Altman, 2008) that needs to be investigated more extensively.

However, so far research on work time preferences is mostly dominated by quantitative methods. Qualitative interviews have been used in order to scrutinize preferences among part-time workers (Walsh, 2007; Walters, 2005). Other qualitative studies are orientated towards examining work orientations of women (Crompton and Harris, 1998; Devine, 1994; Procter and Padfield, 1999), or employees working long hours (Donnelly, 2006; Lautsch and Scully, 2007). Research designs combining quantitative with qualitative methods have been used to examine flexible working practices and work intensification (Kelliher and Anderson, 2010), work orientations of mothers working full-time (McDonald et al., 2006), or, as already mentioned, preferences of employees working long hours (Campbell and Wanrooy, 2013). However, most of these studies rather look at work-life balance in general, instead of explicitly analyzing work time preferences. As far as we are aware of, our study represents the first mixed methods study that examines both preferences regarding shorter work hours and the actual decision for working less.

# 3 Theory

# 3.1 Preferences, Rigidities and Mismatches

In this section the notion of work time mismatches shall be introduced theoretically by deriving it from its two components: work time preferences and rigidities in the adjustment of actual working hours.

In terms of work time preferences, we adopt the notion of endogenous preferences, which is based on the assumption that work time preferences are influenced not only by individual factors, such as economic necessities and domestic circumstances, but also by the societal institutional context, including employment conditions, welfare state policies and, less tangibly but equally important, prevailing social norms and ideologies about how time should be used (Fagan, 2001). This means that preferences for work time are endogenous and dynamic, adapting to changes in objective conditions relevant for people. Preferences thus can be viewed as a result of "compromises between what is desirable and what is feasible" (Bielenski et al., 2002). This perspective is in line with cognitive consistency theories (Festinger, 1962), stating that people tend to adjust to what is realistic in their current circumstances. It can thus be concluded that people scale down their aspirations when the labor market situation is difficult, for example, or that women's employment preferences are partly molded by the allocation of public childcare services (Bielenski et al., 2002). It is hence important to consider the complex system of socio-economic constraints under which preferences are formed.

This approach is in stark contrast to a voluntarist and static perception of preferences put forward by authors such as Catherine Hakim, negating the existence of major constraints or forcing mechanisms with regard to the formation of choices (Hakim, 2000). This notion has been criticized for its simplifying and essentially static way of conceptualizing orientations and preferences, thus deemphasizing the role of structural constraints and variations in opportunities (Fagan, 2001). Further, the concept of endogenous preferences deviates substantially from the perspective of standard economists on preferences, who regard preferences as exogenously given. This view treats individual preferences as fixed, stable and purely innate to the individual, as no societal factors and structures are able to alter them (Pindyck and Rubinfeld, 2003; Stigler and Becker, 1977).

Concerning work hour rigidities, the conventional economic model of firm labor demand acknowledges that the amount of labor preferred by employees does not necessarily have to match the hours demanded by employers (Hart, 2004). As a consequence of technological conditions requiring fixed shift lengths or resulting from the current business situation, employees face work hour constraints, which are imposed on their actual working hours (Golden and Altman, 2008). Hence, the amount of hours employees are working is not chosen completely freely as stated by the

standard labor market model. In fact, people face both rigidities in adjusting their actual work hours (Böheim and Taylor, 2004) and all-or-nothing decisions of work time (Clarkberg and Moen, 2001). The result is that often people involuntarily work more than they actually want to.

Following from this discussion, work hour mismatches can be triggered either by a change in preferences or in rigidities. First, most authors perceive changing preferences as the driving force of work hour mismatches. In line with the notion of endogenous preferences, it is assumed that preferences are subject to change, for example due to the arrival of a baby (Reynolds and Johnson, 2012). In such a situation parents face work hour mismatches if they cannot fulfill their modified work time preferences. Second, changes in the degree to which actual working hours are rigid may induce work hour mismatches. In this view mismatches emerge even though work time preferences remain constant, as a result of imposed actual working hours. Changes in the nature of employment may induce such kind of work hour mismatch. For example, changing the assessment of work performance from time measures to output indicators or changes in the size of the business premise may result in more rigid actual work times. Therefore, both components of work hour mismatches, preferences and rigidities of work time, are subject to change and may induce the emergence of a mismatch.

### 3.2 Actual Working Hours

With regard to working time, people are expected to follow *time use norms*, which are defined as "behavioural regularities that are in line with a socially shared belief about the way people ought to use their time" (Steiber, 2006, 50). These norms may originate from formally set up laws or law-like regulations on working hours, and they prevail as informal societal expectations (Fagan, 2001). In the realm of employment, the statutory working time together with collective agreements are assumed to strongly influence employees' preference (re-)formation. In Austria, the first is set at 40 hours per week and the latter ranges from 38.5 to 40 hours (depending on the industry); therefore, employees are thought to tend towards this *work time norm*. In creating a normative pressure of adherence, time use norms are thought to have a substantial impact on people's preferences. Yet, they do not determine people in a mechanical way (see Hodgson, 2006); rather, they provide a form of guidance, which is inert and mutable, on how one should use time. Hence, people working more than 40 hours per week are more likely to express a preference for reducing working hours. In other words, people who want to reduce their working hours are expected to work longer than those who do not wish any change or, respectively, those who want to work more.

#### 3.3 Gender Division of Labor

In the second half of the 20<sup>th</sup> century, the gender division of labor in Europe was dominated by the so-called *male breadwinner norm*. Men were expected to participate in paid full-time employment, whereas women were held responsible for non-paid reproductive house work (Drago, 2007; Williams, 2001). Accordingly, two congruent and interdependent norms have emerged: Men were induced to follow the *ideal worker norm*, characterized by a strong commitment to their job, while women were expected to fulfill the *motherhood norm* of caring for the family members (Drago et al., 2009). The European welfare state regimes were created according to these norms, thereby leaving a substantial part of care work to families, in particular to women in countries with a conservative-corporatist welfare state regime such as Austria (Esping-Andersen, 1990). As a result, up to now women tend to have a greater risk of being unemployed (Eichmann and Saupe, 2014) and face various other employment discriminations, like the glass ceiling (Erfurt Sandhu, 2013).

Over the last decades, several policy measures have endorsed a change of gender attitudes as well as female employment rates, both in Austria and in other European countries, resulting in a gradual shift away from the pure male breadwinner norm. According to Fagan et al. (2001), four variations of the this norm have emerged over the last decades. In Scandinavian countries a so-called universal breadwinner norm has emerged, treating women and men as relatively equal participants in employment. A modified breadwinner norm is attributed to France and Belgium, mainly because child care and family entitlements are publicly offered, which extensively facilitates female employment. The remainder of the EU countries has developed models of gender division of labor that are more closely related to the original male-breadwinner norm. In southern Europe, Fagan et al. (2001) find a male breadwinner & limited part-time norm characterized by limited support from the welfare state for maternal employment and limited use of part-time employment in general. Mothers in these countries therefore have the choice between full-time employment and nonemployment. Austria together with Germany and others is attributed to the male breadwinner & part-time norm. In this group, women mostly work in part-time jobs as they primarily remain responsible for care work. Thus, the male breadwinner norm, although slightly modified, still has high relevance for grasping the gender division of labor in Austria.

As a result, in research on working time the arrival of children is often thought to have a severe impact on women's preferred working hours, but hardly on those of men. In conjunction with the presence of rigidities in actual working hours, this situation is expected to feed into a negative work hour mismatch (Clarkberg and Moen, 2001; Drago et al., 2009). This so-called *child mismatch hypothesis* (Reynolds and Johnson, 2012) might especially affect women and is closely connected to the *role conflict perspective* (Moen and Dempster-McClain, 1987). The latter states that paid work is

conflicting with parenthood and thus forces parents who want to care for their children to lower the level of actual working hours. However, in a study on the US doubts were raised on the general validity of the child mismatch hypothesis (Reynolds and Johnson, 2012). The degree to which the arrival of children may influence the preference for working less may not be a linear function and possibly only exists for the arrival of the first child. Also, it was found that parents are able to adjust their actual working hours in anticipation of their preference for reduced working hours, which eventually decreases the severity of work hour mismatches. However, these findings on the child mismatch hypothesis in the US may not be fully applicable to Austria, as both countries use distinct forms of employment regulations, which create different levels of flexibility in actual working hours. In other words, the applicability of the child mismatch hypothesis and the extent to which parents may be able to engage in both child caring and paid employment is heavily dependent on the degree to which parents can adjust their working hours, as well as on the availability of publicly offered child care facilities (Fagan et al., 2001).

Moreover, the effect of children on their parents' work time decision may also depend on the children's age. Golden and Gebresselassi (2007) distinguish between two effects. Firstly, young children might create a relatively high *demand for time*. Secondly, when they get older they might increase the *demand for money* compared to time. Therefore, both the children's age and the number of children in the household may affect their parents' preference for a change in work time.

## 3.4 Financial Incentives

In capitalist societies the necessity of earning money in paid employment establishes the most obvious reason for working. In this context, we focus on hourly wages and introduce an interpretation of standard economics theory of labor supply that incorporates the notion of work hour mismatches. Two counteracting effects are crucial for the theory of labor supply: The *substitution effect* states that a rising wage rate increases the opportunity cost of time spent outside of employment. With rising wage rates, leisure or non-paid work becomes more costly, which encourages people to work longer. In contrast, the *income effect* induces people to work less if the wage rate increases. For lower levels of wage rates, the substitution effect typically outweighs the income effect, generating a positive association between the wage rate and working hours. However, above a certain level of wage rates, the dynamic turns around (Pindyck and Rubinfeld, 2003), and people prefer to work less if the wage rate increases. The positive association of wages and working time for lower levels of wages and the negative association of the two variables for higher wages together generate the *backward bending labor supply curve*.

It is important to emphasize the social embeddedness of the model of labor supply. We understand the turning point of the backward bending curve as a situation in which people are able to acquire an appropriate standard of living (Fagan, 2001; Golden and Altman, 2008), which allows them to value leisure more than money. It is needless to say that the level of income that is considered appropriate in terms of people's consumption patterns is defined by social and cultural processes (Hamilton, 1987; Trigg, 2001).

# 3.5 Post-Fordist Working World and the Subjectification of Work

With respect to the qualitative part of our study, not only theories devoted to (work time) preferences, but also concepts describing changes in the forms of work organization and labor control during the last decades may be appropriate. In this field, research has mostly focused on new forms of power and subjectivity in the enterprise. The concepts discussed here cannot be regarded as universal tendencies and may only be relevant for certain employment groups. However, they seem to be helpful to explain some results of our qualitative interviews.

A major work dealing with the new working world is "The New Spirit of Capitalism" from Boltanski and Chiapello (2005), which examines network-based organizations and post-Fordist working structures. Based on a comprehensive analysis of management texts, they conclude that capitalism has entered a new stage, which is mainly characterized by the notion of networks. Accordingly, the phase of hierarchical Fordist work structures prevailing from around 1940 to 1970 has been superseded by a new spirit of capitalism, founded on self-actualization and authenticity. This new spirit has evolved as a response to the 'artistic critique' of capitalism, attacking uniformity, alienation and inflexibility. Hence, capitalism's crisis of legitimacy has been disarmed by absorbing the values promoted by the artistic critique. In the evolving 'Network Capitalism', creativity and selfdevelopment are no longer slogans against bureaucracy and subordination, but are now commonly expected from employees (Boltanski and Chiapello, 2001). In fact, communicative management, team work and self-determination are now seen as production factors in enterprises. However, the formerly subversive nature of the artistic critique is in danger to change to subordination, not least because the adoption of the artistic critique by the management imposes a new risk of selfexploitation via the mode of heteronomous self-determination (Wagner, 2007). For those who work, not because they have to or because they follow a moral obligation, but because they want to realize themselves and actually have this possibility in the firm, it is very difficult to dissociate from increasing requirements (Voswinkel, 2002).

In this context, especially in the German discourse the term "subjectification" of work is used to grasp these developments. This debate mostly refers to highly qualified employees and implies a double effect: First, individuals bring more subjectivity into their work; and second, work requires more subjective and interpretative actions from its employees. Subjectivity thus describes the process of the intensifying interrelation between subject and work (Kleemann et al., 1999).

The first aspect of subjectification describes the fact that employees increasingly involve their subjectivity into work, which is combined with the desire for meaningful jobs, self-realization, and autonomy. According to Baethge (1991), the professional role has an integral function for the construction and stabilization of identity, which becomes even more relevant for some groups of employees. The increasing subjectification of work is partly caused by the growing share of service workers and the rising importance of knowledge and qualification for the production of goods and services, which resulted into longer periods of training and education. Baethge shows that there is a strong link between the social background and the educational/qualification level on the one hand, and preferences concerning the awareness towards work. First, this is because a higher cognitive level implies a differentiation and individualization of claims and assessment criteria regarding social processes. Second, prolonged periods of education and training are associated with greater scopes for experimentation and mistakes in contrast to work situations. Hence, the longer the periods of education and training, the less the work environment immediately shapes a person's attitude, and the more he or she is confronted with everyday influences.

The positive association of work and individual identity construction questions the traditional instruments of regulation and control, especially for highly qualified employees. However, this does not imply that firms reorganize workplaces according to employees' needs. As already mentioned, subjectification also refers to increasing demands for employees' subjective performances. In fact, decentralization, employee initiative and relative work autonomy are regarded as central productive resources (Wagner, 2007).

These increased possibilities for autonomy and self-realization within the working sphere are not only associated with chances, but also with risks. In a post-Fordist working world, responsibilities are transferred from top down and employees are conceded more possibilities for shaping processes themselves. This entails the risk of failing to achieve the self-imposed goals and assignments, which in turn has to be attributed to one's own failure. The structural shift of attributions to the individual also becomes obvious with respect to forms of performance-related remunerations and processes of target agreements, which induce employees to perceive themselves as mostly self-responsible (Wagner, 2007).

Whereas market risks are passed on to the employees, the management tends to promote the idea of inevitable market pressures. By displaying market pressures as a law of nature, the management is able to reject most of its responsibilities, as it presents itself as being simply forced to respond to the market signal (Jessen, 2005). The orientation of actions towards the market and the associated reorientation of attributions increase forms of conformation and the risk of self-exploitation. In contrast, the management seems as an executive organ of factual constraints (Wagner, 2007). This implies that the control exercised by the management to a substantial extent has been replaced by the self-control of employees, who have to shoulder more responsibilities. In combination with the subjectification of work, this market semantics implies that flexible, adaptable and engaged persons are fit for the market, whereas inflexible and passive persons fail and have to attribute this failure to themselves. These tendencies are also reflected in the reorganization the social state has undergone. In many countries, the model of the welfare state has been replaced by the "proactive social welfare state", accompanied with the re-commodification of work and new insecurities. Activation provides that citizens are no longer passive and dependent on state support, but individually responsible for their future and actively care for securing their life. This new mode of social policy is characterized by a combination of coercive and proactive instruments. Moreover, it is accompanied with an individualized interpretation of the causes for social exclusion, which is seen as a result of insufficient flexibility and adaptability (Trube and Wohlfahrt, 2001). This means that long-term unemployment or poverty are an expression and implication of personal deficits, lacking adaptability and own initiative or insufficient commitment. The idea of activation thus focuses on individual behavior, while social circumstances and preconditions for actually taking self-responsibility are neglected (Dahme and Wohlfahrt, 2002). The disciplining effects of this new form of social policy do not only concern beneficiaries, but the middle classes. As employees cannot expect comprehensive state benefits anymore, they tend to exploit themselves and minimize their expectations for various forms of compensation in order to keep their workplace (Wagner, 2007).

# 4 The Leisure Option and its Institutional Embeddedness

# 4.1 The Collective Agreement in Austria

Collective agreements are a key element of the system of social partnership in Austria and are regulated in §2 to §21 of the Labour Constitution Act ("Arbeitsverfassungsgesetz"). Negotiation parties consist of legal and voluntary bodies of representations of employees (Chamber of Labour or Austrian Trade Union Federation) and employers (Austrian Federal Economic Chamber). They agree on rights and duties of workers and salaried employees within a certain branch. Collective agreements typically regulate minimum wages, wage increases, notice periods, holidays, special payments and working time.

Collective agreements have to be within the framework of existing legislation. For example, the legally regulated maximal working time establishes the upper limit of possible collectively agreed working hours. But, negotiation partners are allowed to establish a lower working time norm for their branch. Additionally, regulations in the collective agreements form the statutory framework for special agreements on the company or individual level. In addition, company agreements and individual employee contracts must be favorable for the employee in order to be valid ("Günstigkeitsprinzip"). Therefore, the legal system in the realm of working conditions is created in a hierarchical order with laws at the top and individual agreements at the bottom. Regulations can be amended at lower levels only if they create more favorable conditions for employees.

Austrian unions started to set up collective agreements in the late 19<sup>th</sup> century and continuously extended the number of branches for which collective agreements were established. Agreements for groups of employees enormously enhanced the bargaining position of employees compared to individual contracts. In 1914, 500 collective agreements covered 17% of the employed population in Austria. Six years later a law was passed regulating the practice of collective bargaining which led to its further expansion in the 20<sup>th</sup> century. In 2010 coverage of collective agreements was at a comparably high level of 95.7% of the employed working population (Bauer, 2010).

### 4.2 Development of Working Time Regulations in Austria

The following section discusses the development of the work time norm ("Normalarbeitszeit") in Austria. If not stated otherwise, the information presented is taken from Klenner & Pellar (1999, 521 f) and Wolfram & Sandgruber (1995, 347 ff).

Over the last 150 years the work time norm has changed substantially. Up to the late 19<sup>th</sup> century, Viennese employees have usually worked between 12 and 16 hours a day under miserable working conditions. Weekly working hours fell from around 80 hours per week in the 19<sup>th</sup> century to around

40 hours per week in the present. This enormous improvement in working conditions is closely connected to the development of the Austrian unions. Already in the first years after their foundation in 1893, a shortening of the working day to a maximum of twelve hours was demanded. In 1885 a law entered into force ("Novelle zur Gewerbeordnung") restricting the maximal working day to eleven hours. Also, this regulation prohibited child labor for children below the age of 14 and installed a Sunday rest of 24 hours. However, working time regulations and other social policy measures were systematically circumvented by entrepreneurs. Often the progress made in legislation was not implemented in the factories. As a result, around 1900 a majority of industrial workers still had to work longer than the mandatory maximum of eleven hours.

SUFICHES DIRECT GREAT

Illustration 1: Poster demanding the eight-hour work day for Mai 1<sup>st</sup>, 1904

Source: SPÖ-Wien (2005)

The eight-hour day was demanded for the first time on Mai 1<sup>st</sup>, 1890 and remained the main objective of unions until the early 20<sup>th</sup> century (Illustration 1). Employees claimed "8-8-8" (SPÖ-Wien, 2005), referring to Robert Owen's slogan of "eight hours labor, eight hours rest, eight hours recreation". But the eight-hour working day could be achieved only little by little. The most inert system of regulations were parliamentary regulations. Occasionally, strikes led to company agreements in which shorter working days have been installed. But, collective agreements became the most promising tool to enforce the eight-hour working day. Until 1914 substantial progress has been made in terms of reducing working time in collective agreements. Indeed, lithographers and jewelry workers were able to install the eight-hour day before 1914. Eventually, in the course of the "great reform" of the Austrian social system beginning in 1918, a law enforcing the eight-hour

working day was passed. Therefore, the weekly working time was set at 48 hours, as Saturdays were still regarded as working days.

After the years of the "Red Vienna" no further progress in the reduction of the working week took place. On the contrary, unions had to counteract movements of entrepreneurs aiming at relaxing the eight-hour law. In particular, between the years 1934 and 1945, in which authoritarian Regimes ruled Austria during Austrofascism and Nationalsocialism, the free unions were disintegrated. Social rights stemming from collective agreements, for example, were replaced by new treaties resulting in worsened conditions for the working population. Only after the end of the Second World War, the foundation of the Austrian Trade Union Federation ("Österreichischer Gewerkschaftsbund" – ÖGB) as the umbrella organization for all Austrian unions promised to generate new impulses in terms of a reduction in working time.

Indeed, in the second half of the 20<sup>th</sup> century high economic growth rates enabled progressive reforms in Austria's social system. In 1959 a General Collective Agreement between the National Chamber of Commerce and the ÖGB was introduced including a 45-hour week. Weekly working hours were thus shortened by 3 hours. Moreover, ten years later Austrian social partners agreed upon the 40-hour week, which was introduced in three stages beginning in 1970. Eventually, in 1975 the legal work time norm was set at 40 hours per week. On top of that, until 1987 some collective agreements further lowered weekly working time. For around half a million of Austrian employees the maximum weekly working time has been set at 38 or 38.5 hours per week. Since then, no significant reduction in the work time norm has happened, even though unions proclaim further reductions aiming at a general 35 hours week.

In the field of working time regulation a common pattern can be identified: the impetus for new regulations runs contra the hierarchically nested levels on which regulation takes place. In the late 19<sup>th</sup> century, grassroots movements within companies culminated in strikes, resulting in company agreements which often included shorter working weeks for the employed. Later, in the beginning of the 20<sup>th</sup> century, collective agreements in several branches achieved shorter working hours below the legal norm of eleven hours per day. Indeed, one branch even installed the eight-hour day. Only after the First World War the eight-hour day, hence, the 48-hour week became law. Moreover, after the Second World War a general collective agreement decreased the work time norm to 45 hours in 1959. Ten years later a law introducing the 40-hour week was passed. To sum it up, in the past, collective agreements (sometimes also grassroots workers movements) always functioned as forerunners of parliamentary laws in the realm of working time policies.

The discourse on reduction of working time is led by two prominent arguments raised by the Austrian unions. Firstly, shortening the working week contributes to humanizing the work environment. The hardship of dreadful working conditions in the 19<sup>th</sup> century with working days up to 16 hours was by a large degree relieved due to reducing working time. Possibility of participation and increased leisure time were the union's main objectives. Secondly, distributional concerns were introduced to the discussion. In particular in times of high rates of unemployment unions argued that available work should be allocated among more employees. Indeed, employment increased and working time decreased especially in the 1970s. However, the causal link between shorter working weeks and increase in employment is far from being clear-cut (Bartunek, 1982; Flassbeck, 2013). Therefore, humanizing the working conditions and counteracting unemployment were the two main arguments in the union's discourse on reducing working time.

# 4.3 The Leisure Option in the Collective Agreement 2013 of the Electrics and Electronics Industry

The conclusion of the collective agreement 2013 for the electrics and electronics industry involved a novel aspect, the leisure option or so-called "Freizeitoption". It foresees the conversion of the granted income increases into consumable leisure time. The leisure option thus enables employees to individually choose between a pay increase and additional leisure time to the same extent. In the following, we discuss the legal provisions concerning the leisure option, the employment structure of the electrics and electronics industry as well as the actual usage of this new element.

# 4.3.1 Features of the Leisure Option

The use of the leisure option is based on the prerequisite that a company agreement has been concluded between the management and the works council. This agreement is of voluntary nature and cannot be legally enforced, neither by the company management nor the works council. With a company agreement it was then possible for the employees of the respective company to opt for the leisure option. In the event that no agreement has been reached, the employees were not able to choose the leisure option, but automatically received the pay increase as foreseen in the collective agreement. In companies without works council, the leisure option only could have been offered if the management had concluded an agreement with the unions.

The existence of a company agreement generally allows each employee of the particular company to receive additional leisure time instead of a pay increase. However, the approval of the employer is a necessary precondition for using the leisure option. Neither is it possible that the leisure option is ordered by the employer, nor do employees have the right to approval. Thus, only if an employee and the management were able to reach an agreement, it was possible to use the leisure option.

The implementation process was planned as follows: Until May 10, 2013, the intention to implement the leisure option had to be announced in the respective company. Employees then had the possibility to declare their interest for using the leisure option until May 24. In case a company agreement has been reached until the same date, until July 19 employees (who had applied before) could have concluded an individual contract with the management on using the leisure option.

According to the collective agreement, employees had the possibility to choose between a pay increase of 3% and additional leisure time of 5 hours per week for the occupation groups A to I. For the occupation groups J to K, the pay increase accounted for 2.8% and in case the leisure option was chosen, 4.67 hours of additional leisure were granted. These numbers of hours apply to full-time contracts, adding up to 60 hours per year. For an employee working 38.5 hours per week, the leisure option thus amounts to about 1.5 weeks or 7 to 8 days of additional holiday entitlements. The leisure option was also possible for part-time employees, who would receive time credits to a lesser extent, according to their agreed working time. However, it was not possible to use the leisure option for employees with an income below the minimum wage, or for employees whose income would have been below the minimum wage after the conversion of the pay increase into leisure time.

The leisure option is a lifelong assurance; thus, as long as an employee is in the same company, he or she is entitled to additional leisure time every year. However, in case an employee changes his or her job and is hired by another employer, agreements on the leisure option cannot be transferred. The leisure option thus only applies in the company where the agreement has been reached. If the entitlements are not consumed upon termination of the employment contract, employees are entitled to receive payments for their outstanding claims.

In general, the leisure option can be consumed hourly, by the day, on a weekly or monthly basis. It is also possible to cumulate time credits in order to take some time off. The point here is that, in contrast to vacation entitlements or flexitime credits, the assurance of the leisure option does not expire. Further it is stated that time credits have to be recorded in a separate time account and that the employer has to be informed about the balance every month. Negative time balances are not possible regarding the leisure option. Time credits accrue every year and cannot be renounced by the employee (FEEI, 2013a, 2013b).

In the collective agreement 2013, it is specified that the leisure option is, for the time being, only offered in 2013. It has been left open if this element will be repeatedly offered in subsequent collective agreements. The negotiation partners agreed on evaluating if the leisure option proves successful for both employers and employees (Soder, 2014). In fact, the leisure option has been implemented again in the collective agreement 2014. Whereas the general features remain the

same, modifications were made regarding the conditions of use and the hours of leisure time granted due to different pay settlements. Accordingly, in 2014 employees had the possibility to choose between a wage increase of 2.35% and additional leisure time of 3.93 hours per month, adding up to about 47 hours per year. The collective agreement 2014 further stipulates that it is not possible for employees to opt for the leisure option again if they have already made use of it the previous year. Moreover, it specifically addresses the issue of how to handle the leisure option in combination with partial retirement. Compared to the collective agreement 2013, the current version foresees a longer period for implementation: The collective agreement 2014 entered into force on May 1<sup>st</sup>, 2014. From this date on, all employees in the electrics and electronics industry received an income increase of 2.35%. Until June 30, works council and management were able to issue a declaration of intent in the respective company. Employees then had the opportunity to declare their interest regarding the leisure option until October 15. If a company agreement has been reached until September 19, employees were able to conclude an individual contract with the management regarding the usage of the leisure option until November 15. In that case, employees received the respective time credits from January 1st, 2014 on, and at the same time, the income has been reduced according to the pay increase received since May 1<sup>st</sup>, 2013 as foreseen by the collective agreement 2014 (FEEI, 2014a, 2014b).

After the initial introduction of the leisure option for the electrics and electronics industry, it also has been implemented in the collective agreement for the mining and steel industry, both in 2013 and 2014. Furthermore, a working group has been set up to evaluate the realization of the leisure option in the oil industry (Soder, 2014).

According to the union representatives we interviewed, it is the intention of the unions to expand the offer also to other branches. However, in order to offer the leisure option, the respective branch must have the appropriate conditions regarding the regulation of minimum wages. More specifically, as the income after using the leisure option must not fall below the minimum wage, it is only possible to offer the leisure option in branches where there is an adequate gap between minimum and actual wages. This is primarily the case in industries where the actual wages are increased by collective bargaining (in contrast to increases of the minimum wages). The earnings of employees in trade and commerce (except of the metal sector), however, are mostly close to the minimum wage, which makes the realization of the leisure option in these branches difficult.

In fact, in 2013 only companies with a works council entered into a company agreement and offered the leisure option to their employees. Companies without works council would have had to take own initiative and contact the union, which has not been the case. In general, if a firm permanently employs at least five persons, a works council is required. However, this rule is only legally

enforceable if the establishment of a works council is hindered. Indeed, there are several companies in Austria with more than five employees but no works council.

# 4.3.2 Employment in Austria's Electrics and Electronics Industry

In 2013 45,700 persons were employed in Austria's electrics and electronics industry as own personnel, representing 12.1% of all persons employed in the industry sector. In addition to the own personnel, 3,700 leased employees were working in the electrics and electronics industry, accounting for almost 8% of all employees. As can be seen from Figure 1, 51% of the employed in the electrics and electronics industry are salaried employees, from which 40% are men and 11% are women. With 38%, the share of workers is comparatively lower; this proportion comprises 26% male workers and 12% female workers. Apprentices account for 3% of the employed in the electrics and electronics industry (AK Wien, 2014).

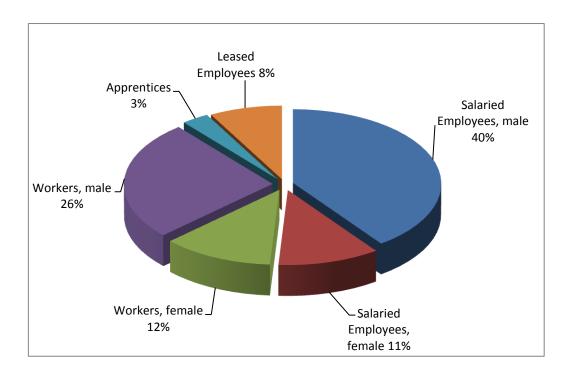


Figure 1: Employment structure of Austria's electrics and electronics industry

Source: own diagram based on data from AK Wien (2014)

After a period of continued good order situation, production in the electrics and electronics industry declined in 2012. Whereas the drop in production had hardly any negative employment effects in 2012, it resulted into a reduction in employment by 2.8% or 1,300 persons in 2013 (AK Wien, 2014).

# 4.3.3 Usage and Acceptance

So far, usage and acceptance of the leisure option only have been evaluated by some surveys conducted by unions among works council representatives. Since exact numbers on the usage are not available due to the absence of a central investigation, the results of these surveys are presented below.

In May and June 2013, a first inquiry has been carried out by the union GPA-djp, representing salaried employees. The survey aimed at assessing how the leisure option has been received in the companies, thereby asking 123 works council representatives about the general acceptance within the company, the intention to implement the leisure option in the respective company, as well as regarding the reasons for not realizing the leisure option. With a response rate of 60%, the results show that the leisure option generally has been received well: 60% of the respondents had a positive attitude, 17% were still undecided and 23% skeptical about the leisure option. Whereas 73% expected that the leisure option will not be offered in the respective company, only 27% of the respondents were convinced that the measure will be realized. According to the works council representatives, one of the main reasons for not introducing the leisure option was the negative stance taken by the management. Other reasons can be found in the short time period for implementation, or the negative attitude of the works councils. From this survey, GPA-djp drew the conclusion that the leisure option has generally been received very well by the works councils, and that the rejection by the management as well as the limited time period can be seen as the main impediments to implementation (GPA-djp 2013, cited from (Soder, 2014)). In Table 1 the companies of the electrics and electronics industry offering the leisure option in 2013 are listed.

Table 1: Companies offering the leisure option in 2013

Company	Region
Gebauer & Griller	Vienna
Infineon Technologies IT Services GmbH	Carinthia
BECOM Electronics GmbH	Burgenland
Metso Automation	Vienna
Siemens Rail Systems Graz	Styria
Gebauer & Griller	Lower Austria
AHT COOLING SYSTEMS	Styria
Siemens AG Österreich, Wien 21	Vienna
Siemens AG	Upper Austria
EATON	Lower Austria
Flextronics Int. GmbH	Carinthia
Philips CL	Carinthia
Thien eDrives	Vorarlberg
GE Healthcare Austria GmbH & Co OG	Upper Austria
cms-electronics	Carinthia
SAGÖ (Siemens)	Vienna
Hirtenberger Engineering & Technology GmbH & Co KG	Lower Austria
Traktionssysteme Austria	Lower Austria
Rockwell Automation GmbH	Upper Austria

Source: GPA-djp 2013, cited from Soder (2014)

In October 2013, GPA-djp conducted another survey among the works council representatives taking part in the GPA-djp's federal committee meeting. Whereas the first survey was only able to record the planned usage, this time the effective implementation could be evaluated. However, it must be borne in mind that the following numbers on the usage of the leisure option are not only based on actual data, but also partly on estimations of works council representatives. The works council representatives taking part in the federal committee meeting represented in total 13,950 salaried employees. 10,490 of these salaried employees were working in companies where the leisure option has been offered. In fact, 9.7% of the salaried employees (1,017 persons), who had the possibility to opt for it, have used the leisure option. In this context, the works council representatives noted that the general interest for the leisure option has been significantly higher than the numbers of actual usage imply. This gap can be explained by the relatively short time period for implementation and the prevailing uncertainties regarding its usage (GPA-djp 2013, cited from Soder, 2014).

Concerning the usage of the leisure option among workers, a survey has been conducted by the union PRO-GE in winter 2013. Questionnaires were sent out to 109 of the biggest employers in the electrics and electronics industry. The response rate was 77%, representing 13,462 employees in the electrics and electronics industry. From the 84 companies which have returned the questionnaire, 16 indicated that they have offered the leisure option. This means that in general 5,733 or 40% of the

workers had the possibility to choose the leisure option. The actual usage amounted to 8.2% or 440 workers (PRO-GE 2013, cited from Soder 2014).

The surveys conducted among salaried employees also provide some numbers on the distribution of the usage across gender, age and income groups. According to GPA-djp, the usage of the leisure option covers all salary groups of the collective agreement. Although not exactly specified, the numbers provided by the works council representatives imply that salaried employees in the lowest income groups did not choose the leisure option as frequently as employees in the medium and high income brackets. Contrary to the assumption that the leisure option would be more attractive to elderly employees, also younger employees showed considerable interest. According to the works council representatives, most of the salaried employees making use of the leisure option are within the age range of 30 to 50 years. Regarding gender, the usage corresponds to the gender ratio typical for the electrics and electronics industry (GPA-djp, cited from Soder, 2014).

According to the survey conducted by GPA-djp, the main problems concerning the implementation were the prevailing uncertainty regarding the accounting procedures or its practical implementation, and the narrow time frame between introduction and realization of the leisure option. Obstacles were also identified regarding the difficulties and uncertainties associated with outstanding vacation entitlements or flexitime credits. Problems concerning the implications on pension insurance payments or repeated usage in subsequent years turned out to be rather marginal (GPA-djp, cited from Soder, 2014).

#### 4.3.4 Summary

The leisure option ("Freizeitoption") has been first implemented via the collective agreement 2013 for the electrics and electronics industry in Austria. This novel work time measure enables employees to individually choose between a pay increase of 3% and additional leisure time of 5 hours per week for most of the occupation groups. However, first the works council and the management had to conclude a company agreement on offering the leisure option in the respective firm. Only then, employees had the possibility to individually opt for the leisure option, which had to be approved by the employer.

For a person working full-time, the leisure option amounts to 60 hours per year, or seven to eight days of additional holiday entitlements. Also part-time employees were able to use the leisure option; however, it was not possible for employees whose income would have fallen below the minimum wage. The leisure option entitles employees for additional leisure time every year, as long as they are in the same company. In general, the leisure option can be consumed hourly, by the day, on a weekly or monthly basis, or cumulated in order to take some time off.

So far, the usage of the leisure option has only been evaluated by some surveys conducted by unions among work council representatives. According to these surveys, 9.7% of the salaried employees (1,017 persons) who had the possibility to opt for the leisure option have actually used it. Regarding the usage of the leisure option among workers, the actual usage amounted to 8.2% or 440 workers.

A survey conducted among salaried employees reveals that the leisure option covers all salary groups of the collective agreement. Although it was expected that the leisure option would be especially attractive for elderly employees, also a substantial part of younger employees made use of the leisure option. Moreover, most of the salaried employees who opted for the leisure option are between 30 and 50 years old. The usage corresponds to the gender ratio typical for the electrics and electronics industry.

The leisure option has been implemented again in the collective agreement 2014. However, it stipulates that it is not possible to opt for the leisure option again if a person has already made use of it the previous year.

# 4.4 Position of Unions and Employers towards the Leisure Option

In this subsection, we discuss the positions that unions on the one hand, and employers on the other hand have towards the leisure option. Unless otherwise stated, the statements below are based on the results of three expert interviews we carried out with representatives of the union and works council representatives.

#### 4.4.1 Development and Formation Context

The leisure option facilitates a flexibilization of working time, both for employees and employers. Employers are able to use the additional leisure time for longer holidays, periods dedicated to education or for accumulating the time credits up to retirement. The advantage for employers is that it enables them to build up time credits in order to better balance fluctuations in demand. Besides, the leisure option implies that the nominal personnel costs remain constant (Soder, 2014).

According to the interviews we conducted with union representatives, the idea of embedding a leisure option in the collective agreement has been supported by both the unions' and the employers' side, however, with different intentions. Concerning the employers, they planned to offer the leisure option only for elderly employees aged over 50, against the background of cost savings. A fundamental debate was held regarding the group of employees who would potentially use the leisure option: On the one hand, there are elderly employees who are not that productive anymore. On the other hand, there are young, engaged employees with high levels of income and qualification, who are highly relevant to the company. In this context, concerns have been raised from the

employers' side that employees of the latter group could increasingly make use of the leisure option, in contrast to elderly employees.

On the contrary, it was the purpose of the unions to implement the leisure option as a universal offer. Although it was assumed that the leisure option would be more attractive to elderly employees, offering it only to this group would have constituted an unequal treatment. According to a union representative, the leisure option reflects the unions' approach to accommodate people's personal needs, which has been realized by offering an individual choice within the collective agreement – a rather unusual aspect that has been very welcomed by employees.

# 4.4.1.1 Change in Working Life

Especially one union representative emphasizes the role of the changes in working conditions with respect to the leisure option. These changes would arouse other needs, a situation to which unions attempted to react.

First, the working world has changed in the sense that work has become more and more atypical and flexible. With these terms, the interviewee mostly associates the fact that although the typical workplace – understood as employees working at their office workstations – still exists, people partly work at home or at construction sites. It would be difficult or even impossible to implement these changes in working conditions into a set of rules. However, this does not imply that employees cannot be treated fairly. In fact, flexitime arrangements are often lived out rather employer-friendly. Instead of arranging his or her working time freely, in reality flexibility often means staying in the company as long as there is work to do. In general, this increase in flexibility arouses different needs.

Second, according to the interviewee, the working world has also changed with respect to employees' income development. Nowadays, it is increasingly difficult to achieve an income increase outside of the collective agreement. Individual salary adjustments take place once a year, whereby only a small sharing of the total wage and salary bill is distributed among very few employees. Thus, although much more employees would deserve it, it can be granted to only very few. In former times, the income opportunities were much better, as the percentage of the total wage and salary bill was substantially higher, with pay rounds taking place twice a year. Limited possibilities for wage and salary increases constitute a problem, for example, for younger employees who wish to start a family or build a house. Although being employed in the same company for some years already, the realization of these kinds of plans is almost impossible, as the earnings of these employees are still close to the minimum wage.

This change in income opportunities also has an effect on employees' attitudes regarding their prospective employment opportunities. Compared to former times, it is not usual anymore to stay in the same company until retirement. Employees are also aware of jobs offered by competing domestic or foreign firms, possibly offering better income possibilities.

Lastly, the union representative also mentions increasing working pressure as an important aspect regarding the change of the working world. As all large corporations are confronted with personnel restructuring measures every year, the pressure on the remaining workforce rises. One of the reasons why holiday entitlements are often not consumed lies in the fact that employees have fear of losing their jobs.

In view of these altered conditions, the interviewee argues that other needs are created and leisure time becomes more important to employees. Accordingly, the leisure option can be regarded as the unions' approach to respond to these changed circumstances and people's personal needs.

# 4.4.2 Expectations of Usage

As the leisure option constitutes a novel instrument, no experiences existed concerning the extent to which it would be used by employees. However, unions expected that the usage would be correlated to age on the one hand, and to income/occupation groups on the other hand.

The assumption that the leisure option would be more attractive to elderly employees was based on the supposition that this group disposes of income sufficient for living and is thus less dependent on income gains. Moreover, it has been expected that, for employees aged 45 and above, reductions in working pressure would play a greater role, and that using the leisure option would allow for maintaining quality of work while decreasing the quantity of work, an aspect also relevant for employers. However, this assumption has been disproved as there has been almost no correlation between the usage of the leisure option and age.

Furthermore, it has been expected that the leisure option would be especially well received among employees who earn good money, as for these group of people money would not play such a great role compared to (leisure) time. As income is highly correlated to occupational groups, the unions also assumed that salaried employees would make use of the leisure option to a much larger extent than workers. The disparities of earnings also play a vital role when it comes to future pension payments. In case earnings exceed the maximum contribution basis for pension insurance, which was set at a gross salary of EUR 4,530 per month in 2014 (Bundeskanzleramt Österreich, 2014), making use of the leisure option would not imply any renouncements of future pension payments. However,

as most of the wages of workers are substantially below this maximum contribution basis, renouncing collective wage increases lowers the prospective pension payments.

According to an interviewee, the differences between workers and salaried employees do not only arise in form of income disparities, but also due to distinct working conditions. In contrast to salaried employees, the performance of workers is clearly measurable. That means that it is possible to observe if the required quantities are produced in a given timeframe. On the contrary, salaried employees are able to organize their time more freely, and it can hardly be detected to whom a phone call is made, or what the internet is used for.

The unions were therefore astonished that workers made use of the leisure option anyway. However, a union representative pointed out that salaried employees have chosen the leisure option possibly due to other reasons than workers did. Also, it has to be noted that these expectations partly have been formed based on a survey conducted by the works council among employees of the respective firms. As employees in workshops or doing assembly work can hardly participate in such surveys because they do not have a laptop, salaried employees might be overrepresented in these kinds of surveys.

# 4.4.3 Current Point of Views of Unions and Employers

#### 4.4.3.1 Unions

In general, the unions regard the leisure option as a seminal arrangement that is important and appropriate. It is considered as an alternative form of increasing prosperity, especially in the context of the limitations to economic growth. It is understood that, in the middle or long term, the instrument will assert itself. The experiences made are regarded as positive, not only because of the satisfying take-up rates, but also because the leisure option provides an instrument to meet the individual needs of people, and to achieve better working conditions and to share company profits with the employees. For these reasons, the unions are promoting the extension of the leisure option to other branches. At the time of the interviews, the collective bargaining process for the electrics and electronics industry has been in progress. One of the union's demands has been the repeated implementation of the leisure option in the collective agreement, a claim that finally could be enforced.

### 4.4.3.2 Employers

According to the union representatives interviewed, the leisure option has been met with mixed responses from the employers' side. After the conclusion of the respective collective agreement in 2013, some employers welcomed the idea, whereas others expressed themselves cautiously and first

wanted to wait for the experiences other firms make with this work time measure. Now, after the leisure option has been realized by some companies, the opinions of employers differ. While some firms are convinced by this option because it increased the satisfaction of employees and the attractiveness as an employer, some remained on the sideline, analyzing the experiences of other firms. Others show no interest, whereas some are upset that the leisure option is not offered in the own company. The employers' position highly depends on its respective economic situation; thus the size of the company, the type of products produced, market cyclicality, work organization or the financial possibilities of the firm in question play a vital role. Also, it has to be noted that the leisure option is less attractive in case of a shortage of skilled labor or a high volume of orders. Any of the small companies without works councils has offered the leisure option to their employees. Without works council, the firm would have had to get in direct contact with the unions, which did not happen. One union representative emphasizes that, although firms are not obliged to offer the leisure option, employees are aware of the existence of this element. Because of their latent interest, they partly complain in case it is not possible to make use of it in the own company, referring to the role the leisure option plays regarding the attractiveness for employers.

One reason for why the leisure option is opposed by the employers is the fear that employees would choose the option several times, if offered repeatedly in the collective agreements of the following years. For people with an income substantially above the minimum wage, it thus would be possible to accumulate seven or eight weeks of holiday entitlements. Due to that misgiving, one union representative indicates the possibility that, for the second time, the leisure option would be implemented in such a way that employees who have opted for the leisure option already in 2013 are not allowed to make use of it another time. Indeed, the result of the collective bargaining in 2014 reveals that the employers had been able to enforce this request.

#### 4.5 The Leisure Option in the Investigated Company

The investigated company is one of the biggest firms in the electrics and electronics industry in Austria, where a substantial number of employees made use of the leisure option. The statements below are again based on the outcomes of the expert interviews with union and works council representatives.

# 4.5.1 Implementation Process

According to the two members of the works council of the investigated company we talked to, for some time the leisure option has been a topic that strongly moved people. A works meeting was held concerning the issue, information emails were sent out and personal consultations with the works council took place.

The framework conditions for the usage of the leisure option have been set down in a company agreement, applying to all employees in the respective firm. Based on this company agreement, individual contracts have been concluded between the company and the employee. These individual arrangements have been prepared by the Human Resources department and have been submitted for signature to the respective superior.

In general, the leisure option can be consumed hourly, by the day, on a weekly or monthly basis, or cumulated in order to take some time off. However, some restrictions according to the field of activity have been set down in the company agreement. For example, it is not possible for employees with an all-inclusive contract and for shift workers to consume the leisure option on a daily basis. This provision concerning the consumption possibilities for different occupation groups was also part of the individual agreements.

The leisure option is generally managed like a holiday, but on a separate time account. As each employee making use of the leisure option has to be registered and managed individually, this constitutes a huge administrative burden. Also, as the collective agreement 2013, and thus the wage increases, has already entered into force on May 1<sup>st</sup>, the wage increases that had been paid out already had to be deducted from the following income payments.

The two interviewees both emphasized that there was very little time between the conclusion of the collective agreement, the company agreement, and the individual registration of employees. Another problem was the fact that some topics were still unresolved at the time of the conclusion of the collective agreement. This relates in particular to fiscal questions and social security issues. For example, it was not clear if the foregone wage increase would be subject to social security contributions. As a result, the works council contacted the health insurance company to negotiate on this issue, which first communicated that it would be treated as income that is subject to social security contributions. In the end, it has been agreed that no social contributions are to be paid on that amount, as the leisure option is not related to any cash flow. Also, taxes only have to be paid if the leisure option is being reconverted, or in case an employee leaves the company and outstanding time credits are disbursed. However, these open questions constituted an element of uncertainty to which the works council was not able to give an answer to. Together with the very tight time frame, this was a reason for why some people registered too late and could not make use of the option.

#### 4.5.2 Usage

Within the investigated company, about 700 employees, among them about 260 workers and 440 salaried employees made use of the leisure option.

Before the negotiation of the company agreement started and the decision for offering the leisure option was made, a survey among employees had been conducted in order to detect the general interest for the leisure option. About 1,600 employees, thus around 20% of the staff, declared an interest. Although only about half of the employees who revealed interest have finally opted for the leisure option, a works council representative points out that this number still constitutes a non-negligible amount of persons within a big company. The substantial gap between the employees interested and those who actually chose the leisure option can be partly explained by the very tight time frame within which the decision had to be taken, and several unresolved issues regarding the usage causing feelings of insecurity. The employees who registered too late could not be recorded by the system. But the works council declared to them that the unions would promote the repeated implementation of the leisure option in the following year, which would provide them the opportunity to choose the leisure option the year after.

Within the company in question, the leisure option has been granted to everyone who has registered in time. In contrast to some other firms in the same industry who approved the employees' requests only selectively, there were no such problems in the investigated firm.

# 5 Investigating the Leisure Option and the Preference for Working Less

The empirical part of this study provides an in-depth examination of the leisure option and the preference for working less in Austria by utilizing "case-oriented" qualitative interviews and "population-oriented" (Mahoney, 2008) regression methods. These two approaches follow different research logics which makes it a challenging endeavor to combine them fruitfully. The question arises, in which case a mixed methods research is superior to a mono-method study. A recent study by Goerres and Prinzen (2012) gives valuable answers to this question in setting up two necessary conditions under which a mixed methods approach might be preferable.

The first necessary condition addresses the issue of congruence. This means that both empirical parts must investigate the same social phenomenon which necessarily has to be sufficiently inert. Even though this might be of extra importance to sequentially applied mixed methods studies, it is also of great relevance to this study, which applies the two methods in parallel. We focus on attitudes towards work time reduction which can be regarded as being a relatively stable social phenomenon in the sense that these attitudes may change but exist over longer time spans, given the perpetual role of paid work in western societies. Hence they can be studied at two different points in time between the fieldwork period for the survey, which took place during the year 2012, and the fieldwork period for the interviews of our study in May 2014.

This study faces another issue of congruence in terms of how the different methods approach people's attitudes towards work time reduction. The qualitative interviews on the one hand examine employees' *decision* on the leisure option, whether they want to work less and get proportionally less money or whether they want to work the same amount and get a pay increase. On the other hand, the quantitative survey contains data on people's work time *preferences* on a weekly basis. As the survey participants' statement on their preferred working hours did not feed into an actual change in their work time arrangement, their answer must be regarded as hypothetical. In order to deal with the difference between decision and preference, we assume that people stating a preference for working less would behave accordingly if the leisure option would be offered to them.

The last issue of congruence between the two empirical parts concerns the concept of working time. In the survey people were asked about their preferred normal weekly working hours. The concept of the work week therefore is crucial for the quantitative analysis. But this might not apply for the leisure option, as this policy allows people to choose when to take time off. If people use it every week, the leisure option indeed reduces weekly working hours. However, if people save the entitlements to take, for example, one extra week off per year, weekly working hours may eventually

remain the same. As no study has shed light on how the leisure option affects employees' work time, the study at hand aims at gaining insight into this topic. Hence, the question of congruence cannot be completely answered in advance, but we will be able to do so afterwards. Following from that, uncertainty due to a lack of knowledge in particular on new phenomena like the leisure option may be an additional motivation for applying mixed methods studies.

Goerres and Prinzen mention a second necessary condition: the research questions must be stated in a way that allows for a meaningful combination of quantitative and qualitative methods. In our quantitative research we focus on the following question: What attributes do people possess who want to reduce their working hours? The qualitative part addresses the question: What are the motives that people state to argue their decision between a pay increase and additional leisure time? In fact, both questions aim at comparing people who want to reduce their working hours (quantitative) or, respectively, have chosen the leisure option (qualitative) from those who want to work the same amount (quantitative) or have chosen the pay increase (qualitative). While the quantitative part utilizes relatively hard attributes, the qualitative method enables us to shed light on motives and arguments.

In order to ensure a fruitful combination of methods, we adopt the "Triangulation" approach suggested by Goerres and Prinzen (2012). This approach suggests that two methods are run in parallel and results are compared and synthesized, thereby ensuring greater validity of the results, which is sometimes referred to as cumulative validation (Kelle and Erzberger, 1999). The point here is that triangulation generates "joint reinforcement; each component can stand alone, although they make a stronger argument in combination" (Lin and Loftis, 2005, 13).

Our approach of triangulation comprises three phases in the empirical work. In the *preparation phase*, we developed the overall research interest and the research question. Further, we established contact to the field and we got access to the survey data. Also, in close cooperation with each other we decided for the most suitable regression technique and developed an interview guide. The preparation phase was characterized by a high level of cooperation and coordination. In the subsequent *core phase*, each research was run separately. The survey data was analyzed and evaluated independently of the qualitative part, which consisted of interviewing the participants, transcribing the interviews and interpreting the data. This phase, in which there was hardly any coordination between the methods, ended by formulating the results separately as well. In the *final phase* we synthesized our results and formulated the joint conclusion.

The context for the qualitative analysis is provided by the case of the leisure option in the electrics and electronics industry in Austria. The 2013 collective agreement enabled employees to opt for

more leisure time instead of getting higher nominal wages. By applying quantitative methods on the preference for work time reduction in Austria and qualitative ones on that case, we closely follow Campbell's and van Wannroy's proposal that "[t]he best approach for a causal analysis of [...] work would seem to be one that combined quantitative analysis of large-scale data sets with in-depth interviews and theoretically-driven case studies in specific occupations and industries" (Campbell and Wanrooy, 2013, 22).

# 6 Quantitative Analysis: The Preferences for Working Less

The quantitative part seeks to describe relationships between a preference for working less and several predicting variables. In particular, we focus on the following research question: What attributes do people possess who want to reduce their working hours? The following sections discuss the data, the estimation procedure and the regression results.

All results presented in this thesis were calculated with R, i.e. a free software for statistical computing available under the terms of GNU<sup>1</sup> General Public License (R Core Team, 2014). In particular, the survey package, an R-extension for analyzing complex survey samples, was intensively used (Lumley, 2010).

#### 6.1 The Data

#### 6.1.1 The Austrian Microcensus

For conducting the quantitative analysis, we use the Austrian Microcensus 2012 gathered by Statistics Austria, Austria's national statistical office. This dataset displays some peculiar features which will be discussed in this section.

The Microcensus has been conducted since the 1970s and is regulated in the "EWStV — Erwerbs-und Wohnungsstatistikverordnung", i.e. a national law particularly made for conducting the Microcensus as a nation-wide social survey on income and living conditions. This national regulation was installed according to an EU regulation for establishing the European Labour Force Survey (LFS), which in 2004 required a major revision of Austria's biggest and most important social survey. As part of the LFS, the Microcensus needs to be conducted in accordance to European wide norms regarding sampling, coverage, size, etc. (Haslinger and Kytir, 2006).

# 6.1.1.1 Frame Population

The frame population for the sample selection consists of Austria's Central Register of Residence (CRR) ("Zentrales Melderegister"). It includes all households which are registered as a main household ("Hauptwohnsitz") and is run by the Austrian Ministry of Internal Affairs. The CRR represents a complete and up-to-date representation of all main residences in Austria. Yet, several groups of Austrian residences are not represented in the frame population, and hence not included in the final sample (Haslinger and Kytir, 2006). This applies to people in non-main residence

<sup>&</sup>lt;sup>1</sup> "GNU" is a recursive acronym standing for "GNU's Not Unix", where "unix" refers to a certain computer operating system.

households, i.e. households that are announced only as secondary households<sup>2</sup>, or people who have not registered their residence, like people without legal status and homeless people. Additionally, people living in institutional households, such as prisons, retirement homes, monasteries, hospitals, etc. are not regarded neither. Lastly, people residing in foreign countries, but working on Austrian territory are also excluded from the frame population.

As this study focuses on people in formal employment, the degree to which unrepresented groups distort the analysis varies greatly. For example, people without legal status are very unlikely to have formal employment. The same applies for homeless people and people living in institutional households. Thus, non-representation of these groups in the frame population does not diminish the validity of the results generated in this study. Indeed, the most important non-represented group is the one that is formally employed in Austria and lives abroad. As a result, it is important to keep in mind that all results presented in this thesis only apply for people living in main residence homes and are formally employed in Austria.

## 6.1.1.2 Sampling

When using complex surveys, it is common to apply more sophisticated sampling strategies (than simple random sampling). Typically, sampling procedures include one or more stages at which individuals are grouped in strata or clusters (e.g., Groves et al., 2004; Lumley, 2010).

Strata are generated by a sampling strategy called *stratification*. This strategy requires a division of the population into certain categories, for example into regions, thereby ensuring that a prespecified fraction of the sample is drawn randomly from each stratum in a way to enhance coverage of the population. Stratification usually leads to more precise standard errors and has become a standard in social surveys.

Cluster sampling is another widely used sampling strategy in modern social surveys. This sampling strategy implies that groups of people are sampled together, in contrast to the sampling of individuals. In particular, when individuals are spread over a wide geographical area, clustering reduces traveling time of interviewees, hence, lowers survey costs. Like stratification, clustering also affects survey statistics, but in a different way. Standard errors usually get larger when clustering is applied. The main reason for this is that people inside clusters are likely to share common attributes. For example, two people in one block of houses tend to be more similar than two people within a

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<sup>&</sup>lt;sup>2</sup> Students, for instance, sometimes remain registered (main residence) at their parents' home, even though they move to another town for attending university. The main reason for this is that social transfer benefits and the individual eligibility to them differ among regions.

city. Hence, clustering reduces the information content. By using survey weights, however, to a certain degree it is possible to account for the decreased precision resulting from cluster sampling<sup>3</sup>.

Clustering, furthermore, is often utilized at several levels or stages (Lumley, 2010). If all people within a cluster are sampled, it is called a single-stage design, in which the first (and only) stage is called Primary Sampling Unit (PSU). Further, sampling strategies often make use of more than one sampling unit, which is called Secondary Sampling Unit, Tertiary Sampling Unit, etc.

The Austrian Microcencus, in particular, mixes stratification and clustering. Stratification is done by dividing the overall Austrian population into the nine federal states which correspond to the NUTS-II-regions. From each stratum, households are selected randomly and all household members are sampled. Thus, the Microcencus represents a stratified and single-stage cluster sampling design with federal states functioning as strata and households as clusters (Haslinger and Kytir, 2006; Kytir and Stadler, 2004). Further, the Austrian Microcensus is a rotating panel survey, i.e. each household stays inside the sample for five subsequent quarters of a year. The first interview is conducted face-to-face, whereas the following four interviews are done via telephone. Every quarter year, about 22,500 private households, i.e. 1,700 households per week, are interviewed. This results in a sample size of 79,702 households and 180,941 individuals for the year 2012.

It is a special feature of the Microcensus that people sampled as interviewees are legally obliged to participate in the survey. The Microcensus, therefore, has much higher coverage rates compared to other social surveys. In 2005 for example, coverage reached almost 97% of the sampled households (Haslinger and Kytir, 2006).

#### 6.1.1.3 *Weights*

Each social survey selects a number of individuals from the frame population to get information on unknown characteristics. The resulting sample ideally should be a small and realistic representation of the population. For doing statistical analysis, the downsizing effect from the sampling process needs to be reverted by using survey weights. For simple random sampling, survey weights are constructed by taking the inverse of the sampling probability. Multiplication of each observation with its weight creates a distortion-free and representative picture of the population.

Due to peculiarities in the sample selection of the Microcensus, the calculation of survey weights gets more complicated. Selection probabilities vary between sampled individuals due to differences in strata and clusters. Also, the construction of weights is tied to the Austrian population register, i.e. a

<sup>&</sup>lt;sup>3</sup> Groves et al. (2004, 102-118) provide a detailed discussion on stratification, cluster sampling and their effects on survey statistics.

register run by Statistics Austria that is closely related to the CRR (Statistics Austria, 2011). This means that proportions of certain characteristics from the population register function as a guideline for identifying survey weights. Hence, the Statistics Austria iteratively<sup>4</sup> chooses weights in such a way that sample proportions of federal state size, age, gender, household size and nationality correspond to the Austrian population register. Eventually, if weights are defined correctly, the weighted Microcensus displays the same share of men and women, old and young people, etc., of the population register (Haslinger and Kytir, 2006). Therefore, survey weights increase the degree to which obtained results represent the population.

## 6.1.2 Definitions of Predictor Variables

Before discussing each variable in detail, there shall be three general remarks. Firstly, names of variables and names of variable levels are both written in italics.

Secondly, a variable's level of measurement is decisive for how it enters the regression. Numerical variables can be added to the regression without further specification. Factor (i.e. categorical) variables<sup>5</sup>, however, need special treatment when considering them in a regression. Plain factor variables, i.e. categorical variables that cannot be ordered, require defining a reference level with which all other levels are compared. This widespread contrast coding technique is known as *dummy coding*. In total, factors enter the regression with k-1 dummy variables, where k denotes the number of levels. In addition, ordered factor variables, i.e. factor variables that can be ordered, offer more contrast coding possibilities. We apply the default in R which is set at *orthogonal polynomial coding* (Hutcheson, 2011). This coding scheme aims at detecting linear, quadratic, cubic, etc. trends in the ordered levels. The number of trends estimated depends on the number of levels and is calculated with k-1 as well. Orthogonal polynomial coding should only be applied for approximately equally spaced ordered factors. To sum up, while numerical variables do not require contrast coding, it is essential for factor variables and ordered factor variables. The former enters the regression with dummy coding, the latter with orthogonal polynomial contrast coding.

Finally, many studies on work hour mismatches test for effects of factors conveying information about people's work related perceptions and attitudes. For example, Bloch and Taylor (2012) examine attitudes towards work and housework, as well as the degree to which a person is dissatisfied with the job. Other studies include career opportunity of the job, or whether the job is perceived as interesting or not (Otterbach, 2010). Our study aims at identifying people who want to

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<sup>&</sup>lt;sup>4</sup> See Haslinger & Kytir (2006) for a detailed description of the iterative process and the identification of survey weights applied for the Microcensus.

<sup>&</sup>lt;sup>5</sup> We apply the notation suggested by R.

reduce their working hours by relating them to relatively 'hard' and easily accessible factors. That is why we have decided against the inclusion of 'soft' factors about individual perceptions and attitudes. In doing so, we want to enable policy makers to easily identify this group of employees by referring to already existing information, such as actual working time, educational attainment, seniority, gender, age, etc. Information about employees' satisfaction level, attitudes towards childcare or other housework may not be available that easily. Therefore, the selection of variables for this study is also motivated by the anticipated applicability of the results for policy makers.

We categorize all relevant variables into four thematic groups: (1) socio-demographic factors, (2) household and family characteristics, (3) employment conditions and (4) extrinsic motivators. Each explanatory variable is attributed exclusively to one of the four groups. In the following part, each variable is discussed in detail<sup>6</sup>. As the variables from the Microcensus were renamed for this research, we will refer to the variable's original name in brackets and quotation marks.

#### 6.1.2.1 Socio-Demographic Factors

We consider two socio-demographic factors for the regression. Firstly, a person's *age* ("balt") is included, as well as its squared term coined *age2*, in order to allow for a quadratic effect of a person's *age* on the dependent variable. As previous studies have detected positive, negative and no significant relations between *age* and the probability to reduce working hours, we cannot formulate a precise expectation for our estimation.

Secondly, the highest educational degree obtained ("xkartab") is labeled *educ*. The original variable offers a detailed breakdown into eight educational degrees, which we reduce into four ordered levels. People having finished minimum compulsory school are labeled *primary education*. *Lower secondary* contains people having completed apprenticeship, craftsman's examinations or Austrian middle schools, i.e. vocational schools without matriculation degree. *Upper secondary* comprises all schools with a matriculation degree and all post-secondary schools that do not belong to the university sector. Lastly, people having obtained a university degree are grouped in *tertiary education*. The education variable enters the regression with dummy coding.

According to empirical findings, educational attainment is positively related to the probability of preferring shorter working hours (Golden and Gebreselassie, 2007). However, the authors did not create a sound theoretical concept of how education as such could affect the preference for working less. They argue that much of the effect is connected to different job characteristics depending on the level of education. Nevertheless, we anticipate a positive relation between the two variables.

<sup>&</sup>lt;sup>6</sup> Descriptions of concepts applied by the Statistics Austria are taken from Statistics Austria (2012a).

#### 6.1.2.2 Household and Family Characteristics

The Microcensus offers a variable on the type of household ("xhhtyp") based on the household-dwelling concept, saying that all people living in the main residence belong to the household. From the original variable we derived a new one coined *relation*, measuring whether a household is inhabited by a *couple*, a *single* person, or by *other* forms of cohabiting. The *couple* category contains all married and un-married couples with and without children. The *single* category comprises single households with and without children. The *other* category captures the effect of two- and multifamily households, as well as non-family households with multiple inhabitants. Unfortunately, due to the small group sizes, the latter two categories pooled in the *other* category could not be regarded separately.

The *children* ("xanzkind") variable is also allocated to the group of household and family characteristics. This variable comprises all children living in a household, irrespective of the children's age or occupational status, and also includes stepchildren and adopted children. As we believe that having no child (*0 children*) shall be treated categorically differently from having children (*1 child*, *2 children*), we add this variable as a non-ordered factor.

Furthermore, the age of the children is expected to have an impact on people's work time preferences. We add a variable measuring the age of the youngest child in the household called agechild. The presence of a child between 0-2 years, 3-5 years, and 6-14 years is compared to this categorical variable's reference level coined no child < 15. The reference level thus groups households without children and those having children above the age of 15.

Finally, we add a categorical variable called *earners* comprising two levels: *single earner* for households with only one person working and *multiple earner* for households with more than one person contributing to the household income.

Estimates of all variables in this group of household and family characteristics are expected to support the male breadwinner & part-time norm (Fagan et al., 2001). In terms of the number of children and the age of the youngest child, this might result in a higher propensity for reducing working hours for women. Dual-earner couples might face a time squeeze (Clarkberg and Moen, 2001) which creates a normative pressure on women to reduce working hours. According to this kind of gender division of labor, men should provide the family with financial means; hence, none of these household variables is expected to create a negative work hour mismatch. On the contrary, if women (partly) withdraw from employment, the pressure to generate household income might induce men to increase their working hours (Reynolds and Johnson, 2012).

#### 6.1.2.3 Employment Conditions

This group of explanatory variables aims to describe a person's employment related conditions. For doing so, we take account of a number of variables offered by the Microcensus.

We include a person's *position* ("dbers") denoting whether a person is employed as a member of the three following groups: *workers, salaried employees* or *civil servants*. Self-employed workers and family workers, i.e. people helping other self-employed family members with whom they share the household, are excluded from the analysis due to missing data problems. In particular, they lack data on income as the Microcensus only includes income data for non-self-employed via the payroll tax statistics.

Additionally, we regard the size of the premise, coined *premsize* ("danz"), as relevant. The Microcensus offers an ordered factor describing the number of employees working at the premise. We use the information contained in the original variable for constructing levels for premises with *1-10, 11-49, 50-499* and *500+* employees. Also, the time span a person is working in the current job may be important. Therefore we transform the original "dseitz" variable into *seniority*, measuring the years an employee is working in the current job.

Furthermore, the *leading* ("dleit") variable measures whether a person is instructing and supervising fellow employees. This does not only apply to executives, but also to people in lower positions. The variable has two levels: *leading* and *non-leading*.

Moreover, the duration of employment contracts is tested by adding a variable called *temporary* ("dfrist"). We distinguish between *non-temporary* contracts, contracts up to 35 months (0-35 months) and temporary contracts for longer time periods (36+ months). People working in temporary jobs face greater insecurity in their job (Böheim and Taylor, 2003), and thus might provide for times without employment. In this context, it is very likely that those persons try to save money by working more in order to counteract financial shortages in times of unemployment. The degree to which this mechanism prevails is dependent on how social security institutions support the unemployed. Nevertheless, it is expected that people working in temporary jobs are less prone to state a preference for shorter working hours.

The *sector* ("xdwzab08") a firm is allocated to is added to the regression as well. Following the standard classification we distinguish between the agricultural (*1. sector*), the industrial (*2. sector*) and the service sector (*3. sector*).

Moreover, we consider a person's *occupation* ("xdberg08") as relevant. This variable follows the International Standard Classification of Occupations (ISCO), i.e. a taxonomy that organizes jobs into groups depending on their nature. The ISCO was developed by the International Labour Organization (ILO) and is widely used for statistical applications (ILO, 2012). We label people working in the management as *executives* (ISCO-08: 1). Academic occupations like scientists, teachers, jurists, etc. are grouped as *professionals* (ISCO-08: 2). Technicians, associate professions as well as clerical support workers and service and sales workers are represented by the category *service workers* (ISCO-08: 3, 4 and 5). The *skilled workers* category contains all skilled agricultural, forestry and fishery workers, as well as craft and related trade workers (ISCO-08: 7 and 8). Lastly, *elementary workers* groups all elementary occupations and members of armed forces (ISCO-08:9 and 0).

Lastly, a person's actual hours worked is likely to have an impact on whether a person wants to decrease working hours or not. The Microcensus provides information about people's main ("dstd") and second job ("estund"). For each person the numbers of hours worked in both jobs are added and coded as *whactual*. The section on working hours thoroughly discusses this variable.

In terms of employees' actual working time, we expect its relation to the preference for working less to be strictly positive. We do so, firstly, on empirical grounds, as this association is clearly supported by previous empirical findings (see Chapter 2). Secondly, the realm of working time is highly regulated by laws and framed by norms which have a strong impact on employees' preference formation. What we call the work time norm is expected to lastingly mold the aspirations of people. Thus, it can be assumed that people working more than 40 hours a week have a tendency to reduce and vice versa.

#### 6.1.2.4 Extrinsic Motivators

Typically, employees are seen as extrinsically motivated by their remuneration. That is why we take a person's hourly wage coded as *incperwh* into consideration. This variable is constructed by taking net monthly wages ("rincmon") and dividing them by 4, assuming four working weeks per month, generating weekly wages. Further, we divided weekly wages by the hours worked per week.

The reason for taking hourly wages and not monthly wages is that monthly wages are highly correlated with the total number of hours worked (*whactual*), resulting in a high degree of colinearity in the regression. It further has to be mentioned that income data is only available for employed people. Unfortunately, no income data is provided for self-employed. This is due to the fact that the Microcensus is connected to the national payroll tax statistics which only includes official income data for the non-self-employed. Hence, people are not asked what they earn during the interview, instead their income data is added to the data, if available.

The most favorable aspect of this survey approach is its high quality of data. Usually, a considerable amount of respondents refuses answering questions on their income. Also, it has been shown that misreporting is a serious problem (Kim and Tamborini, 2014; Neri and Zizza, 2010). Typically, the resulting income distribution therefore displays inequalities that are too small. From this point of view, taking income data from the national payroll tax statistics is highly recommended. However, the major weakness of this approach is that it lacks data on self-employed. As a result, we had to omit this group of people from our analysis. Also, we have to accept that, in case a person is employed in one job and self-employed in another one, the income data only reflects the income generated in the job in which the person is employed. But, in the subsequent chapter on working hours, it will be shown that the share of second jobs is rather small. Hence, data problems resulting from the lack of income from self-employment for those being also employed in another job may be rather negligible.

However, there is another more serious repercussion stemming from lacking income data for the self-employed. On theoretical grounds it was intended to consider total household income as the relevant income variable. Using total household income instead of personal income is widely used in economics, due to the assumption of positive effects of scales in the size of households. This aspect of sharing within household members, for example, is represented in OECD's or EUROSTAT's calculation of equalized household incomes (EUROSTAT, 2014). As a result of lacking income data for self-employed, we would have had to exclude all households with at least one person working self-employed. Otherwise, household income would have been seriously flawed. Eventually, we have decided to exclusively consider the personal income of the employed.

In terms of financial incentives we form our expected results on the basis of the backward bending labor supply curve that states a negative relation between wages and the preference for reducing working hours for lower income levels; above a turning point it suggests a positive relation of wages and the preference for reducing.

## 6.1.3 Working Hour Variables

The Microcensus asks several work time related questions. For the purpose of this study it seems most appropriate to use three of them, all of which are directed at a person's *normal weekly working hours*. Two of them examine actual normal hours worked in the main and in the second job. The sum of both numerical answers will be used as a person's *actual normal weekly working hours*. The third relevant question asks about a person's *preferred normal weekly working hours*. In particular, we focus on the mismatch between actual and preferred hours. The following parts provide a detailed

discussion on these aspects. Before doing so, the concept of work used in the Microcensus shall be presented.

#### 6.1.3.1 The Labor Force Concept

The Microcensus uses the Labor Force Concept (LFC) of work. In the advent of the European-wide Labor Force Survey (LFS), the ILO decided on central concepts on work related issues, which were then slightly adapted by EUROSTAT. According to the LFC, all people aged 15 or above are assigned to be employed, unemployed or non-employed. In the following, we focus on the definition of employment, because unemployment and non-employment are not at the core of the present study. An elucidative description of all three concepts is presented by Kytir & Stadler (Kytir and Stadler, 2004).

For being employed according to the LFC, it is essential to have a paid job for at least one hour during the reference week, a week randomly assigned to each household in the survey. If a person is not working during the reference week, he/she still is seen as employed in case the person has a job in general. If the duration of absence from the job exceeds three months, the person needs to get more than 50% of remuneration in order to still to be counted as employed. This definition further comprises people on parental leave and people temporarily staying away from work due to sickness or injuries. Even though this definition excludes unpaid workers within households, it includes people that help other self-employed household members, for example at a farm. Recruits and people in community service ("Zivildienst") are not conceptualized as employed.

This definition of work heavily leans on the notion of formal paid work. Informal kinds of work, such as housework, are excluded. From a gender perspective, such narrow concepts of work have been criticized, whereas more extended concepts have been developed (see e.g. Biesecker and Hofmeister, 2010). But, as this study is about reducing formal paid work, it is essential to use a narrow concept of work along the lines of the LFC.

## 6.1.3.2 Actual Normal Weekly Working Hours

It is important to stress again that we exclusively focus on working hours a person normally works per week. The Microcensus also queries working hours in a specific reference week for capturing the variation of working hours per week within a year. We, however, are not interested in seasonal fluctuations of weekly hours worked. Instead, we focus on the working hours normally worked per week. Further, it is worth noting that all work time related questions in the Microcensus focus on weekly working hours. Neither does the survey contain questions on monthly or yearly working time, nor it asks about working time over the life cycle. A possible explanation for this is that weekly

working hours are most accessible to people, rather than monthly, yearly or life-long working time. This may also be the case because regulations on working time in the 20<sup>th</sup> century shifted from regulations of daily working time to weekly working time, as shown in Chapter 4.2. Thus, weekly working hours is the most common concept for present debates on working time.

On actual hours worked, the Microcensus asks two questions. The first one focuses on the main job and can be translated into "How many hours do you normally work per week in your main job? Please include regular hours of overtime worked, but please exclude breaks longer than 30 minutes!"<sup>7</sup>. The main job is defined as the job with the higher time exposure in the reference week. In the Statistics Austria's explanation document attached to the data (Statistics Austria, 2012c) it is further noted that the normal working week shall be thought as a working week without any interruption, like holidays. Moreover, overtime shall be added, regardless if it is paid out or not. The second question on actual working hours asks about working time in a second job: "How many hours do you normally work in your second job?" For the question about the second job, the same definitions apply as for the question about the main job.

Adding hours worked in the main and in the second job generates actual normal weekly working hours. We call this variable *whactual*. At this point the question arises what the contribution of the main and of the second job is to *whactual*. This question can be answered by creating the share of working hours in the main job of *whactual*. For doing so, we sum up the working hours in the main job, the second job and of *whactual* for all employees. Adding up *whactual* generates 121.807.397 hours. Doing the same for working hours in the main and in the second job and relating these numbers to the sum of *whactual*, we see that 98.77% of the hours worked during a normal week are performed in a main job. Only 1.23% of the hours worked comes from a second job. Therefore, in Austria people predominantly work in their main jobs.

An analysis of the distribution of *whactual* presented in Table 2 shows that 48% of the employed population in Austria normally work between 38.5 and 40 hours, 28% work up to 38.5 hours and 23% work more than 40 hours. Roughly speaking, half of Austria's working population is working according to the work time norm. One quarter is working less and another quarter is working more than that.

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<sup>&</sup>lt;sup>7</sup> Original wording: "Wie viele Stunden arbeiten Sie in Ihrer (S: selbständigen) Haupttätigkeit normalerweise pro Woche (U: einschließlich regelmäßig geleisteter Überstunden (TZ: oder Mehrstunden)? Mittagspausen über 30 Minuten bitte abziehen!" (Statistics Austria, 2012b).

<sup>&</sup>lt;sup>8</sup> Original wording: "Wie viele Stunden arbeiten Sie normalerweise in Ihrer Zweittätigkeit?" (Statistics Austria, 2012b).

#### 6.1.3.3 Preferred Normal Weekly Working Hours

Interviewees are also asked how much they want to work in total per week. The question can be translated into "How many hours per week would you normally prefer to work in all your jobs?" This variable is named *whpref* referring to *preferred normal weekly working hours*. Questions on preferred working time typically raise the problem which extra information on a potential income change should be provided to the interviewee. The respective question in the Microcensus does not explicitly hint at any income change due to a preferred increase or decrease in working hours. However, in the supporting documents for interviewers (Statistics Austria, 2012c), it is mentioned that the question's objective is to create knowledge on people's preferred working hours, even if they would face a reduction of income in case of decreasing working hours and vice versa. It is thus likely that interviewees orally point at a change in income during the interview. Respondents, however, should decide on the amount of change in income by themselves.

The Microcensus' approach on how to construct the question on preferred working hours is valid, as by now there is no homogenous use of this question among large-scale surveys (Campbell and Wanrooy, 2013). In most surveys the question suggests an open choice by subsequently adding the condition of income changes. Some surveys provide a rather weak condition by pointing out that people should take into account the amount of income they need to make a living (Bielenski et al., 2002; Drago et al., 2009; Reynolds and Aletraris, 2006). This kind of question is used, for example, by the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The condition can be gradually intensified, for example, by stating that income changes proportionally to the change in working hours, as applied by the Survey of Employment Arrangements and Superannuation (SEAS) (Australian Bureau of Statistics, 2000). Hence, the wording of the question on preferred working hours varies among surveys.

Due to differences in wording, a problem of comparability arises, because the results are sensitive to the framing of the question. Unfortunately, no study thoroughly examined the framing effect of questions on preferred working hours. But, substantially varying results indicate that the wording of the question influences respondents' answering behavior. For example, results on the share of US employees who want to work less vary between 6% and 50% (Golden and Altman, 2008). Campbell and Wanrooy indicate that "the tighter the conditions in the question; the smaller the proportion of respondents who state a preference for change" (Campbell and Wanrooy, 2013, 5). The structure of the question thus can cause substantial variations in the answering behavior.

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<sup>&</sup>lt;sup>9</sup> Original wording: "Wie viele Stunden pro Woche möchten Sie insgesamt, also alle Beschäftigungen zusammen, normalerweise arbeiten?" (Statistics Austria, 2012b).

The Microcensus' question on preferred working hours does not contain any explicit condition in the wording of the question itself. But, the interviewers are encouraged to explain that people should consider a change in income, but they are not obliged to. Hence, in comparison to other social surveys the income condition in the Microcensus can be regarded as very weak. As the effect of wording on the question of preferred working hours is not elaborated thoroughly, we apply Campbell's and Wanrooy's observation that tighter conditions generate stickier answering behavior. Resulting from the weak income condition in the wording of the question in the Microcensus, we therefore expect a comparably large share of people to state preferred working hours that are different from their actual ones.

Moreover, as a special feature of the mixed methods design, we are in the lucky position to have transcripts on interviewees' reactions on the question of preferred working hours from the qualitative field work. After the qualitative interviews have been finished, we asked respondents to fill in a short questionnaire with a selection of relevant questions from the Microcensus, including the question on preferred working hours. The transcripts from the recordings shed additional light on how respondents perceive this question. Regarding the condition on income change, we applied the logic of the Microcensus and orally explained that people should consider an income change similar to the leisure option.

Among the 17 interviewees, six filled out the questionnaire without commenting on the question on preferred working hours, hence they cannot be interpreted. The same applies for two respondents that only stated feeling "okay" with their current work time arrangement. Further, to some respondents the question had an irritating effect at first glance. One person asked if other respondents really write down their preferred hours. Another respondent asked if this is a serious question. A third respondent did not answer the question, because he felt that insufficient information was presented.

In total, six respondents reasoned their decision orally and they can be categorized into three groups. First, two respondents considered working time as the decisive factor for their choice ("30 hours per week! That would be pleasant"). Income was not considered relevant, even though both stated lower preferred hours than actual.

Second, two respondents reflected on reduced working time and potential income losses. For example, one respondent working full-time gave an impulsive answer of 24 hours, but shifted towards 35 hours, once a possible income change was mentioned by us. This behavior is especially of interest as it provides evidence for the previously mentioned assumption that tighter conditions on income changes generate lower deviations from actual working hours.

Third, two respondents working full-time indicated a preference for working 30 hours but they added that the current job does not allow for such a reduction in working hours. One of them then shifted back towards 35 hours per week, which underlines the assumption that preferences are formed in the context of desire and feasibility (Bielenski et al., 2002).

This discussion indicates that respondents perceive the question on preferred working time quite differently. While some can give a straightforward answer, others think and reason, partially referring to income changes. Most importantly, the analysis shows that people at least partly form their preferences according to two previously made assumptions. First, when stating their work time preference respondents stroke a balance between what they desire and what they perceive as feasible. Second, some respondents indicated a preference for shorter work hours but they shifted back to a certain degree after a potential income loss had been mentioned. This shows once again that the conditions on income changes in the question matter.

## 6.1.3.4 Comparing Actual with Preferred Normal Weekly Working Hours

In this section we compare actual working hours and preferred ones. This can be done on an aggregate and on an individual level. While the first captures the overall structure of both variables, the latter takes into account combinations of *whactual* and *whpref* for each person. We will start with the aggregate level by discussing characteristics of the two variables' density functions. Then, we compare the values of the two variables separately for each individual.

In order to introduce characteristics of variables, population density functions provide a useful tool. Figure 2 shows the kernel density estimation of *whactual* and *whpref* with equal bandwidth. The plot suggests that both distributions are highly concentrated between 38.5 and 40 hours. We refer to this range of weekly working hours as the work time norm which is indicated by the shaded area in Figure 2. The major peak of the function of preferred working hours exceeds the one from actual working hours, indicating that more people prefer working according to the work time norm than actually do work these hours. Values of 30 and 35 hours per week also seem to be desirable as here too the density for preferred hours is greater than the one for actual hours. This pattern suggests that the mean for preferred weekly working hours is somewhat lower than the one for actual hours. Indeed, the mean for preferred working hours is 36.5 hours per week, whereas the one for actual hours is 37.3.

Additionally, both distributions have minor peaks appearing periodically on the left and on the right of the main peak. Many respondents position themselves at values such as 20, 25, 30 and 35 hours per week. For interpreting these minor peaks it is important to keep in mind that these values were generated in an interview situation and not by an objective and detailed examination of working time

at the respondents' premise. In an interview situation it is likely that respondents give a rounded average of their normal working hours. Therefore, the smaller peaks shall be interpreted carefully, as they likely give more evidence about people's rough use of numbers in everyday calculations, rather than genuinely hours worked and preferred.

0.20 whactual whpref 0.15 Density 0.10 0.05 0.00 10 0 20 30 40 50 60 70 80 weekly working hours

Figure 2: Densities of actual and preferred working hours and the work time norm represented by the shaded area

Source: Microcensus 2012, own figure

Table 2 displays that 53% of Austrian employees desire to work between 38.5 and 40 hours per week, i.e. 5% more than those who actually do so. 31% want to work less than 38.5 hours, which is a slightly higher fraction than for *whactual*. Finally, 16% prefer to work more than 40 hours, compared to 23% who actually work that long.

This analysis has shown patterns of the distributions of *whactual* and *whpref*. However, the discussion does not allow inferring knowledge about which individuals want to increase or decrease their working hours. For making inference about individuals, we have to compare actual and preferred working hours for each individual separately.

Table 2: Participation in percent in categories of actual and preferred working hours

Variables	0-38 h	38.5-40 h	41-120 h	Sum
Whactual	28	48	23	100
Whpref	31	53	16	100

Source: Microcensus 2012, own calculation

Figure 3 displays a scatterplot of *whactual* and *whpref* on an individual basis. Each circle in the figure shows the combination of actual and preferred working hours for an individual employee. The circles further differ in opacity representing survey weights. As survey weights can be thought as the number of people in the population represented by an individual in the sample, darker areas indicate a higher density of people and vice versa. The scatterplot further shows dominant lines, indicating popular values in the distributions equivalent to the peaks in Figure 2. Most prominently, the 45 degree line represents people who want to work the same amount as they actually do. This line separates the sample into two parts. People wanting to work longer than they actually do are situated above the 45 degree line. People wanting to work shorter than they actually do are located below the 45 degree line.

Also, a loess curve of *whpref* on *whactual* is plotted for illustrative purposes in orange. Up to the work time norm, the loess curve is positioned above the 45 degree line, whereas for regions above it, the curve falls below this line. Only few people work more than 80 hours, which creates high fluctuations in the loess curve in these areas<sup>10</sup>. In summary, this means that, on average, people working short hours have a preference for longer ones; people working long hours tend to prefer shorter working hours. Both groups display a preferred move towards the work time norm. People working relatively few hours and wish to increase working time hardly want to work more than 40 hours and vice versa.

<sup>&</sup>lt;sup>10</sup> Indeed, it is hard to believe that some employees work more than 80 or 100 hours per normal week and there may be reasons for treating them as outliers. But, the subsequent regression was run for two subsets excluding employees above 100 and 80 hours per week, thereby testing whether the exclusion modifies the regression results. In fact, it did not. Therefore, we relied on the data without excluding employees working extremely long hours.

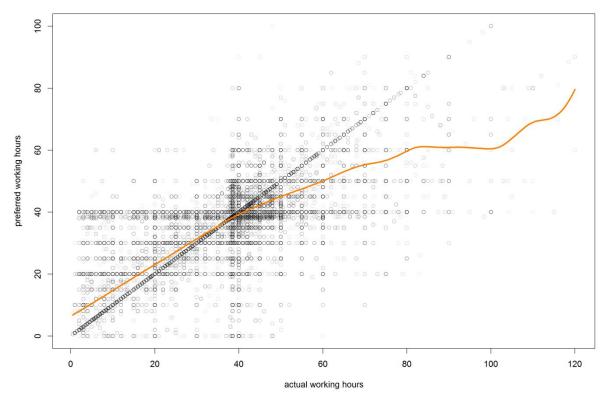


Figure 3: Scatterplot of actual and preferred working hours with a loess curve

Source: Microcensus 2012, own figure

# 6.1.3.5 Work Hour Mismatch and Mismatch Groups

For the further discussion it is useful to introduce the notion of work hour mismatches, denoting whether actual and preferred working hours match or to what extent they do not (Reynolds, 2003). In short, the mismatch describes the difference between preferred and actual normal weekly working hours:

$$mismatch = whpref - whactual$$

People on the 45 degree line in the scatterplot want to work the same amount as they actually do, hence, their mismatch = 0. People above the 45 degree line want to work more and are characterized by a positive mismatch. Accordingly, for people who want to work less, the mismatch becomes negative.

The overall distribution of the mismatch is plotted in Figure 4. Both the histogram and the kernel density estimation indicate an extremely concentrated distribution of the mismatch around zero. The figure shows that more than 70% of the Austrian working population want to work the same amount as they actually do. Even though the distribution ranges from -75 hours to +57 hours, there are hardly any values above +/- 20. Due to that reason, the plot is limited to values between +/- 25.

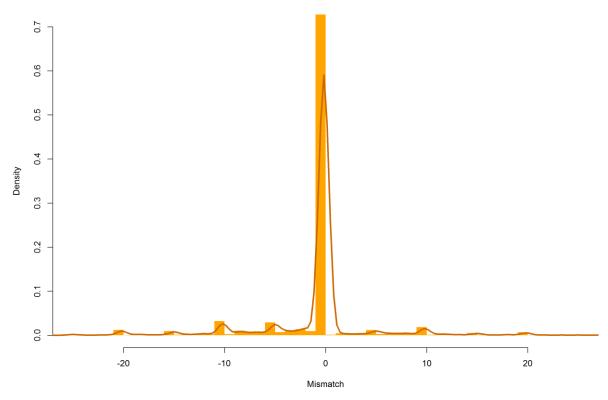


Figure 4: Histogram and density estimation of work hour mismatches

Source: Microcensus 2012, own figure

Logically, the discussion on individual values of *whactual* and *whpref* allows us to derive five distinct groups of employees, resulting from combinations of particular values in the working time variables. Employees whose actual working hours match the preferred ones shall be coined Nonchangers, highlighting the fact that they do not want to change their actual hours. People with positive mismatches can be allocated into two groups: Increasers, i.e. people wanting to increase their working hours, and Starters, i.e. people who want to start working. Similarly, we divide people with a negative mismatch into those who want to decrease working hours, named Reducers, and those who want to stop working, named Stoppers.

# Put in more formal words:

- 1. Starters comprise people who are currently not working, but want start working. For being a Starter, two conditions need to be fulfilled: whpref > 0 and whactual = 0.
- 2. Increasers comprise people who want to work more than they actually do. For being an Increaser, three conditions need to be fulfilled: whpref > 0, whactual > 0 and whpref > whactual.
- 3. Nonchangers comprise people who want to work the same actual working hours. For being a Nonchanger, three conditions need to be fulfilled: whpref > 0, whactual > 0 and whpref = whactual.

- 4. Reducers comprise people who want to work less than they actually do. For being a Reducer, three conditions must be fulfilled: whpref>0, whactual>0 and preferredwh<actualwh.
- 5. Stoppers comprise people who want to stop working. For being a Stopper, two conditions need to be fulfilled: whpref = 0 and whactual > 0.

Among these five groups, Starters are not included in the sample. Only people already working were asked about their preferred normal weekly working hours. For future surveys it could be considered to extend the range of respondents for the question on preferred working hours to all participants of the survey. For the respective data, however, we cannot analyze people expressing a preference for starting to work. Frequencies for the remaining groups are summarized in Table 3.

Table 3: Frequencies of mismatch groups

Mismatch categories

	Nonchangers	Reducers	Increasers	Stoppers	Sum
Absolute Number	2,580,008	613,798	308,747	5,070	3,507,623
Participation in %	73.6	17.5	8.8	0.1	100

Source: Microcensus 2012, own calculation

Nonchangers are by far the largest group in Austria. 73.6% of employees do not want to change their actual working hours. 17.5% can be attributed to the group of Reducers. 8.8% want to increase their working hours and 0.1% want to stop working. Therefore, 26.4% - roughly speaking one quarter - of Austrian employees prefer to change their actual normal weekly working hours. It has been shown in the discussion on the wording of questions that lower values would be likely to appear if the survey question included tighter conditions on income.

This framework of different groups has proven to be appropriate for descriptive analyses of the kind presented above and might be useful for studies on working time mismatches in general. As we are primarily interested in employees who want to lower their working time, the group of Reducers is of special interest for us. Also, Nonchangers will be examined in the further analysis as they establish a standard, due to their dominance in the distribution. Consistent with a recent study by Bloch and Taylor (Bloch and Taylor, 2012), the regression analysis compares Reducers with Nonchangers. Consequently, we exclude Increasers and Stoppers from the following analysis. Thus, the subsequent parts of the quantitative analysis only focus on Reducers in comparison to Nonchangers.

#### *6.1.3.6 Reducers*

Before comparing Reducers with Nonchangers, they shall be described by a univariate analysis. The previous discussion introduced Reducers simply as the category of people wanting to reduce their working time. However, the category of Reducers displays quantitative differences. For example, some employees prefer to work only three hours less per week, whereas others prefer to shorten their working time by ten, 20 or more hours. The absolute hours of preferred reduction, however, may not be the best measure, as a reduction by ten hours should be regarded differently depending on whether a person is working, for example, 20, 40 or 60 hours. Hence, we construct a variable capturing the preferred reduction relative to actual hours worked per week, which is named mismatchper<sup>11</sup>. This section analyzes the distribution of mismatchper.

Figure 5 displays a histogram and a kernel density estimation of the preferred relative reduction of Reducers. The distribution ranges from -0.25% to -97.5%, i.e. all negative values of mismatchper that are <0 and >-100. Its mean is set at -20.2% and the median at -17.5%. The distribution peaks several times in varying intensity at values around a preferred reduction of  $\frac{100}{8}$ ,  $\frac{100}{5}$ ,  $\frac{100}{4}$ ,  $\frac{100}{3}$ ,  $\frac{100}{2}$ %. Generally, it can be said that peaks get smaller, the greater the reduction gets and that overall density decreases sharply below values of -25%. Further, almost no Reducers want to decrease their working time beyond 50%. This pattern is underlined by Table 4 which compares the percentage participation in groups generated by dividing the distribution presented in Figure 5 into certain parts. Around  $\frac{3}{4}$  of Reducers<sup>12</sup> do not want to decrease by more than 25%. In the subsequent groups, participation gradually decreases and hardly anybody wants to reduce more than 50%.

Table 4: Participation in percent of Reducers in categories of preferred reduction

 Categories of Preferred Reduction in percent

 0 - 12.5%
 12.5 - 25%
 25 - 37.5%
 37.5 - 50%
 50 - 99%
 Sum

 Participation in %
 38.5
 36.8
 14.5
 7.6
 2.6
 100

Source: Microcensus 2012, own calculation

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<sup>&</sup>lt;sup>11</sup>  $mismatchper = \left(\frac{whpref-whactual}{whactual}\right) * 100$ 

 $<sup>^{12}</sup>$  38.5% + 36.8% = 75.3%

90.0 0.05 0.04 0.03 0.02 0.01 0.00 -90 -80 -70 -60 -30 -20 -10 -100 0 -50 -40 Mismatchper of Reducers

Figure 5: Histogram and density estimation of preferred reduction in percent

Source: Microcensus 2012, own figure

This discussion has shown that mismatchper is far from being equally distributed. Future research could shine light on the correlations between the preferred amount of reduction and differences in explanatory variables. As we aim at explaining the difference between the two categories of Reducers and Nonchangers, this endeavor is not part of our research.

#### 6.1.3.7 Differences between Reducers and Nonchangers

Reducers and Nonchangers are likely to differ in certain predictor variables. The regression presented later aims at detecting these differences while controlling for other factors. As a preliminary analysis, we conduct a bivariate descriptive comparison of predictor variables for Reducers and Nonchangers. This procedure shall convey an explorative impression on the two groups in a non-controlled setting.

Both theory and previous empirical research suggest that working time decisions and preferences are likely to be gendered. We account for differences between genders in conducting the regression for men and women separately. Hence,

#### Table 5 and

Table 6 separately present descriptive analyses for women and men. For both tables numerical variables are provided with their mean, their median and their limits of the interquantile range (IQR), i.e. values for the 25% and the 75% person in the distribution. Factor variables (ordered and non-

ordered) are presented with participation rates. Within one factor, participation rates of the various categories sum up to 100%.

Table 5 shows differences between female Reducers and Nonchangers. In both groups the mean in age is 39.3 years. However, the median as well as the IQR are one year higher for female Nonchangers than for female Reducers. Further, participation rates of lower levels of education are higher for Nonchangers and women with higher levels of educational attainment have higher shares in the group of Reducers. Moreover, female Reducers and Nonchangers differ regarding relationship status. More female Reducers live in single household, whereas female Nonchangers tend to live together with their partners. The participation rate for the other category is almost the same for both. Also, the majority of female Reducers does not have children. For the same category, the value of Nonchangers is markedly lower. Employed mothers with one or more children rather do not prefer shorter working weeks. Participation rates for mothers who do not want to change their working hours are higher than those for Reducers. In terms of the age of the youngest child it can be seen that more female Reducers have no children below the age of 15, compared to female Nonchangers. Differences in the groups of children until the age of five are rather marginal. However, once children get between 6 and 14 years old, there are more women in the group of Nonchangers. Concerning the number of earners in the household, it is shown that there are more single earner women in the group of Reducers than in the group of Nonchangers. The complementary group of multiple earner households shows the opposite relation.

Turning to employment conditions, concerning a woman's position, female salaried employees and civil servants are prone to be in the group of Reducers, whereas female workers are inclined to belong to the group of Nonchangers. In addition, if women work in bigger premises, it is more likely that they express a wish for reducing working time. In smaller premises, however, women tend to be in the group of Nonchangers. Furthermore, female Reducers on average have worked 0.7 years longer than female Nonchangers. Also, female Reducers are more likely to be in leading position. However, in the variables temporary and sector, differences between Reducers and Nonchangers are negligible. Types of occupation associated with higher status, like executives and professionals, have higher shares in the group of Reducers. In other occupation categories, the share of Nonchangers is higher. The most pronounced difference between Reducers and Nonchangers can be seen in the actual hours worked. On average, Reducers exceed Nonchangers in weekly working hours by more than 10 hours. The distance between medians, however, is much smaller, highlighting the fact that the distribution of whactual for Nonchangers is skewed to the left, whereas for Reducers it is skewed to the right. Lastly, on average Reducers earn EUR 0.5 more per hour compared to Nonchangers.

To sum up, the most notable difference between Reducers and Nonchangers is identified regarding the amount of hours worked. Other variables, such as *age*, *educ*, *premsize* and *position*, also show a clear pattern. For the remainder of variables, differences can be identified; however, it is questionable whether these patterns persist in the controlled regression setting.

#### Differences for male Reducers and Nonchangers are presented

Table 6. Comparing the averages in men's age reveals that male Reducers are about two years older than male Nonchangers. Furthermore, the distribution in participation rates in the education variable is much the same as for women. Higher educated men tend to be in the group of Reducers, whereas lower educated men are more likely to be in the group of Nonchangers. In addition, the *relation* variable does not show any major difference for Reducers and Nonchangers. Further, men are very similar to women, when the dynamic in terms of differences in the number of children (*children*) is compared. Men without children are more likely to be found in the group of Reducers. Fathers, however, show a higher preference to work the same amount, irrespective of the number of children. The children's age in all categories does not generate big differences between male Reducers and Nonchangers. Comparing men to women in terms of the youngest children's age (*agechild*) shows that participation rates for men in the groups with younger children are higher than for women, meaning that it might be easier for men to stay in employment even if they have young children at home. Turning to the number of *earners* in the household, male Reducers and Nonchangers differ only marginally.

Irrespective of gender, the difference between Reducers and Nonchangers is markedly elaborated in the *position* variable. With respect to Reducers, most people can be found in the category of *salaried employees*, but participation in the group of Nonchangers is highest for *workers*. The *premsize* variable shows the same dynamic for men as for women. In firms with more than 10 employees, men are prone to state a preference for working the same weekly working hours. Additionally, averages in *seniority* differ by 0.7 years. This is 0.3 years less than for women. Moreover, as for woman, the difference in *leading* must be regarded as notable. Male Reducers are much more likely in *leading* positions than male Nonchangers. Further, there are only negligible differences in participation rates conditional on the duration of contract (*temporary*). Concerning differences in the *sector* variable, it can be said that men in the service sector tend to be in the group of Reducers, whereas men working in the industry sector are more likely to be in the group of Nonchangers. This is in contrast to the distribution for women, who do not show noteworthy differences.

Table 5: Differences between female Reducers and Nonchangers

Mismatch Groups Variable Reducers Nonchangers Levels **Socio-demographic Factors** 39.3, 40 (30-48) Age 39.3, 41 (29-49) Educ Primary education 7.9 17.5 Lower secondary 41.1 49.5 Upper secondary 21.1 18.6 Tertiary education 29.9 14.4 **Household and Family Characteristics** Relation Couple 61.9 71.1 Single 33.1 23.7 Other 5 5.3 0 children Children 52.7 38.1 1 child 23.8 27.5 2 children 18.7 25.8 3+ children 4.8 8.6 Agechild No child < 15 77.9 70.2 0-2 years 3.7 4.5 4.5 6.3 3-5 years 6-14 years 14 19 Earners Single earner 34.4 26.6 Multiple earner 65.6 73.4 **Employment Conditions** Position Salaried employees 70.4 64.4 Workers 12 22.9 Civil servants 17.6 12.6 Premsize 1-10 21.7 31.6 11-49 30 33.6 50-499 32.4 24.8 500+ 16 10.1 Seniority 9.6, 6 (2-14.6) 8.9, 5.3 (1.7-13.5) Leading Non-leading 72 84.6 28 15.4 Leading 89.5 90.7 Temporary Non-temporary 0-35 months 6.4 5.2 36+ months 4.1 4.1 Sector 3. sector 86.6 84.6 1. sector 0.4 0.6 13 14.8 2. sector Occupation Service workers 59 65.9 **Executives** 6.3 2.3 Professionals 26.4 13.4 Skilled workers 2.2 3.4 Elementary workers 6.2 15 42.4, 40 (39.5-45) 32, 38.5 (25-40) Whactual **Extrinsic Motivators** 12.7, 12 (9.4-15.2) 12.3, 11.3 (9.1-14.5)

Note: Numerical values are presented with their mean, median and limits of their interquantile range. For factor variables their participation is presented in percent. In each working time category the participation for each factor adds up to 100%.

Source: Microcensus 2012, own calculation

Table 6: Differences between male Reducers and Nonchangers

Mismatch Groups Variable Levels Reducers Nonchangers **Socio-demographic Factors** 40.6, 41 (32-49) 38.7, 39 (28-49) Age Educ Primary education 6.4 15 53 59.6 Lower secondary Upper secondary 18.4 14.2 Tertiary education 22.2 11.3 **Household and Family Characteristics** 72 Relation Couple 72.7 Single 22.9 21.1 Other 5.1 6.2 Children 0 children 40.5 35.7 1 child 25.9 27.7 2 children 24.7 26.1 3+ children 8.9 10.5 Agechild No child < 15 67.4 69.2 0-2 years 10.6 8.6 3-5 years 6.1 5.8 6-14 years 15.9 16.4 Single earner Earners 31.4 30 Multiple earner 68.6 70 **Employment Conditions** Position Salaried employees 59.2 43.4 Workers 26.7 45.3 Civil servants 14.2 11.3 Premsize 1-10 15.2 18.9 11-49 28.9 31.2 50-499 34.1 36.9 500+ 19 15.8 11.4, 7.8 (2.7-18.6) 10.4, 6.3 (1.9-16.9) Seniority Leading Non-leading 54.8 70.8 45.2 29.2 Leading 94.2 90.3 Temporary Non-temporary 0-35 months 3.2 3.7 36+ months 2.6 6.1 Sector 3. sector 63.1 54.7 1.2 0.9 1. sector 2. sector 35.7 44.4 Occupation 39.1 36.2 Service workers **Executives** 10.1 4.5 Professionals 11.3 19.7 Skilled workers 29.7 18.1 Elementary workers 13 18.3 Whactual 48.2, 45 (42-50) 40.1, 40 (38.5-40) **Extrinsic Motivators** 14.7, 13.4 (10.3-17.6) 13.7, 12.5 (10.1-16.1) Incperwh

Note: Numerical values are presented with their mean, median and limits of their interquantile range. For factor variables their participation is presented in percent. In each working time category the participation for each factor adds up to 100%.

Source: Microcensus 2012, own calculation

Moreover, occupation groups associated with a high status, including service workers, tend to prefer reducing working hours. Skilled workers and elementary workers, however, are inclined to stay on their current level of working hours. This pattern is similar to women, except for service workers. For men also differences in whactual are remarkable. On average, Reducers work 48.2 hours per week, whereas Nonchangers work 40.1 hours per week. However, unlike for women, both distributions of whactual are skewed to the right. Finally, the difference in averages in incperwh amounts to EUR 1 which is about twice as much as for women.

In comparison to women, men show higher differences in age, whactual, sector and incperwh. In the relation variable differences among women are more elaborated. Also, there are variables like children, premsize, temporary and occupation where (in-)difference does not change between men and women.

In summary, it has been shown that Reducers in comparison to Nonchangers tend to have fewer children or no child at all; they are higher educated, work as salaried employees in higher positions of the occupational hierarchy and have higher monthly net incomes, due to their higher hourly wages (EUR 0.4-1) and longer workweeks (8-10 hours). Further, Reducers mainly work in bigger business premises and have been working longer (around 1 year) at the same company than Nonchangers.

Comparing women to men, it has become evident that women work shorter hours per week (5.8-10 hours) and have lower hourly wages (EUR 1.5-2), which results in a substantially lower net monthly income, despite women's higher educational attainment. Additionally, women in the groups of Reducers and Nonchangers have fewer children or no child and are employed predominantly as *salaried employees* in the service sector.

This analysis is incapable of identifying colinearities between the predictor variables. Hence, it might well be the case that some variables associated with strong differences show the same effect. For example, *leading* personnel is very likely to work longer than non-leaders. Strong differences in both variables, therefore, might be due to the same effect. In a regression, where each variable's effect is measured while controlling for all other variables, some variables might overlay the effect of others. As a result, the tables presented above provide a useful guideline for setting up the regression model.

By now, the topic of omitted observations has been left blank. It is important to bear in mind that data problems lead to exclusion of observations. Missing data or extreme outliers creating non-meaningful values have to be spared out of the analysis. This common issue of survey analysis is of high importance, as statistical results are likely to be affected by omitting observations from the

analysis. The following chapter discusses data issues in the Microcensus and how it was dealt with this topic in the descriptive as well as in the subsequent regression analysis.

## 6.1.4 Exclusion of Observations

There are two reasons why observations have been excluded from the analysis. Firstly, given the construction of our research question, the population of this research exclusively comprises people in formal employment. Hence, we exclude all people indicating no value in the working hour variables, which can be regarded as equivalent to not being employed. Secondly, non-meaningful values in variables should carefully be excluded, too. The task here is to distinguish real existing extreme values from wrong extreme values created by mistakes in the data generating process. Fortunately, the data quality of the Microcensus is very high in general, for example, because sampled individuals are obliged to participate in the survey (e.g., Moser, 2005). Nevertheless, extreme values that are not interpretable in a meaningful way are eliminated from the final sample.

To begin with, 217 observations from the original dataset display a value in the variable of *whactual* of 999 hours per week. Once these observations are excluded, the respective variable shows 92,161 cases of missing data. This number can be interpreted as the unweighted number (=observations in the sample) of people without employment, as other crucial variables indicating a status of employment, like *premsize*, *seniority*, *position*, *sector* and *occupation*, show the same value of missing cases. As a result, deleting the non-employed generates a reduced sample size of 88,780 observations.

Further missing data problems appear in the *incperwh* variable. After deleting all non-employed from the sample, *incperwh* still shows 14,286 cases of missing data, even though imputation has been applied by the Statistics Austria (Moser, 2005). Also, some extreme outliers distort the consistency of the *incperwh* variable. In a scatterplot of *incperwh* and *whactual* (Figure 6) it becomes apparent that some individuals with missing values in *whactual* were most likely coded wrongly when the data has been entered to the database. Instead of entering the value for missing data defined as -3, which would have been the correct procedure, some people with missing values in the variable of *whactual* were coded as +3. This value, however, does not represent missing data. Instead, it represents three hours of actual weekly working hours. As a result, these individuals cannot be recognized as missing any more. For calculating *incperwh*, monthly net income is divided by *whactual*. A wrong value of +3 in the *whactual* variable, therefore, generates enormous values in hourly wages. Consequently, cases indicating a value exceeding 110 in the *incperwh* variable were excluded from the analysis.

Eventually, the final sample contains 74,442 observations. For all excluded observations we apply the *missing at random* (MAR) assumption. That means that "the probability of missing data on a variable (Y) is not a function of its own value after controlling for other variables" (Howell, 2008, 209).

Figure 6: Scatterplot of hourly wage on actual weekly working hours. Cases above the dotted line were excluded

Source: Microcensus 2012, own figure

# 6.2 The Estimation Procedure

A model of binary outcomes<sup>13</sup> is needed when a categorical dependent variable takes on a value of y=1 or y=0. In this study, y=1 if a person wants to work less (Reducers), and y=0 if a person wants to work the same hours as actually (Nonchangers). Among the existing modeling strategies we decided for the logit model, which links a linear combination of explanatory variables with the probability of an outcome by assuming a logistic distribution of error terms.

In this nonlinear probability model the explanatory variables, typically referred to as  $\mathbf{X}'$ s, are related to the probability of an event,  $\Pr(y=1|\mathbf{X})$ . In particular, probabilities are transformed into *odds* by dividing the probability by its counter probability

$$\frac{\Pr(y=1|\mathbf{X})}{\Pr(y=0|\mathbf{X})} = \frac{\Pr(y=1|\mathbf{X})}{1 - \Pr(y=1|\mathbf{X})}.$$
 [1]

<sup>13</sup> This description of the logit model for binary outcomes is based on Scott Long (1997, 34-113).

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It is central to odds that they are defined between 0 (if  $\Pr(y=1|\mathbf{X})=0$ ) and  $\infty$  (if  $\Pr(y=1|\mathbf{X})=1$ ). Taking the logarithm of odds yields a variable ranging from  $-\infty$  to  $\infty$ , generating a measure known as the *logit*. This procedure results in a model that is linear in logits:

$$ln\left[\frac{\Pr(y=1|\mathbf{X})}{1-\Pr(y=1|\mathbf{X})}\right] = \mathbf{X}\boldsymbol{\beta}.$$
 [2]

Solving for Pr(y = 1|X) generates the inverse link function

$$Pr(y = 1|\mathbf{X}) = \frac{\exp(\mathbf{X}\boldsymbol{\beta})}{1 + \exp(\mathbf{X}\boldsymbol{\beta})}$$
[3]

where the right term of the equation is also known as the logistic function.

Error terms,  $\varepsilon$ , in the logit model are assumed to follow a logistic distribution. Further, they are set at zero conditional mean with constant variance.

#### 6.2.1 Method of Estimation

Logit regressions by construction cannot be estimated by minimizing the squared residuals. Instead, maximum likelihood estimation (MLE) is applied, which generates estimates at values that maximize the likelihood function

$$L(\boldsymbol{\beta}|\mathbf{y},\mathbf{X}) = \prod_{i=1}^{N} p_i$$
 [4]

where

$$p_i = \begin{cases} \Pr(y_i = 1 | \mathbf{X}_i) & \text{if } y_i = 1 \text{ is observed} \\ 1 - \Pr(y_i = 1 | \mathbf{X}_i) & \text{if } y_i = 0 \text{ is observed} \end{cases}$$
 [5]

and  $Pr(y_i = 1 | \mathbf{X}_i)$  is defined by Equation 3.

Synthesizing Equation 4 and 5 and taking the logarithm of the likelihood equation generates the log likelihood function

$$\ln L(\boldsymbol{\beta}|\mathbf{y}, \mathbf{X}) = \sum_{y=1} \ln \Lambda(\mathbf{X}_i \boldsymbol{\beta}) + \sum_{y=0} \ln 1 - \Lambda(\mathbf{X}_i \boldsymbol{\beta}).$$
 [6]

Estimates generated by MLE are consistent, asymptotically normal and asymptotically efficient.

#### 6.2.2 Interpretation

There are several existing approaches of interpreting outcomes from binary logit models. For example, it is possible to focus on predicted probabilities, partial or discrete change in probabilities. These methods have in common that interpretation is conditional on values of other variables. Interpreting probabilities works well for models with small numbers of explanatory variables. However, once numerous explanatory variables are used, interpretation gets increasingly confusing.

Odds ratios, however, provide a solution to this issue. They are stable regardless of the value of other variables, and can thus be interpreted *ceteris paribus*. This provides an enormous advantage for models with a long list of explanatory variables. As a result, we will make use of odds ratios when it comes to interpreting regression coefficients.

Equation 2 shows that taking logits as the dependent variable creates a linear model in odds. Defining

$$\Omega(\mathbf{X}) = \frac{\Pr(y=1|\mathbf{X})}{\Pr(y=0|\mathbf{X})} = \frac{\Pr(y=1|\mathbf{X})}{1 - \Pr(y=1|\mathbf{X})}$$
[7]

Equation 2 can be rewritten as

$$ln \Omega(\mathbf{X}) = \mathbf{X}\boldsymbol{\beta}.$$
[8]

In order to derive odds ratios, let us focus on one particular variable,  $x_k$ , and its estimate,  $\beta_k$ . Due to the linear structure of the model, a unit change in  $x_k$  can be interpreted by taking the derivative

$$\frac{\partial \ln \Omega(\mathbf{X})}{\partial \mathbf{x}_k} = \beta_k.$$
 [9]

Hence, ceteris paribus a one unit change in  $x_k$  changes the logit by  $\beta_k$ .

Equation 9 underlines that the coefficients in the logit regression can be interpreted independently of other coefficients. Unfortunately, the logit is an unintuitive measure. It is hard to imagine what a change in logit actually means. Luckily, coefficients can easily be transformed into odds ratios which are more accessible than logits.

To do so, we exponentiate Equation 8 with a focus on variable  $\mathbf{x}_k$  for which we will derive the odds ratio

$$\Omega(\mathbf{X}) = \exp(\mathbf{X}\boldsymbol{\beta}) = \Omega(\mathbf{X}, \mathbf{x}_k).$$
 [10]

The aim is to transform this equation in a way to see how odds  $(\Omega(\mathbf{X}))$  change if the independent variable  $(\mathbf{x}_k)$  changes by  $\delta$ . The odds then become  $\Omega(\mathbf{X},\mathbf{x}_k+\delta)$ . For numerical variables,  $\delta$  most often is analyzed as a one unit change. For categorical variables,  $\delta$  refers to a change from one category to another. Regardless of the variable's level of measurement, we are interested in how  $\Omega$  changes due to a change from  $\mathbf{x}_k$  to  $(\mathbf{x}_k+\delta)$ . This can be done by taking the ratio of the two odds resulting in the odds ratios

$$\frac{\Omega(\mathbf{X}, \mathbf{x}_k + \delta)}{\Omega(\mathbf{X}, \mathbf{x}_k)} =$$

$$\frac{\exp(\beta_0)\exp(\beta_1x_1)...\exp(\beta_kx_k)\exp(\beta_k\delta)...\exp(\beta_Kx_K)}{\exp(\beta_0)\exp(\beta_1x_1)...\exp(\beta_kx_k)...\exp(\beta_Kx_K)} = \exp(\beta_k \delta).$$

Thus, if  $\delta=1$ , the odds ratio simply becomes  $\exp(\beta_k)$ , i.e. the exponentiated coefficient from the logit regression. In other words, "[f]or a one unit change in  $\mathbf{x}_k$ , the odds are expected to change by a factor of  $\exp(\beta_k)$ , holding all other variables constant" (Long, 1997, 80). This is regarded as a factor change in odds. If the value of  $\exp(\beta_k)$  is greater than one, it can be said that the odds are  $\exp(\beta_k)$  times larger. A value of  $\exp(\beta_k)$  between 0 and 1 can be expressed as odds that are  $\exp(\beta_k)$  times smaller.

Odds ratios should be compared on a logarithmic scale, because the effect of an odds ratio of 0.5 and of 2 has the same size in different directions. While the first halves the odds, the latter doubles them.

How does the interpretation of odds ratios relate to estimated probabilities? It is worth mentioning again that while factor changes are constant in odds, this is not the case for probabilities, but both effects go into the same direction. Hence, a positive factor change in odds corresponds to a positive factor change in probabilities. But, the size of the factor change in probabilities depends on the current level of odds. If odds are very small (around 1/100), probabilities change roughly by an equal amount as the factor change in odds. If odds are very large (around 100), the probabilities do not change substantially.

### 6.2.3 Goodness of Fit

As no equivalent of the standard  $R^2$  exists for logit models, we use pseudo  $R^2$ s for measuring a model's goodness of fit. Firstly, we use McFadden's adjusted pseudo  $R^2$ , secondly, we apply a classification table.

# 6.2.3.1 McFadden's Adjusted Pseudo R<sup>2</sup>

This widely used measure of goodness of fit is also called the *likelihood ratio index* because it compares the log likelihoods of a model with all regressors,  $Ln(L(M_{full}))$ , with the one from a model only including an intercept,  $Ln(L(M_{full}))$ . McFadden's adjusted pseudo  $R^2(\bar{R}_{McF}^2)$  further adds a punishment factor, K, to account for the number of parameters

$$\bar{R}_{MCF}^2 = 1 - \frac{\ln L(M_{full}) - K}{\ln L(M_{null})}.$$

The original McFadden's pseudo  $R^2$ ,  $R^2_{McF}$ , excludes the punishment factor, thereby restricting the measure to be within 0 and 1. If a new variable is added to the model, the original McFadden's pseudo  $R^2$  always increases. To account for irrelevant variables, the  $\overline{R}^2_{McF}$  adds the punishment factor. Therefore, the  $\overline{R}^2_{McF}$  increases only if  $Ln(L(M_{full}))$  increases by more than 1. Further, by adding K,  $\overline{R}^2_{McF}$  does not necessarily have to be between 0 and 1. Still, larger values of  $\overline{R}^2_{McF}$  are preferred.

#### 6.2.3.2 Classification Table

Classification tables apply a different logic of assessing the goodness of fit. Whereas the  $\bar{R}_{MCF}^2$  uses the logic of the standard  $R^2$ , classification tables compare observed values from the data with the predicted values from the regression as shown in Table 7. For analyzing which observed outcome is predicted better, the number of correctly predicted observations must be divided by the respective row sum.

Table 7: Classification table of predicted and observed values

Observed	Predicted		
Outcome	y=1	y=0	Row Sum
y=1	n <sub>11</sub> ::correct	n <sub>12</sub> ::incorrect	n <sub>1+</sub>
y=0	n <sub>21</sub> ::incorrect	n <sub>22</sub> ::correct	n <sub>2+</sub>
Column Sum	n <sub>+1</sub>	n <sub>+2</sub>	N

Source: Long (1997, 107)

Additionally, from the classification table a single scalar measure for the goodness of fit can be constructed, which is called *adjusted count*  $R^2$ . It is calculated as

$$R_{adjCount}^{2} = \frac{\sum_{j} n_{jj} - max_{r}(n_{r+})}{N - max_{r}(n_{r+})}$$

where  $n_{jj}$  denotes the diagonal elements excluding N, and  $max_r(n_{r+})$  refers to the largest element in the Row Sum column. This subtraction is included for adjusting the unequal group size in the observed data. If, for example, 80% of the observations in the data are members of the group y=1, the null model would predict the same share for that group. Therefore, the adjusted count  $R^2$  shows the number of correct predictions beyond those correctly predicted due to the distribution of observed outcomes. Scott Long offers an exemplary interpretation: "Knowledge of the independent variables, compared to basing our prediction only on the marginal distributions, reduces the error in prediction by  $100*R^2_{ad\,iCount}$  %"(Long, 1997, 108).

# 6.2.4 Method of Specification

As suggested by Auer (2007) we employ a top-down or general-to-specific approach for specifying the final model. We start out estimating the largest model including all theoretically reasonable explanatory variables. Gradually we reduce the model by eliminating insignificant and irrelevant variables. A standard t-test supports the decision whether a coefficient deviates significantly from 0 by generating t-statistics and p-values respectively.

Additionally, we compare the explanatory power of an unconstrained and a constrained model by applying a Likelihood Ratio Test. For nested models the chi-squared distributed *likelihood ratio* statistic equals

$$LRX^2 = D(M_c) - D(M_u)$$

where  $D(M_c)$  refers to the deviance of the constrained model and  $D(M_u)$  denotes the deviance from the unconstrained model. Similarly, the log likelihood can be used instead of the deviance, as for any model,  $D(M) = -2 \ln L(M)$ . The deviance is used as R generates it by default.

### 6.3 Results

Results from the regression of the Reducers/Nonchangers variable on the explanatory variables are presented in Table 8. Estimates were generated for women and men separately and subsequently transformed into odds ratios. According to a likelihood ratio test shown in Table 9 and Table 10, all variables included add explanatory power to the models, even though some are not significant<sup>14</sup>. Hence, both model specifications generate the maximum goodness of fit. The McFadden's adjusted pseudo R<sup>2</sup> peaks at a value of 18.5 for women and at 17.0 for men. Calculation of the adjusted count R<sup>2</sup> reveals that the information contained in the explanatory variable reduces the error in prediction by 8.5% for women and by 9.5% for men, in comparison to a prediction that is exclusively based on the sample distribution of Reducers and Nonchangers. Further, a classification table<sup>15</sup> reveals that 99% of all female Nonchangers, but only 16% of female Reducers are correctly predicted. Concerning the estimation for men, the model predicts 96% of all Nonchangers rightly, and only 25% of all Reducers. Thus, while both models are capable of detecting most Nonchangers, accurately identifying Reducers seems to be more challenging.

Before discussing each variable in detail, the main results shall be briefly summarized. Employees' preferences for reducing working time are most strongly related to their actual weekly working hours, as this variable accounts for almost all the explanatory power of the models for both women and men. Working eight hours more doubles the odds for preferring shorter weekly working hours. Apart from that, Reducers compared to Nonchangers tend to be older, higher educated, have no or fewer children and they predominantly work as salaried employees in bigger business premises. Gender differences are greatest in terms of household and family characteristics. Women living in multiple earner households and mothers of young children prefer to work less, while men's preferences are unaffected by these variables, which is in line with the male breadwinner & parttime norm.

## 6.3.1 Socio-Demographic Factors

For both women and men, Reducers are significantly older than Nonchangers. The odds of men who are 20 years older are twice as big for being in the group of Reducers. For women the relationship is stronger: the odds double every 12 years. For both genders, the relationship slightly weakens with increasing *age* represented by the slightly negative odds ratios of the squared term of age, *age2*. The education variable displays odds greater than 1 for both genders in all categories, but people who finished *tertiary education* differ only marginally from people who finished *upper secondary* 

<sup>&</sup>lt;sup>14</sup> Table 8 contains only significant variables; the complete output is presented in the appendix.

<sup>&</sup>lt;sup>15</sup> Classification tables are presented in the appendix.

education. This means that higher educated employees are more likely to be in the group of Reducers; however, with higher levels of education, the positive relationship becomes weaker. For both genders the level of educational attainment ranks third in a list of variables' predictive power<sup>16</sup>, meaning that education explains a relatively large share of the variation in both models.

### 6.3.2 Household and Family Characteristics

Concerning household and family characteristics, mothers of younger children, prefer significantly shorter weekly working hours, while fathers do not show any significant pattern, although fathers of children up to the age of two are only slightly insignificant. For women, having a child at pre-school age (0-2 years and 3-5 years) doubles the odds of preferring shorter weekly working hours compared to having no child below the age of 15. For mothers of children between six and 14, the effect is slightly lower. Furthermore, while the age of the youngest child, agechild, is the second most important variable for predicting women's preferences, for men its explanatory power is almost negligible.

In contrast to the youngest child's age, the total number of children living in the household (children) is relevant for both men and women. Having one or more children lowers the probability of preferring shorter hours. For women the preferred reduction is more elaborated than for men. For men the significant relationship only appears for having one or two children. For fathers of three children the effect turns slightly insignificant. For both genders, this variable is the fourth important variable in terms of explanatory power. The third variable in this group of variables capturing the effect of the number of employees in the household shows a stark difference between women and men as well. Compared to female *single earner* households, women who live in *multiple earner* households have a significantly higher propensity to prefer shorter working hours. For men the number of employed household members is neither significant nor relevant.

Two of the three variables on household and family characteristics – the age of the youngest child (agechild) and the number of earners in the household (earners) – clearly support the male breadwinner & part-time norm (Fagan et al., 2001). The results suggest that younger children up to the age of 14 demand time for care provided by mothers as suggested by the motherhood norm and the child mismatch hypothesis. Children above the age of 14 are predominantly money demanding, which creates pressure not to reduce working hours. The results for the number of earners in the household indicate that multiple earner households face a time-squeeze, creating an incentive for women to reduce paid work, but not for men.

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<sup>&</sup>lt;sup>16</sup> See Table 9 and Table 10.

The third variable on the number of children living in the household (*children*) does not support this kind of gender division of labor, which would suggest women to prefer reduced working hours with an increasing number of children. What we see is the opposite effect: having more children is accompanied by a preference for working the same amount of hours. Hence, it becomes obvious that higher numbers of children increase the demand for money, which makes it less possible for men and women to prefer shorter working hours. Additionally, especially mothers of many children with at least one of them being in pre-school age face conflicting demands. On the one hand, the youngest child increases the demand for time, and on the other hand, having two or more children increases the demand for money. When the youngest child gets older, this conflict slightly resolves. Men, however, do not have to struggle with this conflicting situation.

Furthermore, when interpreting variables on household and family characteristics, one has to keep in mind that sample selection is present here. This means that women with children might have opted out of employment with the arrival of children. Complex regression techniques like Heckman selection regression models could account for this issue in future research.

In terms of gender differences in the explanatory power of variables on household and family characteristics, an interesting pattern appears: In Austria women's working time decisions are far more shaped by household variables compared to those of men. Table 9 shows that household and family characteristics for women are the 2<sup>nd</sup>, the 4<sup>th</sup> and the 10<sup>th</sup> most important variable out of 15 variables in total. Table 10 reveals that for men household and family variables rank at place 4, 11 and 12 out of 13 variables in total. Thus, household and family characteristics influence women's preferences for reduced working hours more than those of men, which is again in line with the male breadwinner & part-time norm.

Table 8: Regression results for women and men

		Women		Men	
Variables	Levels	Odds Ratios	Significance	Odds Ratios	Significance
Socio-demograpl	hic Factors				-
Age	-	1,084	***	1,051	***
Age2	-	0,999	***	0,999	***
Educ	Primary education	ref		ref	
	Lower secondary	1,477	***	1,256	**
	Upper secondary	1,833	***	1,546	***
	Tertiary education	1,852	***	1,549	***
Household and F	amily Characteristics				
Children	No child	ref		ref	
	1 child	0,77	***	0,818	***
	2 children	0,773	***	0,833	**
	3+ children	0,543	***	0,843	0.067
Agechild	No child < 15	ref		ref	
	0-2 years	1,94	***	1,148	0.063
	3-5 years	2,051	***	1,046	0.61
	6-14 years	1,333	***	1,001	0.993
Earners	Single earner	ref			
	Multiple earner	1,241	**		
mployment Cor	nditions				
Position	Salaried employees	ref		ref	
	Workers	0,682	***	0,679	***
	Civil servants	0,858	*	0,801	***
Premsize	L	1,222	***	1,156	**
	Q	0,99	0.845	0,993	0.872
	С	0,93	0.112	0,999	0.988
Temporary	Non-temporary	ref		ref	
	0-35 months	1,103	0.327	1,023	0.84
	36+ months	1,199	0.268	0,736	*
Occupation	Service workers	ref		ref	
	Executives	1,181	0.24	1,039	0.659
	Professionals	1,183	*	1,085	0.273
	Skilled workers	0,839	0.24	0,895	0.065
	Elementary workers	0,723	**	0,829	**
Whactual	-	1,13	***	1,129	***
Adj. McFadden R <sup>2</sup>		18,5		17,0	
Adj. Count R <sup>2</sup>		8,5		9,5	

Notes:

Significance: p-values>0.05; \*<0.05; \*\*<0.01; \*\*\*<0.001

N=31275 for Women; N=36737 for Men Source: Microcensus 2012, own calculation

Table 9: Variables for women ranked by their explanatory power

		Deviance	Deviance	Likelihood-	Significance
Rank	Variable	full	reduced	Ratio Stat.	Chi square
1	Whactual	22410.11	25566.12	3156.02	**
2	Agechild	22410.11	22503.29	93.18	**
3	Educ	22410.11	22487.74	77.63	**
4	Children	22410.11	22471.46	61.35	**
5	Age	22410.11	22457.81	47.7	**
6	Position	22410.11	22452.29	42.18	**
7	Premsize	22410.11	22442.58	32.48	**
8	Age2	22410.11	22441.26	31.16	**
9	Occupation	22410.11	22438.34	28.24	**
10	Earners	22410.11	22424.05	13.94	**
11	Relation	22410.11	22421.01	10.9	**
12	Sector	22410.11	22417.16	7.06	**
13	Incperwh	22410.11	22415.77	5.66	*
14	Temporary	22410.11	22414.35	4.25	*
15	Seniority	22410.11	22414.09	3.98	*

Notes:

Significance: \*<0.05, \*\*<0.01

Critical values of Chi-square distribution for 1 degree of freedom: 0.05=3.84, 0.01=6.63

Source: Microcensus 2012, own calculation

Table 10: Variables for men ranked by their explanatory power

		Deviance	Deviance	Likelihood-	Significance
Rank	Variable	full	reduced	Ratio Stat.	Chi square
1	Whactual	31935.52	36351.57	4416.05	**
2	Position	31935.52	32024.45	88.93	**
3	Educ	31935.52	31986.29	50.77	**
4	Children	31935.52	31962.97	27.45	**
5	Age	31935.52	31961.89	26.37	**
6	Age2	31935.52	31961.64	26.12	**
7	Occupation	31935.52	31955.17	19.64	**
8	Premsize	31935.52	31953.45	17.93	**
9	Temporary	31935.52	31945.24	9.72	**
10	Leading	31935.52	31943.19	7.67	**
11	Relation	31935.52	31943.03	7.51	**
12	Agechild	31935.52	31942.92	7.39	**
13	Incperwh	31935.52	31939.82	4.3	*

Notes:

Significance: \*<0.05, \*\*<0.01

Critical values of Chi-square distribution for 1 degree of freedom: 0.05=3.84, 0.01=6.63

Source: Microcensus 2012, own calculation

#### 6.3.3 Employment Conditions

Turning to considerations on employment conditions, it can be seen that both *workers* and *civil servants* show a lower propensity to state a preference for reducing working hours, compared to *salaried employees*. Hence, Reducers predominantly can be found in the group of *salaried employees*. The pattern is of similar strength for women and men. However, Table 10 reveals that this variable is the second most important variable in terms of its explanatory power for men, while the *position* variable is less important for women's preference on reducing working hours, as can be seen in Table 9.

The size of the business premise (*premsize*) also displays significant results. Employees working in bigger business premises are more likely to be in the group of Reducers. The effect, however, is relatively small: Women who work in a company larger than 500 employees display twice as large odds of being in the group of Reducers compared to employees in businesses up to ten employees. For men the effect is even smaller.

Concerning the question on *temporary* employment contracts, men show a significantly lower probability for being in the group of Reducers if their contract period is longer than three years. Employees with *non-temporary* contracts do not differ from those with temporary contracts lasting up to three years. It was theorized that employees in temporary work arrangements are less likely to express a preference for reducing working hours, as they have to provide financial security for times of unemployment (Böheim and Taylor, 2003). Our results only offer mixed support for this relation because only employees with working contracts lasting longer than three years follow the expected pattern. Women are unaffected by this variable.

In terms of *occupation, elementary workers* differ the most from all other categories of *occupation*. Indeed, being an *elementary worker* compared to being a *service worker* lowers the odds of being member of the group of Reducers by around one fourth for women and one fifth for men. Furthermore, female *professionals* have a significantly higher tendency towards shorter working hours compared to female *service workers*.

Finally, by far the most important variable in terms of its explanatory power<sup>17</sup> is a person's actual weekly working hours (*whactual*). In fact, for both genders actual hours worked accounts for almost all the explanatory power in the model. An estimation using actual weekly working hours as the only explanatory variable generates a McFadden's adjusted pseudo R<sup>2</sup> of 16.0 for women and of 15.1 for men, which is almost 90% of the explained variation of both final models. Moreover, in the final

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<sup>&</sup>lt;sup>17</sup> See Table 9 and Table 10.

model for women this variable's explanatory power is 34 times larger than the second most important variable, which is the age of the youngest child (Table 9). For men, this variable explains even 50 times more than the second most important variable, which is the employee's *position* denoting whether the employee is part of the groups of *workers*, *salaried employees* or a *civil servants* (Table 10). Also, the size effect of actual weekly working hours is very similar for both genders: working eight hours more per week doubles the odds of wanting to reduce working hours.

This result of the variable of actual weekly working hours supports the expected positive relation between weekly working hours and the preference to reduce. In fact, this finding suggests that the work time norm molds employees' preferences on weekly working time. Further, the results are in line with the descriptive analysis, which reveals that the preferred weekly working hours' density around the work time norm is higher than the one for actual weekly working hours<sup>18</sup>. As women on average are slightly below the work time norm and men above it<sup>19</sup>, it is therefore confirmed that people working long hours are more likely to express a preference for working less.

Comparing men's and women's variables on working conditions in terms of the explanatory contribution reveals a gendered pattern. Table 9 and Table 10 display that variables on working conditions for men rank at position 1, 2, 7, 8, 9 and 10 out of 13 variables. For women the same analysis generates ranks 1<sup>st</sup>, 6<sup>th</sup>, 9<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup> and 15<sup>th</sup> out of 15 variables in total. Therefore, men are more influenced by employment conditions, while for women household and family characteristics are more important.

### 6.3.4 Extrinsic Motivators

Differences in terms of higher hourly wages between Reducers and Nonchangers that were detected in a bivariate descriptive analysis turn out to be insignificant in the controlled regression setting for both genders. Higher hourly wages neither increase nor decrease a person's inclination for working less. In terms of financial incentives it was theorized that wages follow the backward bending labor supply curve that suggest a negative relation between wages and the propensity for reducing working hours for low levels of wages and a positive relation for higher levels of wages. Thus, our findings do not support the theory of the backward bending labor supply curve.

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<sup>&</sup>lt;sup>18</sup> See Figure 2.

<sup>&</sup>lt;sup>19</sup> See Table 5 and Table 6.

### 6.3.5 Summary

The discussion of the outcomes of the regression generates five main results. First, it can be concluded that the reasons for being a Reducer or a Nonchanger are manifold and of high complexity as only a maximum of 18.5% of the existing variation is explained by our models. Second, among the explanatory variables used for our estimation, actual weekly working hours have the largest explanatory power. Hence, Reducers are simplest identified by looking at those employees with long working hours. Third, this suggests that the prevalent work time norm strongly shapes employees' work time preferences. Future research could shine light on country differences of work time norms and their effect on employee preferences. Fourth, women's preferences for reducing working hours seem to be strongly related with household variables, whereas variables on working conditions explain a greater share of the variation for men. Finally, an analysis of household and family characteristics reveals the expected pattern along the lines of the male breadwinner & part-time norm, highlighting the gendered nature of preferences for work time reduction.

# 7 Qualitative Analysis: The Decision for Shorter Working Hours

The qualitative part of our study is mainly based on interviews amongst workers and salaried employees in a major company of the electrics and electronics industry in Austria, who had the possibility to opt for the leisure option in 2013. This novel work time policy, first implemented via the collective agreement 2013, enables employees to choose between a wage increase and equivalent leisure time. In addition to the interviews with employees, three expert interviews with representatives of the trade union and the works council have been carried out.

The foregoing quantitative analysis generates understanding of the factors associated with a preference for work time reduction, covering the overall labor force in Austria. In contrast, the qualitative approach considers employees' preferences in a very specific economic sector and provides insights into the perceptions of circumstances and consequences, in short how individuals reason their choice between a pay raise and additional leisure time. In particular, we focus on the following research question: What are the motives that people state to argue their decision between a pay increase and additional leisure time? As the qualitative part has been designed in compliance with the regression model, it also allows us to contextualize the regression results and to explain unexpected findings.

In the first part, we introduce the methods applied for the expert interviews and the interviews with employees. The second part is dedicated to the main results of the interviews carried out with employees. As the expert interviews were mainly conducted in order to obtain information on the bargaining process of the said collective agreement 2013 and the implementation of and response to the leisure option, the outcomes of the expert interviews are not presented below, however, they are included in the chapter describing the case of the leisure option.

#### 7.1 Methods

### 7.1.1 Expert Interviews

In order to establish contact to the field, we carried out three expert interviews with representatives of the trade union. The first interview has been conducted with two representatives of the Austrian trade union for production workers (PRO-GE). The interview took place in the central office of the Austrian Trade Union Federation in January 2014. The interviewees could provide us with valuable information on the history of work time agreements in Austria, the bargaining process of the said collective agreement 2013, and the responses of employers, employees and works councils. Besides, they thereupon supported us to get in contact with the works council representatives of the company where we had planned to conduct the interviews with the employees.

In April 2014, we interviewed two works council representatives, responsible for workers and salaried employees, respectively. These interviews took place in the building of the company and took about one hour each. On the one hand, these interviews served the purpose to gather more detailed information on the implementation of and response to the leisure option, on the other hand, the aim was to establish cooperation with the firm in order to receive support for organizing the following interviews with the salaried employees and workers.

As a method of analysis, we applied the concept of *qualitative content analysis* developed by Mayring (2008). This approach is mainly characterized by its empirical, methodological controlled analysis of texts, thereby taking into consideration the respective communication context, content analytical rules and step by step models, without hasty quantification (Mayring, 2000).

In order to develop categories, which is one of the main ideas of this method, Mayring proposes two central approaches: deductive category application and inductive category development. The deductive approach is based on the application of previously formulated, theoretically derived categories, which are then assigned to different passages of text. This method is particularly appropriate for structuring the material to be analyzed (Kohlbacher, 2006). However, the main goal of our analysis was to reduce and summarize the material, while preserving the essential contents. We thus mainly followed the procedure of inductive category development, meaning that the categories were developed according to the textual material. Specifically, our theoretical background and research question served as a basis for developing a criterion of definition according to which the relevant aspects of the material were determined. Categories were then deducted step by step by working through the material. In an iterative process, those categories were revised and finally reduced to main categories and tested regarding their reliability (Mayring, 2000). The objective of this approach is to reduce the material and at the same time ensure the preservation of essential information.

In contrast to the problem-centered interviews conducted with employees, the results of the expert interviews are not presented in this chapter, but in the section on the description of the case. It includes the discussions of the positions of trade unions and employers toward the leisure option, as well as information on the leisure option in the investigated company, regarding implementation process, usage and position of the management.

#### 7.1.2 Interviews with employees

The target group for the qualitative interviews comprises employees who had the possibility to either opt for the leisure option or a pay increase. This leisure option has been offered via the collective agreement 2013 of the electrics and electronics industry in Austria. It enabled employees to choose

between a wage increase of about 3% and equivalent leisure time. For an employee working 38.5 hours per week, the leisure option thus amounted to 60 hours per year; this is about 1.5 weeks or seven to eight days of additional holiday entitlements. First, the works council and the company management had to agree on offering this option within the company. Only then had the employees the possibility to enter into individual agreements with the company management (FEEI, 2013a, 2013b).

According to a survey conducted by the trade union, 9.7% of the salaried employees (1,017 persons), who had the possibility to opt for it, have actually used the leisure option. Among workers, the usage amounted to 8.2% or 440 persons (GPA-djp 2013 and PRO-GE 2013, cited from Soder, 2014).

The leisure option has been introduced only in May 2013, and by now, no study exists about individuals' perceptions on this new work time policy.

### 7.1.2.1 Sampling Strategy: Purposeful Sampling

In this part of the qualitative analysis, we rely on the sampling strategy of *purposeful sampling*, also commonly termed judgmental sample. This nonprobabilistic approach is based on the selection of subjects according to the purpose of the study and the researcher's knowledge. The subjects are selected because of certain characteristics or categories, such as age, gender, social class, or role in an organization (Coyne, 1997; Marshall, 1996). This sampling strategy seems highly appropriate to our study, as we developed the qualitative part in close relation to the quantitative analysis. In fact, we have selected our interview partners by balancing the factors age, gender, occupation (levels of qualification), and position (workers and salaried employees). These variables, which have been used as guiding criteria for the sampling of our subjects, have also been applied in the quantitative analysis.

The three expert interviews helped us to establish contact to the field. Especially the works council representatives of the case company supported us by organizing the interviews. The two interviewees are each responsible for workers or, respectively, salaried employees. They searched for employees who were willing to give an interview and told them about our project. As we have informed the two works council representatives about our sampling criteria, they took into consideration these aspects when looking for potential interviewees. Furthermore, they have arranged a time schedule and provided us with rooms where we could conduct out the interviews. As the organization of the interviews in fact has been carried out by the works council representatives, we had not been in contact with the interviewees before the interviews took place.

We are aware that the way of approaching our interviewees might entail some problems. As the works council representatives have selected our respondents, we have not been able to fully monitor the procedure of recruiting. Therefore, one could argue that the interviewees have a close relationship with the trade unions or have been influenced by the works council representatives. Although we cannot completely rule out this problem, we are very confident that the sampling procedure did not have any major distorting influences on our results, as the respondents were talking very openly during the interviews and we had the impression that the works council representatives want to support our project without reservations.

#### 7.1.2.2 *Sample*

As the leisure option has been offered in relatively big companies, we conducted our interviews in one of the biggest firms in the electrics and electronics industry in Austria/Vienna, in which a substantial number of employees made use of the leisure option. In fact, about 230 workers and 440 salaried employees have chosen the leisure option in the investigated company.

The interviews took place in the building of the company in May 2014. In total, we conducted 17 interviews with employees of the case company. Nine of them opted for the leisure option, whereas eight chose the wage increase. The sample comprises six workers and eleven salaried employees. Among the interviewees, there are eight women and nine men, all of them in the age range of 32 to 53 years. We also paid attention to balancing the sample regarding the occupational position; thus among the interviewees there are both elementary and skilled workers, as well as service workers, professionals and executives.

### 7.1.2.3 Method of Data Collection: Problem-Centered Interviews

Concerning the interviews conducted with employees, we rely on the methodology of *problem-centered interviews* developed by Witzel (2000). Witzel names four basic elements of qualitative interviews: A preceding short questionnaire aiming at gathering socio-demographic data; an interview guide providing a structure for orientation to warrant the comparability of the interviews; a tape recording providing the basis for full transcription; and a postscript written immediately after the interview to amend the tape recording (Witzel, 2000). The combination of questions and narrative stimuli in the interview guide enables the collection of biographical data with respect to a certain problem, focusing on the interviewee's perspective on the problem (Flick, 2009). The latter aspect is highly crucial to our study, as the emphasis of the qualitative part lies in researching the motives behind the actual decision about a reduction in work time.

The narrative stimulus is formulated in a way it encourages the interviewees to tell about the decisive reasons for taking the decision regarding the leisure option. It has been formulated as follows:

About one year ago, you had the possibility to choose the leisure option. What are the reasons that caused you to decide for the leisure option/for the pay raise? Please just tell us about your different motives!<sup>20</sup>

This open beginning of the interview is intended to trigger personal narratives and enables the interviewees to speak openly about the topics they regard as most relevant.

An interview guide forms the basis for subsequent immanent and exmanent questions. Although key questions are prepared in advance, this kind of semi-structured interviewing still allows interviewees to diverge into topics and ideas they consider relevant. The flexible and open structure facilitates them to share their own perspectives, experiences and interpretations. The questions of the interview guide are based on factors that are relevant for work time preferences, as being identified in the course of our literature review. The topics on family situation and financial situation are also related to variables used in the regression analysis referring to the number of children living in the household (children), the age of the youngest child (agechild), the relationship status (relation) and the hourly wage (incperwh). The other questions of the interview guide enable us to shed light on more fine-grained aspects of work that could not be captured by the standardized survey.

The main topics encompassed in the interview guideline are listed below:

- Working time autonomy
  - Work time regulation
  - Flexibility
  - Flexitime
- Working environment
  - o Task
  - Job satisfaction
  - Workload
  - o Fear of job loss
  - Discussions with colleagues

<sup>&</sup>lt;sup>20</sup> Original wording: "Vor knapp einem Jahr hatten Sie die Möglichkeit, sich für die Freizeitoption zu entscheiden. Warum haben Sie sich damals für die Freizeitoption bzw. die Lohn-/Gehaltserhöhung entschieden? Erzählen Sie uns bitte einfach, was Ihre verschiedenen Beweggründe waren!"

- Family situation
- Financial situation
- How leisure option is used (only if interviewee chose leisure option)
- Satisfaction with decision

Apart from the guideline, the short questionnaire suggested by Witzel is also developed in relation to the variables used in the regression model. In fact, the questionnaire comprises the (slightly modified) questions of the Austrian Microcensus 2012 underlying the variables applied in the model. The questionnaires thus enable us to obtain data on socio-demographic factors, household and family characteristics, employment conditions and extrinsic motivators. This data obtained from the questionnaires also enters the qualitative analysis<sup>21</sup>.

### 7.1.2.4 Method of Interpretation

In order to interpret the data collected by the problem-centered interviews, we rely on the *Framework Method* (Ritchie et al., 2012). This method of interpretation makes it possible to "compare and contrast data by themes across many cases, while also situating each perspective in context by retaining the connection to other aspects of each individual's account" (Gale et al., 2013). The Framework Method thus is not only highly suitable for the analysis of interview transcripts in general, but also with respect to our study as the comparison within and between interviews is enabled.

For the analysis of our interviews, we used the qualitative data analysis software MAXQDA. After transcribing all the interview material, we went through three of the interviews, thereby assigning a label (a *code*) to each text passage. This process of inductive coding provided us with a list of codes, which has been grouped and sorted to develop an analytical framework. We then applied this analytical framework to all problem-centered interviews. Via MAXQDA, we exported the coded passages into an Excel spreadsheet. The next step was to reduce the data by paraphrasing the coded material for each interview. These paraphrases have then been incorporated into one major spreadsheet, with all the observations on the vertical axis, and all the categories on the horizontal axis. Also, the evaluation results of the questionnaires have been included into this table. This final table allowed us to compare the two groups of employees, those with the leisure option and those with the pay raise, and analyze the interview content together with the socio-demographic and work related information obtained from the questionnaire.

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<sup>&</sup>lt;sup>21</sup> The interview guideline as well as the questionnaire are provided in the appendix.

#### 7.2 Results

The presentation of the qualitative results is divided into two parts: The first part contains a descriptive analysis, which focuses on the two different groups of interviewees, on the one hand employees who have chosen the leisure option, and on the other hand, those who have opted for the wage increase. For each of the subsamples, we first present the socio-demographic characteristics as well as other work and work time related information obtained from the questionnaire handed out to the interviewees at the end of the interviews. We then discuss the motives that were relevant for the respondents' decision between a pay increase and additional leisure time.

The second part, we provide a more detailed analysis of the interview material. In this in-depth analysis, we present some interesting patterns within the subsamples, illustrated by several interview passages. Moreover, we develop three theses, which can be seen as major results of our quantitative part.

Table 11 on page 103 provides an overview about the interviews, comprising the main results of the questionnaire. Also, numbers are assigned to each employee, which allows for relating the interview passages presented in the in-depth analysis to the socio-demographic characteristics, etc. of the respective interviewee.

# 7.2.1 Descriptive Analysis

#### 7.2.1.1 Employees Who Opted for Leisure Option

As already mentioned, the sample comprises nine persons who made use of the leisure option, including four women and five men. The interviewees of this group are aged between 32 and 53. Most of them have one child or no children at all (living in the same household); however, there are also two men with two or three children, respectively. Those children are aged 12 to 24 years. Regarding the highest educational level attained, there are four persons with a lower secondary education (completed apprenticeship), one person with an upper secondary education, and four persons with a tertiary education. The subsample contains four workers and five salaried employees. Among the respondents of this group, there are both elementary and skilled workers, as well as service workers, professionals and executives. The monthly net income indicated varies between EUR 1,400 and 4,500, with a concentration of values between EUR 2,000 and 2,600. Regarding the actual working time, the interviewees in this group are working between 38.5 and 48 hours per week. Even though they have opted for the leisure option, two of them are satisfied with their actual weekly hours and do not want to reduce them. The other respondents wish to decrease their working time

by 3.5 to 15 hours, irrespective of the leisure option. They would thus prefer a workweek of 30 or 35 hours, respectively.

After having introduced the socio-demographic characteristics prevalent in this group, we discuss the reasons people have stated as being relevant for their choice. Not surprisingly, all interviewees in this group have mentioned additional free time as a motive for choosing the leisure option. Most of the persons said that they had chosen the leisure option to spend more time with their family/children. Having more time for themselves (for hobbies, travelling or sports) was a motive for about half of the respondents. One interviewee indicated that she wanted to take a longer break, for which she would use the leisure option.

With regard to financial aspects, almost all interviewees indicated that renouncing the pay increase had not played a major role, mostly as they regarded their financial situation as satisfying. Other persons stated that the extent of future wage increases was uncertain anyway, or that the amount of the income foregone was not relevant. One person remarked that financial aspects had had an influence on his choice. This interviewee considered the leisure option as advantageous compared to the pay increase. As the latter is subject to taxation, thus reducing the additional income by more than 50%, he preferred the leisure option.

For some employees, also the working environment influenced their decision. According to one person, the pressure at work partly induced him to opt for the leisure option. The possibility of being able to actually consume the additional spare time was also a reason for one respondent. (Note: For some employees, a high workload and/or a large amount of outstanding holiday were an obstacle for taking the leisure option.) Another person indicated that the leisure option enabled him to balance out workload fluctuations, as he could take time off in summer when less work has to be done.

Another reason indicated by some interviewees is related to the characteristics of the leisure option. The employee using the leisure option for taking some time off argued that the accumulation of holiday entitlements was not possible, as it expires after two years. Taking a sabbatical for this purpose would be financially disadvantageous compared to the leisure option. Another person stated that the leisure option increased her flexibility in the organization of working time: It is possible to consume the leisure option if holidays are not granted at short notice; the firm cannot impose the consumption of the leisure option; it can be accumulated and entitlements do not expire over time. For another employee, the leisure option constitutes a possibility to gain additional days off as he has an all-inclusive contract that does not allow him to use flexitime.

In general, it is possible to consume the leisure option hourly, daily, or on a weekly or monthly basis. In addition, it is also possible to accumulate the entitlements over the years to take some time off. Shift workers and employees with an all-inclusive contract are though not able to use the leisure option on an hourly basis. However, none of the interviewees said that they would use the leisure option hourly, for example to reduce weekly work hours. Most of them indicated that they were using the leisure option in combination with flexitime entitlements and holidays in order to extend their holidays or to take off a bridging day to have a long weekend. As already mentioned, one person intends to save the entitlements to take some time off. Two persons also referred to the possibility of taking off Fridays, as this day only comprises 5.5 work hours at the investigated company.

All persons who have chosen the leisure option are very satisfied with their decision. We also asked this group of interviewees if they would choose the leisure option an additional time if it would be possible. (Note: The collective agreement 2014 stipulates that it is not possible for employees to opt for the leisure option again if they have already chosen it the previous year.) This decision would decrease the real income another time, but provide them with further leisure entitlements every year, in addition to the time credits already granted. Whereas five interviewees indicated that they would like to use the leisure option another time, four persons currently would not choose it once again. The main reasons stated for not using the leisure option a second time were the loss of income, that there is no need for further leisure time, or that the consumption of additional leisure entitlements would not be possible due to the workload.

### 7.2.1.2 Employees Who Opted for the Pay Raise

In our sample, eight persons have decided to take the pay increase offered by the collective agreement. Regarding some socio-demographic characteristics, this group is very similar to the group of employees who have chosen the leisure option: It comprises four women and four men, aged between 32 and 53. Half of the persons have no children at all (living in the same household). The other persons have one to four children aged between one and nineteen years, thus the employees in this subsample have younger children than those who opted for the leisure option. Five persons have a lower secondary education (completed apprenticeship); two persons have an upper secondary education and one person a tertiary education. Interestingly, the latter person was not yet sure whether to choose the leisure option in 2014. This shows that the highest educational level attained tends to be lower in this group compared to the interviewees with the leisure option. Regarding the occupation, the subsample encompasses two (skilled) workers and six employees (service workers). The monthly net income indicated ranges from EUR 1,000 to 4,500. This is very similar to the previous group; however, the net income of the interviewees with a pay raise is

concentrated around relatively higher values of EUR 2,800 to 3,500. Apart from one woman working part-time, total weekly work hours vary between 35 and 53.5 hours. Although they have not opted for the leisure option, five persons of this group would like to reduce their weekly working time by 3 to 8.5 hours, which would result into a desired workweek of 30 to 45 hours.

Besides the employees who have opted for the leisure option, we also asked this group of interviewees about the underlying motives for their choice. For almost all persons, the financial aspect was decisive for the decision. About half of them indicated that they would need the money for their family and children. One person said: "The primary reason for me is, well, I have three children and I also need this wage increase for my family. My wife does not earn that much, so each euro is actually worth a lot."<sup>22</sup> The others argued that they had weighed up the two options and had come to the conclusion that they prefer the pay increase. In part, this group of employees has calculated the future income losses and the reducing effects on their pensions due to the leisure option. One person considered using the leisure option in order to take care of her son of school age; however, as she does not have problems with organizing childcare and it was not clear if the leisure option can be consumed whenever required, she decided for the pay increase. Another person thought about taking the leisure option and accumulating the entitlements to retire earlier. However, he was not sure if he would be employed in the same firm until his retirement, as it is not unusual that employees leave the profession before retirement age due to severance schemes imposed by the company.

Besides the financial factor, another frequently stated reason was the fact that it would not have been possible to consume the additional leisure entitlements granted by the leisure option. Most of the persons who referred to this motive are in the firm for already more than 25 years, and thus are entitled to six (instead of five) weeks of holidays per year. They argued that they would not have been able to consume an extra week of holiday, as it is already difficult to use the current vacation entitlements. Some interviewees also said that the leisure option would not have been granted to them because of a large amount of outstanding holidays, or that their vacation entitlements were even close to expiration. A high workload was the main reason for not being able to consume their holidays. Two of the respondents explained that they had accumulated a lot of holidays because of working abroad for some years, or due to a ban on taking leave several years ago. One interviewee argued that he could consume his outstanding holidays in autumn or winter; but at that time his

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<sup>&</sup>lt;sup>22</sup> Original wording: "Der primäre Grund bei mir ist halt wirklich, also ich habe drei Kinder und ich benötige diese Lohnerhöhung auch für die Familie. Meine Frau verdient nicht so viel und jetzt ist bei mir jeder Euro eigentlich sehr viel wert."

children are at school, why he did not see any need to take time off. Another person stated that her position could not be substituted by another person when she is not at work.

At the time of the interviews, it has already been clear that the leisure option will be offered another time in the collective agreement 2014. Therefore, we asked this group of employees if they were considering taking the leisure option this year. Almost all respondents said that they would opt for the pay increase again. Two of them stated that they would take it at a higher age when money does not play such a great role anymore due to fewer family obligations. Only one person was generally interested in the leisure option and unsure how to decide that year. She was still balancing between the additional time gained by the leisure option and income reductions.

Some employees also expressed, implicitly or explicitly, that they had no need for additional spare time for themselves. One interviewee would have opted for the leisure option at a younger age, when he would have needed more free time for his children of school age. Another employee remarked that his life partner only had five weeks of holiday, thereby implicitly suggesting that he could not share the extra leisure time with her. One respondent, who had not chosen the leisure option because of financial constraints, said that he would have used the time for his kids, but that he has enough leisure time for himself. Yet another person stated that he was not in need for additional spare time, as it would only be possible for him to take time off in autumn when children are at school; and at home no house conversion or the like was planned. He also said: "I am in the company to work and to earn money; and not to stay at home."

#### 7.2.1.3 Comparison between the Two Subsamples

Our sample comprises nine employees who have opted for the leisure option and eight persons who have decided for the pay raise. These two groups are very similar regarding age range, which complies with previous quantitative research, where the effect of age on work time preferences is found to be ambivalent. Also, men and women are distributed similarly among the two groups.

Apart from the similarities in respondents' age and gender, the two subsamples differ with respect to other socio-demographic characteristics. Although the number of children in both groups does not vary considerably, the children of employees with the leisure option are older than those who have chosen the pay increase. However, half of the respondents with the pay raise do not have any children at all. Additionally, the two groups also differ regarding their highest educational level attained: Whereas most of the persons who opted for the pay increase have a lower or upper secondary education, only one person has a tertiary education. Interestingly, the latter person

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<sup>&</sup>lt;sup>23</sup> Original Wording: "Ich bin ja auch in der Firma zum Arbeiten und zum Geld verdienen. Und nicht, dass ich jetzt zuhause bleibe."

considered to choose the leisure option in 2014. In contrast, in the group with the leisure option there are four persons with a tertiary education. This is also reflected in the occupational position of the respondents (regarding salaried employees): While the subsample of employees using the leisure option comprises service workers, professionals as well as one executive; the other group comprises only service workers. Thus both the qualification (educational level attained) and the occupational position tends to be higher in the group of employees who chose the leisure option. This observation also corresponds to previous quantitative research, where higher educational attainment and higher occupational position were identified as one of the most stable factors increasing employees' preference for reducing their work time.

Interestingly, the level of qualification also seems to have an influence on the decision if considered together with the number of children: Among our sample, all interviewees with a lower or upper secondary education, who have two children or more, have opted for the pay raise. In contrast, among the employees with a tertiary education, also some of the persons with more than one child have chosen the leisure option. It can therefore be stated that the number of children seems to have an effect on the decision between additional time and a pay increase for low- and medium-skilled employees, whereas no such influence can be observed among the high-skilled employees.

With regard to income, no major difference concerning the range of variation can be observed. However, it is even noticeable that the net income of the group with a pay raise is concentrated around relatively higher values compared to the other group. Here previous studies come to different conclusions regarding the effect of financial incentives on work time preferences.

In this context, it has to be noted that there is not always a positive correlation between qualification, occupational position and/or income, as it is usually assumed. In fact, the level of income also strongly depends on age/seniority. Whereas some rather young respondents earn relatively little although they have a tertiary education, some older employees only have a lower secondary education, but a relatively high income. Furthermore, the level of income also depends on the position: the lowest incomes can be observed among workers, and the highest among salaried employees.

Actual weekly work hours, as indicated by the interviewees, do not substantially differ between the two groups. This contradicts the majority of quantitative findings which identify the effect of actual working time on the wish for work time reduction as the most salient. What is remarkable is that also more than half of the respondents with the wage increase wish to reduce their weekly work hours (by 3 to 8.5 hours). On the other hand, two of the employees using the leisure option did not indicate any wish to reduce their weekly work time. This shows that the leisure option is not regarded as a

tool to reduce weekly work hours, but rather to reduce annual working time. The other interviewees using the leisure option would like to work between 3.5 and 15 hours less per week, which would result into a desired workweek of 30 to 35 hours, respectively. This partly applies also to employees in a relatively high position and level of education. Not surprisingly, respondents with the leisure option generally indicate higher mismatches than those with the pay raise, which in turn means that they prefer shorter weekly working hours.

The interviewees were also asked about their job satisfaction (regarding tasks, working time, flexibility, working environment, responsibility, etc.). Comparing the two groups reveals that the respondents who have opted for the pay raise tend to be slightly more satisfied with their work. However, this conclusion should be considered with caution as it is based on the interpretation of qualitative interviews, not on a quantitative scale. With respect to the pressure experienced at work, no substantial difference can be observed between the two groups.

The preceding descriptive analysis of the problem-centered interviews conducted with employees reveals that the two groups are neither homogenous in their socio-demographic characteristics nor with respect to the motives they stated regarding their decision between a wage increase and additional leisure time.

For the group of employees with the leisure option, gaining more free time, mostly for family/children or for themselves (for hobbies, travelling or sports), was the most decisive factor. Whereas financial aspects only played a minor role, work related issues (pressure at work, possibility of consuming leisure option, balancing out workload fluctuations) and the characteristics of the leisure option (no expiration over time, more flexibility in work time organization, extra free days with all-inclusive contract) also influenced the respondents' decision.

Financial aspects were the major reason for choosing the pay increase instead of the leisure option. The respondents either argued that they would need the money for their family and children, or they preferred the pay raise after weighing up the two options. Another cause that has been mentioned frequently is that it would not have been possible to consume the additional time credits due to the high workload or outstanding holidays, respectively. Most of the interviewees referring to this reason have six weeks of holiday per year, as they are in the firm for already more than 25 years. However, comparing the two groups reveals that in each group, about half of the interviewees are employed in the firm for more than 25 years. Some interviewees also remarked, implicitly or explicitly, that they had no need for extra spare time.

According to the interviewees, they are all very satisfied with their decision. Among the group using the leisure option, about half of the respondents would choose this option an additional time, if possible, thus gaining even more additional leisure entitlements per year. Apart from one person who is not sure yet, all interviewees who opted for the pay raise have indicated that they would take the same decision this year.

### 7.2.2 In-Depth Analysis of Problem-Centered Interviews

In the first part of our qualitative analysis, we have separately examined the two groups of employees – those who have chosen the leisure option and those who have opted for the wage increase. Our results reveal that the two subsamples are quite heterogeneous regarding socio-demographic characteristics and the motives that were decisive for the respondents' choice between a wage increase and additional leisure time. However, looking more closely at the qualitative material, some patterns within the subsamples become evident. These tendencies within the groups of interviewees are presented in the following subsection. Moreover, we will develop three theses in the course of this chapter.

# 7.2.2.1 Employees Who Have Opted for the Leisure Option

According to the collective agreement 2014, employees who had already opted for the leisure option in 2013 were not allowed to choose it again in 2014. However, during the interviews we asked the employees with the leisure option if they would like to choose it an additional time, provided that it would have been possible. This would imply that the employees renounce a pay raise another time while gaining additional time credits, in addition to the leisure entitlements already granted. Five persons stated that they would use the leisure option once again. Four persons would not use it an additional time; however, they are all satisfied with their decision for the leisure option. Looking at these two groups in more detail – the persons who would like to use the leisure option another time, and those who do not – reveals some interesting differences regarding the motives they stated.

## 7.2.2.1.1 Employees Who Would Opt for the Leisure Option an Additional Time

For the five persons who would have chosen the leisure option an additional time (if possible), spare time seems to have a significant value in itself. To the initial question regarding the factors that were decisive for the decision, one interviewee responded:

The leisure option offers the opportunity to decide between more money and more time. This means that you have to weigh up if you want more time or more money. And in short, I have preferred the time.<sup>24</sup>(No. 9)

#### Two other interviewees stated:

In the first place, it is paramount for me to have more available leisure time. Financial worries and to gain even more income was completely negligible for me.  $^{25}$  (No. 1)

My motive was primarily – as the name of this option suggests – simply having more leisure time. I like to work and I am gladly committed to my job; however, I have reached a point in my professional life where time becomes increasingly important for me.  $^{26}$  (No. 5)

The preceding statements have been made in response to the first question asking for the main reasons for the employees' decision. As the above quotes suggest, leisure time obviously has an intrinsic value for those employees who would choose the leisure option an additional time. This is also reflected in the statements concerning the activities they are planning to devote their additional spare time to. They indicated that they have mainly chosen the leisure option to have more time for themselves, for their hobbies and their families.

One employee said that the leisure option allowed him to realize his hobby as a painter again and to travel more with his wife:

I have more time for myself again. I have a hobby; extra-professionally, I am a painter. In this way I was able to paint pictures again. [smiling to oneself] Well, now I start to enjoy the spare time more. [...] And I think the money is enough anyway; I rather renounce various luxuries. Well, I allow myself to drive a car that is a little more expensive. But I can do without that. For me, leisure time is simply more important. [...] And I would have taken it again. Well, I could imagine having maybe ten weeks of holidays. [laughing] Or twelve weeks of holidays. [No. 1)

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<sup>&</sup>lt;sup>24</sup> Original wording: "Die Freizeitoption bietet einem an, zu entscheiden, ob man mehr Geld will oder eben mehr Zeit. Das heißt, prinzipiell muss man abwägen, ob man lieber mehr Zeit oder mehr Geld will. Und kurz gesagt ist mir die Zeit lieber gewesen."

<sup>&</sup>lt;sup>25</sup> Original wording: "In erster Linie steht bei mir im Vordergrund, dass ich dadurch mehr Freizeit zur Verfügung habe. Finanzielle Sorgen und noch mehr Einkommen zu gewinnen war für mich völlig vernachlässigbar."

<sup>&</sup>lt;sup>26</sup> Original wording: "Meine Beweggründe waren in erster Linie einmal, so wie der Name dieser Option sagt, einfach mehr Freizeit zu haben. Ich arbeite gerne und ich engagiere mich gerne für meinen Beruf, aber ich bin irgendwo in meinem Arbeitsleben auch an einem Punkt angelangt, wo mir Zeit mehr und mehr wichtig wird."

<sup>&</sup>lt;sup>27</sup> Original wording: "Ich habe wieder mehr Zeit für mich. Ich habe ein Hobby, ich bin Maler nebenbei. Dadurch habe ich auch wieder Bilder malen *können*. [schmunzelt] Naja, ich fange jetzt auch an, die Freizeit mehr zu genießen. [...]Und ich denke mir, mit dem Geld geht es sich auf jeden Fall aus, da verzichte ich eher noch auf irgendwelche Spumpanadeln. Also ich leiste es mir, ein bisschen ein teureres Auto zu fahren. Aber auf das kann ich ja verzichten. Für mich ist die Freizeit einfach mehr wert. [...] Und ich hätte es schon gerne wieder genommen. Also ich könnte mir schon vorstellen, vielleicht zehn Wochen Urlaub zu haben. [lachen] Oder zwölf Wochen Urlaub."

Another employee indicated that the leisure option enabled him to visit his family more often:

Possibly I make more visits at home and spend more time with my family. In 30 or 40 years, this will most likely be difficult with my parents. However, with the extra money, I could, whatever, pay off my house earlier. Well, right now, time simply has absolute priority for me.<sup>28</sup> (No. 3)

Spending time together with family and children also constituted a motive for two other persons:

Well, I have three children, and then I cannot say, now I am at work and the three children are annoying and my wife will handle it somehow. I also want to be present as they are growing up only once. [...] And apart from that, I know what to do with my spare time. So it is not the case that I am bored.<sup>29</sup> (No. 7)

Well, simply in order to spend more time with my family. Never mind if it is a weekend trip or sport activities with friends, my husband, children, or whatever. [...] Besides that, I am 50, my father died last year; my mother is also at an advanced age. Although I do not have to intensively care for her, the interaction with an elderly person is more intense, as they cannot do various things independently. Also for this reason, time for personal hobbies and family is important for me. <sup>30</sup> (No. 5)

#### 7.2.2.1.2 Employees Who Would not Use the Leisure Option an Additional Time

After having analyzed the group of employees who would opt for the leisure option another time, we scrutinize the employees who have opted for the leisure option in 2013 and are satisfied with their decision, but would not use it once again.

From the statements of this group of interviewees, it does not become clear that leisure time has an intrinsic value for them. They rather indicated that they had chosen the leisure option due to a specific purpose, or because this possibility appeared to be more advantageous after having weighed up the options. This is reflected in the following quotes:

The thing is, I am from Serbia and I want to go home at least three times a year. And, how should I put it, five weeks of holidays per year are simply not enough. [...] If I would live here all the time, it would possibly be sufficient, with the compensatory time off and the bridging days. For me personally, that

<sup>&</sup>lt;sup>28</sup> Original wording: "Wahrscheinlich mache ich mehr Besuche zuhause und verbringe mehr Zeit mit meiner Familie. In 30 oder 40 Jahren geht das mit meinen Eltern höchstwahrscheinlich schlecht. Dafür könnte ich mit dem extra Geld, keine Ahnung, mein Haus früher abzahlen. Also für mich hat jetzt halt Zeit die absolute Priorität."

<sup>&</sup>lt;sup>29</sup> Original wording: "Naja, ich habe drei Kinder und da kann ich nicht sagen, jetzt bin ich in der Arbeit und die drei Kinder gehen mir auf die Nerven und meine Frau wird das schon irgendwie machen. Ich will auch dabei sein, die werden ja nur einmal groß. […] Und abgesehen davon, weiß ich mit meiner Freizeit etwas anzufangen. Also es ist ja nicht so, dass mir dann fad ist."

<sup>&</sup>lt;sup>30</sup> Original wording: "Also schlicht und einfach um mehr Zeit mit der Familie zu verbringen. Egal ob es jetzt Wochenendausflüge sind, oder sportliche Aktivitäten mit Freunden, Ehemann, Kindern oder was auch immer. [...] Und dazu kommt auch der Aspekt, ich bin eben 50, mein Vater ist voriges Jahr verstorben, meine Mutter ist jetzt auch schon im fortgeschrittenen Alter. Auch wenn ich sie nicht intensiv pflegen muss, ist die Auseinandersetzung mit einem älteren Menschen intensiver, da dieser dann vieles nicht mehr so selbstständig tun kann. Auch aus diesem Grund ist Zeit für persönliche Hobbies und Familie wichtig für mich."

was the only reason. [...] My family is there and we have a house there. And if something happens, we have to drive there quickly. But we do not get holidays at short notice. And if the company is not going well, no work, then we have to consume the reserves [note: holidays and compensatory time off]. I can save the leisure option and do not have to use up everything. [...] Because from the works councils, it was agreed that no one can force us to consume it.<sup>31</sup> (No. 3)

One interviewee indicated that she wanted to take a longer break, for which she would use the leisure option. She argued that she still had to work 20 years (due to a change in the pension scheme that foresees longer periods of employment for women). Another person has chosen the leisure option to balance out the low workload in summer and because the pay increase would have been associated with tax disadvantages:

There are two things. First, it is simply the case that there is less work to do in summer. [...] And the second point, at least as important, I have taken it because from the pay raise not even 50% would have remained. [...] And then I thought, well, as not that much remains, I simply prefer the five hours per month.<sup>32</sup> (No. 6)

An executive stated that his work contract did not allow him to use flexitime, and that the leisure option would allow him to have some additional days off:

The reason is that, as an executive, you have an all-inclusive contract that does not allow you to work overtime. And thus you do not have the possibility to take compensatory time off. [...] I rather consider the leisure option as a tool that allows me to have compensatory time off; in this case it is seven days per year. [...] If you have a normal contract and you want to have one day off, you work ten hours for four days, then you can have the last day off. Executives, they are anyway working ten hours or more per day. And they do not get compensated.<sup>33</sup> (No. 8)

The quotes cited above suggest that the four respondents, who do not want to take the leisure option an additional time, have made this decision based on rational reasoning. This group has taken

<sup>31</sup> Original wording: "Es ist so, ich komme aus Serbien und dann möchte ich mindestens dreimal pro Jahr nachhause fahren. Und, wie soll ich sagen, die fünf Wochen Urlaub im Jahr sind mir einfach zu wenig. [...] Wenn ich ständig hier leben würde, dann würde mir die Zeit vielleicht ausreichen, mit dem Zeitausgleich und den Fenstertagen. Für mich persönlich war das der einzige Grund. [...] Meine Familie ist dort und wir haben ein Haus dort. Und wenn was passiert, dann müssen wir schnell dorthin fahren. Aber so schnell kriegen wir keinen Urlaub. Und wenn es in der Firma einmal schlecht steht, keine Arbeit, dann müssen wir die Reserven [Anm.: Urlaub und Zeitausgleich] verbrauchen. Die Freizeitoption kann ich mir aufsparen und ich muss dann nicht alles aufbrauchen. [...] Weil von den Betriebsräten ist es ja so ausgemacht, dass uns keiner zwingen kann, diese Tage zu verbrauchen."

<sup>&</sup>lt;sup>32</sup> Original wording: "Es sind zwei Dinge. Also das erste ist einmal, dass im Sommer einfach weniger zu tun ist. [...] Und der zweite Punkt ist, mindestens genauso wichtig, dass mir von der kollektivvertraglichen Erhöhung nicht einmal 50% übrig geblieben wären. [...] Und dann hab ich mir gedacht, nachdem mir jetzt nicht so viel übrig bleibt, sind mir die fünf Stunden pro Monat schlicht und ergreifend lieber."

<sup>&</sup>lt;sup>33</sup> Original wording: "Der Grund ist der, dass man als Führungskraft einen All-Inclusive-Vertrag hat, mit dem man keine Überstunden machen kann. Und daher hat man nicht die Möglichkeit, auf Zeitausgleich zu gehen. […] Ich sehe die Freizeitoption eher so, dass ich auch einmal auf Zeitausgleich gehen kann oder in diesem Fall sind es sieben Tage pro Jahr. […] Wenn Sie mit einem normalen Vertrag einen Tag frei haben wollen, dann arbeiten Sie vier Tage mal zehn Stunden, und dann können Sie am letzten Tag freinehmen. Die Führungskräfte arbeiten sowieso jeden Tag zehn Stunden oder mehr und erhalten dafür keinen Ausgleich."

the decision because they planned to use the leisure option for a specific reason (visiting family abroad, taking a longer break, balancing out workload fluctuations), and because the characteristics of the leisure option offer specific advantages (flexibility of usage, no expiration, no taxation, substitution for flexitime). This implies that extrinsic motivations, which are related to work or private conditions, have been decisive for choosing the leisure option for this group of employees. Of course, also this subgroup has actually chosen the leisure option in order to gain more free time. However, from the conversations it does not become apparent that these employees have made their decision because they appreciate leisure time as such, in contrast to the preceding subgroup.

In response to the question as to whether the employees would like to choose the leisure option an additional time, the interviewees of this group stated:

No, not again. Maybe later. I already lose the pay increase now, and then I would earn much less than all the others. Once is enough for me. $^{34}$  (No. 3)

No, because that does not work out. Then I could not use up either my holidays or my usual flexitime. <sup>35</sup> (No. 6)

You mean additionally? [right] So that I only have to work five hours when I retire? [smiling to oneself] Well I think that once is already totally enough for my current life situation. [...] Of course it also depends on the workload. There are many factors that are relevant here.<sup>36</sup> (No. 8)

The quotes above reveal that the main reasons for not using the leisure option a second time are the loss of income, that there is no need for further leisure time, or that the consumption of additional leisure entitlements would not be possible due to the workload. Hence, for this group, a potential intrinsic motivation for more leisure time is constrained by work or private conditions.

Another finding worth mentioning is that, among the persons who have chosen the leisure option, a link between the appreciation of leisure time/family time and the level of qualification can be observed. Those employees, who stated that spare time is important for them, or respectively, that they intend to spend the additional time gained through the leisure option with their family and children, tend to have a higher education than those who did not mention these aspects. This finding could be explained by the notion of adolescent socialization. According to Baethge (1991),

<sup>&</sup>lt;sup>34</sup> Original wording: "Nein, nochmals nicht. Vielleicht später dann. Ich verliere jetzt schon die Lohnerhöhung, dann würde ich viel weniger verdienen als alle anderen. Einmal reicht mir."

<sup>&</sup>lt;sup>35</sup> Original wording: "Nein, weil sich das nicht ausgeht. Dann könnte ich entweder meinen Urlaub nicht aufbrauchen oder meine normale Gleitzeit."

<sup>&</sup>lt;sup>36</sup> Original wording: "Sie meinen nochmal zusätzlich? [genau] Sodass ich dann, wenn ich in Pension gehe, nur mehr fünf Stunden arbeiten muss? [schmunzelt] Also ich glaube, dass einmal für meine momentane Lebenssituation schon vollkommen ausreichend ist. [...] Das hängt natürlich auch davon ab, wie es mit der Arbeitsbelastung ist. Es gibt viele Faktoren, die da mitspielen."

preferences regarding the awareness towards work are strongly influenced by the educational level. The longer a person remains in education or training, the less the work environment molds a person's attitude, and the stronger the influence of everyday aspects. This suggests that persons who went through longer periods of education and training are not only oriented towards work, but also conceive leisure and time with family and friends as important aspects of their life.

Based on these observations, we formulate our first thesis: For employees with higher educational levels, leisure time and family time constitute intrinsic values, which induce them to reduce working time.

This proposition is very much in line with previous quantitative research, which identifies higher educational attainment as one of the most stable factors for increasing employees' preferences for reducing actual working time. However, one could also assume that higher educated employees work in higher positions and thus show more intrinsic motivation for work. Also, it can be supposed that they do not consider themselves capable to reduce work time due to high levels of workload and responsibilities. From this perspective, it is somewhat surprising that the preference to reduce work hours rises with educational attainment.

### 7.2.2.2 Employees Who Have Opted for the Pay Raise

As the employees with the leisure option, so is this group very heterogeneous regarding sociodemographic characteristics and the motives indicated. However, some trends become apparent in this group too, which will be discussed in this subsection.

Among the interviewees who opted for the pay raise, the most frequently stated motives were related to financial aspects and difficulties in consuming the extra leisure time granted by the leisure option. In the following, we will therefore look at these two motives in more detail.

#### 7.2.2.2.1 Financial Reasons

Almost all of the respondents mentioned financial issues as being decisive for their choice. However, whereas some interviewees stated that they needed the additional money, others indicated that the pay increase was simply considered beneficial compared to the leisure option. It can be observed that these differences in justifications are also connected to certain socio-demographic characteristics.

In the following, we try to further differentiate between the persons who mentioned financial reasons, according to whether the choice has been made due to financial needs or rather based on financial preferences. We have identified three groups, which will be analyzed in detail below.

The first group is characterized by a relatively low level of income and qualification. The two persons associated with this type are both male and skilled workers. Both of them have more than two children and indicated that they had chosen the pay raise because they needed the money for their families:

In fact, the leisure option has been an option for me as well. But for me, it was simply not possible in financial terms. That was actually the main reason. [...] I have four children and a wife. Well, I would have needed the leisure time for the children. But it is simply the case that this wage increase has an effect on the whole lifetime and finally, it was more important for me to take the money and not the leisure. [...] For me, security was important as well. <sup>37</sup> (No. 16)

The primary reason for me is, well, I have three children and I also need this wage increase for my family. My wife does not earn that much, so each euro is actually worth a lot. [...] Well, I said, if I take the leisure option, my wage does not increase, which would directly affect my pension. [...] I also have a housing loan, which I have to pay off. Well, as I said, you also want to buy other things, like a car. Or if the children go on a ski week, or whatever. That always costs around EUR 1,000. Things like that sum up, in addition to the fixed costs.<sup>38</sup> (No. 17)

These interviewees both referred to the long-term effect the foregone wage increase would have. They mentioned implications on the whole lifetime, on the pension or security aspects, which reveals that they are planning to stay at the firm for several more years (otherwise the leisure option would not have such a long-lasting, great impact on wages and pension). As they have been in the firm for almost 25 or 32 years, respectively, they seem to feel deeply identified with the firm, which is also reflected in their high satisfaction and commitment towards work:

I am very satisfied. There is nothing to complain about. [laughing] But the activity is okay. I could not imagine anything better. [...] The working atmosphere and the colleagues are okay. The payment is appropriate as well. From that perspective, I would probably never get such a job again.<sup>39</sup> (No. 16)

Well, I am flexible and resilient. Indeed, I work a lot in terms of hours, but I do not regard this as a burden. As I said before, I am someone who likes to work overtime and who rather does a lot of

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<sup>&</sup>lt;sup>37</sup> Original wording: "Die Freizeitoption war sehr wohl auch für mich eine Option. Aber es war für mich einfach aus finanzieller Hinsicht nicht möglich. Das war eigentlich der Hauptgrund. […] Ich habe vier Kinder und eine Frau. Also die Freizeit hätte ich gebraucht für die Kinder. Aber diese Lohnerhöhung wirkt sich halt doch auf die ganze Lebenszeit aus und schlussendlich war es für mich doch wichtiger, dass ich das Geld nehme und nicht die Freizeit. […] Mir war halt doch die Sicherheit auch wichtig."

<sup>&</sup>lt;sup>38</sup> Original wording: "Der primäre Grund bei mir ist halt wirklich, also ich habe drei Kinder und ich benötige diese Lohnerhöhung auch für die Familie. Meine Frau verdient nicht so viel und jetzt ist halt bei mir jeder Euro eigentlich sehr viel wert. [...] Na gut, ich habe gesagt, wenn ich jetzt die Freizeitoption nehme, erhöht sich mein Lohn nicht, was sich eins zu eins auf die Pension auswirken würde. [...] Einen Wohnungskredit habe ich auch noch, den muss ich zurückzahlen. Ja, wie gesagt, man will sich auch andere Sachen kaufen, ein Auto oder so. Oder wenn die Kinder auf eine Schulschiwoche mitfahren, oder was auch immer. Das kostet auch immer um die 1.000 EUR. Und da kommt dann doch immer wieder ein Geld zusammen, zusätzlich zu den Fixkosten."

<sup>&</sup>lt;sup>39</sup> Original wording: "Ich bin sehr zufrieden. Da gibt es nichts. [lacht] Aber die Tätigkeit, die passt. Ich könnte mir nichts besseres vorstellen. [...] Das Arbeitsklima passt, die Kollegen passen. Die Bezahlung ist auch okay. Von dem her, so eine Arbeit werde ich wahrscheinlich nie wieder kriegen."

overtime. Other colleagues do not like this that much. I also carry out activities that are physically demanding, which is something others don't like that much either. However, that always depends on the perspective, what is stressing and what is not. [...] I am in the company to work and to earn money; and not to stay at home. <sup>40</sup> (No. 17)

Interestingly, they also stated that they did not need any additional leisure time:

Well, if I would have chosen the leisure option, for sure I would have gone on holidays only in summer. Or maybe when the children have semester break or Easter holidays. But only when the children are at home. Well, for me in particular, I have enough spare time; this must be said as well. 41 (No. 16)

For a longer recreation holiday, when you go away on a trip, you also need money. Well, I could spend my holidays at home. But at home, no housing renovations are pending, which would require longer holidays. And therefore, it actually does not really make sense. As I can work overtime anyway, fortunately I could transform the overtime into compensatory time off, which would allow me to stay at home for three, four, five days. [...] I could have taken the holiday in November or December. But at that time, there is no need because the children are at school.<sup>42</sup> (No. 17)

This reveals that those two workers have no intrinsic motivation for additional spare time; instead they would use the leisure for social purposes.

To sum up, these two workers have chosen the wage increase because they needed the money for their families. They also indicated that it was important for them to offer their families certain material goods. It is also noteworthy that they do not need any additional leisure time for themselves (only for the children), and that they mentioned a high satisfaction and motivation for their work, which reveals a strong orientation towards paid work.

The second group of employees who argued that they have chosen the pay increase due to financial reasons has taken this decision not because they are in need of the money, but because they preferred the pay increase after weighing up the two options.

<sup>&</sup>lt;sup>40</sup> Original wording: "Ja, ich bin da flexibel und belastbar. Ich mache sicher stundenmäßig sehr viel, aber ich sehe das nicht als Belastung. Also wie gesagt, ich bin eben jemand, der gerne und viele Überstunden macht. Andere Kollegen machen das halt nicht so gerne. Ich mache auch Tätigkeiten, die körperlich anstrengend sind, was andere auch nicht so gerne machen. Also das ist halt immer so eine Sache der Ansicht, was belastend ist und was nicht. [...] Ich bin ja auch in der Firma zum Arbeiten und zum Geld verdienen. Und nicht, damit ich jetzt zuhause bleibe."

<sup>&</sup>lt;sup>41</sup> Original wording: "Also wenn ich die Option gezogen hätte, dann wäre ich hundertprozentig nur im Sommer auf Urlaub gegangen. Oder vielleicht eben in diesen Ferien, wo die Kinder Semesterferien oder Osterferien haben. Aber immer dann, wenn die Kinder zuhause sind. Also für mich speziell jetzt habe ich genug Freizeit, das muss man auch sagen."

<sup>&</sup>lt;sup>42</sup> Original wording: "Für einen längeren Erholungsurlaub, wenn man wegfährt, braucht man dort auch dementsprechend Geld. Ja, jetzt könnte ich den Urlaub zuhause verbringen. Aber zuhause stehen jetzt keine Umbauten oder so an, wo ich länger Urlaub bräuchte. Und damit macht es eigentlich nicht wirklich Sinn. Damit, dass ich eh auch Überstunden machen kann, zum Glück, könnte ich die Überstunden auch in den Zeitausgleich reingeben lassen, wo ich dann drei, vier, fünf Tage zuhause bleiben könnte. [...] Im November hätte ich den Urlaub nehmen können, oder im Dezember. Aber da ist keine Notwendigkeit da, weil die Kinder halt auch in der Schule sind."

There are two persons in the sample who can be clearly assigned to this group. The fact that they both do not have any children and earn a relatively high income supports the assumption that they have made their decision due to financial preferences. They did not explicitly indicate for what reason they preferred the pay increase. (However, it has to be noted that we did not explicitly ask for this during the interviews.) The only reasons they stated were that the salary (including the pay raise) is received 14 times per year (due to the holiday pay and the Christmas bonus) whereas the leisure time is only granted for 12 months, and that only the pay raise was combined with compound interest. Hence, they have mostly based their decision on rational calculations, whereas the need for leisure seemed not to be relevant.

In the following, their statements concerning their underlying motives are presented:

One reason was simply an economical one. Because practically, I only get twelve months compensated in time, and I get the pay raise 14 times, with holiday pay and Christmas bonus. Furthermore, a part of the pay increase is paid to the pension fund, ditto to the employee provision fund. [...] From an economic perspective, you simply lose money. Besides, with each future pay increase I receive compound interest of the pay raise. Not so with the leisure option.<sup>43</sup> (No. 12)

I start my semi-retirement the 1<sup>st</sup> of October, which is blocked for four years, meaning that I will work for two more years, and then I am at home for two years. And therefore, I do not benefit from the additional holidays, as I will actively work for only two more years. So I benefit more from the money, as it also increases my pension. Therefore, the decision was quite easy. [...] Well, these 3%, that's not the world. But in sum, it is always something. So a little bit more was convenient for me. I don't know, if it is EUR 50 or 60 additional to the salary. But you always have to calculate, because it sums up, right. [...] My husband said: ,Well, of course you take the money!' [laughing] At first, I have not thought about it that much. I said, what do I need the leisure time for; I have so much outstanding holidays anyway. But it was him who brought up the argument that I actually benefit financially. Well, he has actually consolidated my position.<sup>44</sup> (No. 10)

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<sup>&</sup>lt;sup>43</sup> Original wording: "Ein Grund war einfach ein wirtschaftlicher. Weil ich bekomme da praktisch nur zwölf Monate abgegolten in Zeit und die Erhöhung bekomme ich 14 mal, mit Weihnachts- und Urlaubsgeld. Weiters wird von der Erhöhung bei uns ein Anteil in die Pensionkassa eingezahlt, detto in die Mitarbeiter-Vorsorgekasse. Allein vom wirtschaftlichen Standpunkt her verliert man einfach Geld. Weiters bekomme ich ja bei jeder weiteren Erhöhung Zinseszinsen von der Gehaltserhöhung. Bei der Freizeitoption *nicht*."

<sup>&</sup>lt;sup>44</sup> Original wording: "Ich fange mit 1. Oktober mit der Alters-Teilzeit an. Ich gehe dann vier Jahre in Alters-Teilzeit, die geblockte, das heißt, ich gehe dann noch zwei Jahre arbeiten und bin zwei Jahre zuhause. Und dadurch bringt mir der Mehrurlaub nichts, weil ich nur noch zwei Jahre aktiv arbeiten werde. Da habe ich mehr vom Geld, weil das für mich auch mehr in der Pension heißt. Also dadurch war die Entscheidung recht leicht. [...] Naja, diese 3%, das ist nicht die Welt. Aber in Summe ist es immer was. Also ein bisschen mehr war für mich halt angenehmer. Ich weiß nicht, sind das jetzt 50 oder 60 EUR, die halt wieder mehr auf dem Gehalt drauf sind. Man muss halt immer rechnen, es rechnet sich halt doch auf, nicht. [...] 'Na selbstverständlich nimmst du das Geld', hat mein Mann gesagt. [lachen] Ich habe mir zuerst nicht so viele Gedanken darüber gemacht. Ich habe gesagt, was brauche ich die Freizeit, ich habe eh so viel Urlaub. Aber das Argument, dass ich einen finanziellen Vorteil habe, darauf hat mich eigentlich erst er gebracht. Also er hat meine Position eigentlich gefestigt."

The latter quote also reveals that the specific point in a person's life course is a relevant factor that has to be considered. In this case, for the respondent close to retirement, the amount of the pension is a relevant aspect. As she will end her working life soon, she does not see any need for additional free time during the remaining two years in the firm. The statement also illustrates the possible influence the social environment may have on one's decision. During the interviews we have explicitly asked if friends or family members have had an impact on the decision, however, this interviewee was one of the few who indicated that another person's opinion has played a role.

We have now outlined two groups of employees for whom the financial aspect highly influenced their decision, but who are in very different financial situations. Apart from those respondents, there is a third group of persons who has opted for the pay increase due to financial reasons. However, they cannot be clearly assigned to one of the above described groups. They both have one child living in the same household. One person is working part-time, her husband full-time. Her argument was as follows:

Well, I have considered the leisure option because of my son, because he has to attend school. But then I have not done it. Well, you lose it once and then you take it with you forever. [...] So in the end, the financial aspect was crucial. Because it also has an effect in the future, and it probably affects the pension as well. It is not the case that you renounce it just once. But you never get it again. 45 (No. 11)

Another employee with a medium income and a wife working full-time stated:

"The decision was simply due to financial reasons. As I have a daughter who is in the middle of her education, and this surely will be the situation for the next seven to ten years, I have decided to take the money. "46 (No. 13)

In this subsection, we have scrutinized one of the most frequently stated motives for taking the pay raise, namely financial issues. It has been shown that some persons needed the additional money for their families, while others did not have any financial need, but have preferred the pay raise after having weighted up the two options. Another noteworthy finding is that the cumulative effect of the decision only seems to be relevant in financial terms. Respondents only referred to the fact that they would lose money in the future, but not that they would gain additional free time every year. The preference for money is thus much more related to a long-term perspective and security aspects,

<sup>&</sup>lt;sup>45</sup> Original wording: "Also überlegt hab ich wegen meinem Sohn, weil der schulpflichtig ist. Aber ich hab es dann doch nicht gemacht. Also du verlierst es einmal und ziehst es dann aber ewig mit. [...] Da war dann halt das Finanzielle ausschlaggebend. Weil es sich halt auch zukünftig auswirkt, und auf die Pension auch wahrscheinlich. Es ist ja nicht so, dass du nur einmal verzichtest. Aber du kriegst es ja nie mehr danach."

<sup>&</sup>lt;sup>46</sup> Original wording: "Die Entscheidung war schlicht und ergreifend finanzieller Natur. Da ich eine Tochter habe und die noch mitten in der Ausbildung steckt und das auch sicher noch die nächsten sieben bis zehn Jahre so sein wird, hab ich mich einfach dazu entschieden, dass ich das Geld nehme."

whereas the additional time granted every year by the leisure option is not considered from this point of view. In contrast, leisure seems to be associated only with short-term benefits.

This enables us to formulate a second thesis: Money is valued from a long-term, security perspective. This implies that some employees, even though living in a good financial situation, prefer not to decrease their working hours.

We can assume that the appreciation of financial security hinders work time reduction. Although the financial situation of certain employees would allow them to renounce a part of their income in exchange for additional leisure time, the fact that they place a high value on money reduces the preferences for work time reduction.

#### 7.2.2.2.2 Difficulties in Consuming Additional Leisure Time

Besides the financial aspect, another commonly stated reason for choosing the pay increase is related to the fact that it would not have been possible to use the additional leisure time provided by the leisure option. Most of the persons who referred to this motive have been in the firm for already more than 25 years, and thus are entitled to six (instead of five) weeks of holidays per year. They reasoned that consuming an extra week of holidays would be impossible, as they already face difficulties in using the current vacation entitlements. Some interviewees also said that the leisure option would not have been granted to them because of a large amount of outstanding holidays, or that the vacation entitlements were even close to expiration. These causes have been mentioned very often in connection with financial aspects. In the following, we present some of the statements made with respect to difficulties in consuming additional leisure time.

Besides the financial aspect, I have a lot of remaining holidays, the holiday entitlements of two years. So there was not really the need to have more leisure time, but rather to reduce the outstanding holidays. [laughing to oneself] [...] However, as I am in the lucky position to have six weeks of holidays and my life partner only has five weeks without the possibility to gain additional leisure time, this was not really an issue, also for that reason.<sup>47</sup> (No. 13)

I always have so much holidays that I have to consume them on the key date. So probably the leisure option would not have been approved. If you have lots of holidays, you cannot say that you want to have even one more week.<sup>48</sup> (No. 10)

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<sup>&</sup>lt;sup>47</sup> Original wording: "Neben den finanziellen Gründen habe ich einen Haufen Resturlaub, zwei Jahresurlaubs-Zeiträume. Also es war nicht wirklich der Bedarf da, mehr Freizeit zu haben, sondern eher, die Urlaubsansprüche abzubauen. [schmunzelt] [...] Aber da ich wie gesagt schon in der glücklichen Lage bin, sechs Urlaubswochen zu haben und meine Lebenspartnerin aber nur fünf Wochen und auch gar nicht die Option, zusätzliche Freizeit lukrieren zu können, war das auch aus diesem Grund kein Thema."

<sup>&</sup>lt;sup>48</sup> Original wording: "Ich hab immer so viel Urlaub, dass ich immer zu meinem Stichtag noch meinen Urlaub abbauen muss. Also es wäre mir wahrscheinlich gar nicht genehmigt worden. Wer nämlich sehr viel Urlaub hat, kann nicht sagen, man will noch eine Woche haben."

My decision had little to do with the salary. The reason is – I think you have to confront yourself with the workplace. My workplace is organized for 40 to 50 hours. I am in the company for a very long time. This means that I have already six weeks of holidays, which I cannot consume, because in principle there is no holiday replacement. So in the end, it would have a totally adverse effect if I had even more holidays which I cannot consume. This does not mean that I don't know what to do with my leisure time. But it has to do with the workplace and the working environment. <sup>49</sup> (No. 14)

During the interviews, we also asked the respondents about the reasons for not being able to consume their holidays. As the quotes below illustrate, a high workload has been the main reason for this.

It is simply because the workplace is occupied only once and not twice. I live in the project business and live from one project to the next. I mean, of course I go on holidays for 14 days, or three weeks in summer. I also go on holidays at Christmas. But a lot more is not possible. <sup>50</sup> (No. 14)

I have already been working in many departments, and there are departments with only two persons. Then you always have to make sure that there is a vacation replacement or something like that. But also because of the working time, the amount of work, not enough colleagues who could substitute us. That has already been the case in many departments.<sup>51</sup> (No. 10)

Due to the workload. Because it is simply not possible that I'm not here for seven weeks per year. On average, you are surely sick for one or two weeks, flu or something. The field of activity does not allow that you are absent for eight, nine weeks. And if you add up all the flexitime balances, it's another week. (No. 12)

When asking about his job satisfaction, this employee further indicated that the working pressure had increased during the recent years. According to him, this rising pressure manifests itself in the fact that time is built up because it is not possible to go home before finishing a certain activity. This

<sup>&</sup>lt;sup>49</sup> Original wording: "Meine Entscheidung hat weniger mit dem Gehalt zu tun. Der Grund ist – ich glaube, man muss sich mit dem Arbeitsplatz konfrontieren. Mein Arbeitsplatz ist eingeteilt auf 40 bis 50 Stunden. Ich bin sehr lange im Unternehmen. Das heißt, ich habe auch schon sechs Wochen Urlaub, und kann diesen nicht konsumieren, weil im Prinzip keine Vertretung da ist. Also es ginge im Endeffekt komplett in die gegenteilige Richtung, wenn ich theoretisch noch mehr Urlaub hätte und den nicht konsumieren kann. Das hat nichts damit zu tun, dass ich mit meiner Freizeit nichts anzufangen weiß. Aber das hat mit dem Arbeitsplatz und dem Arbeitsumfeld zu tun."

<sup>&</sup>lt;sup>50</sup> Orignal: "Es liegt einfach auch daran, dass der Arbeitsplatz nur einmal und nicht doppelt besetzt ist. Ich lebe im Projektgeschäft und ich lebe von einem Projekt zum anderen. Ich meine, ich gehe natürlich im Sommer meine 14 Tage oder drei Wochen auf Urlaub. Ich gehe auch zu Weihnachten auf Urlaub. Und *viel* mehr ist da nicht drinnen."

<sup>&</sup>lt;sup>51</sup> Original wording: "Ich habe ja schon in vielen Abteilungen gearbeitet und da gibt es Abteilungen, in denen man nur zu zweit ist. Da muss man immer schauen, dass eine Urlaubshilfe da ist oder sonst was. Aber schon von der Arbeitszeit, der Arbeitsmenge her auch; und zu wenig Kollegen, die uns vertreten können. Das war schon in vielen Abteilungen so."

<sup>&</sup>lt;sup>52</sup> Original wording: "Vom Arbeitsaufwand her. Weil es einfach nicht möglich ist, dass ich sieben Wochen im Jahr nicht da bin. Im Durchschnitt ist man sicher ein bis zwei Wochen krank, Grippe oder so. Das lässt einfach das Arbeitsgebiet nicht zu, dass man acht, neun Wochen nicht da ist. Und wenn man alle Zeitausgleichstage zusammen rechnet, ist das auch noch eine Woche."

is the result of both more fixed dates that have to be considered and because the volume of work has increased:

In the past, we have handled this department with – say ten persons, now there are seven. And there is the tendency that it will be five or six. So it is logical that there is more work to do for each individual person.<sup>53</sup> (No. 12)

The statements presented above reveal that difficulties in consuming additional leisure time are conceived as a major obstacle for taking the leisure option. This problem is mostly associated with a high workload, which indicates that work tasks and their fulfillment are no longer measured in time, but by output indicators. This is very much in line with the literature discussed in the theory chapter (e.g., Boltanski and Chiapello, 2005; Wagner, 2007), suggesting that post-Fordist work structures are characterized by communicative management, team work and self-determination. As responsibilities are transferred from top down, employees are granted more autonomy in organizing their work processes, however, this also means that the risk of not attaining the self-imposed goals are attributed to employees' own failure. This increases the risk of self-exploitation, as it becomes difficult to detach oneself from increasing requirements. The statements quoted above partly reflect this problem described in the literature, as the respondents indicated that their work in the project business did not allow them to be absent for several weeks per year, as no one could replace them in case of sickness or holidays. This also hints at a very low division of labor among project workers with very specific tasks. The fact that a certain task has to be finished in a given time, as the delegation of work tasks is not possible, is experienced as high working pressure. According to one respondent, due to staff reductions the same work load now has to be managed by fewer employees, which gives evidence for an intensification of work.

These observations have prompted us to formulate the following thesis: The assessment of work performances by output indicators instead of time measures can be regarded as a major obstacle for work time reductions.

In the literature, these tendencies are mostly discussed in terms of rather highly qualified employees. Interestingly, as the qualification level and the occupational positions of interviewees with the pay raise is generally lower than for those with the leisure option, this also applies to this aspect: Employees who have mentioned difficulties in consuming additional leisure time are service workers or skilled workers and have a lower or upper secondary education. Hence, in our case output orientation and self-determined working processes also seem to be relevant for middle job positions.

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<sup>&</sup>lt;sup>53</sup> Original wording: "Früher haben halt, was weiß ich, zehn Leute diese Abteilung gemacht, jetzt sind es sieben. Und das geht dahin, dass es fünf oder sechs werden. Das ist logisch, dass dann für jeden Einzelnen einfach mehr zu tun ist."

However, professionals, executives and persons with a tertiary education seem to be more inclined to take the leisure option, although it can be assumed that they have greater responsibilities and rooms for action. From this perspective, it could be expected that employees in higher occupational positions do not consider themselves capable of taking the leisure option. However, the effect described in the first thesis seems to dominate here, stating that employees with higher educational levels value leisure time and family time as intrinsic values, which induce them to reduce working time.

## 7.2.2.3 Summary

In this chapter, we have analyzed the two subsamples of employees in more detail. Based on the observed patterns within the two subsamples, we have formulated three theses.

Our first thesis states that for employees with higher educational levels, leisure time and family time constitute intrinsic values, which induce them to reduce working time. This thesis is based on the observed differences among the employees with the leisure option. For those who would have used it an additional time (if possible), leisure time constitutes an intrinsic value. They indicated that they had mainly taken this decision in order to devote more time to their families, children, or to their hobbies. In contrast, those interviewees who would not have used the leisure option an additional time have made their decision due to a specific purpose (visiting family abroad, taking a longer break, balancing out workload fluctuations), or because the leisure option is associated with specific advantages (flexibility of usage, no expiration, no taxation, substitution for flexitime). For this group of respondents, extrinsic motivations related to work or private conditions have been relevant for their choice. Another remarkable finding in this context is that employees who emphasized the importance of leisure time, or respectively, that they want to spend the additional spare time with their family, tend to have a higher educational attainment compared to those who did not mention these aspects.

Based on the statements of the employees who have opted for the pay raise, we have formulated our second thesis as follows: Money is valued from a long-term, security perspective. This implies that some employees, even though living in a good financial situation, prefer not to decrease their working hours. Among the interviewees who opted for the pay raise, the most frequently stated motive was related to financial aspects. However, whereas some interviewees indicated that they would need the additional money for their families to whom they want to offer certain material goods, others said that the pay increase was simply considered beneficial compared to the leisure option without explicitly indicating for what reason they preferred the pay increase. This justification was also brought forward by two respondents who have a relatively high income and no children. In

this context, it has been found that the preference for money is often associated with a long-term perspective and security aspects, as the decision against the leisure option was frequently justified by the fact that it would have had a negative effect on income development and pension. This great importance attached to financial security is assumed to hinder work time reduction.

The third thesis states that the shift in assessing work performances by output indicators instead of time measures can be regarded as a major obstacle for work time reductions. Besides the financial aspect, difficulties in consuming the additional leisure time are conceived as a major obstacle for taking the leisure option. The respective persons stated that consuming an extra week of holidays would be impossible, as they already face difficulties in using the current vacation entitlements. The primary reasons for this are the high workload and that there is no other person who could replace them in case of absence. These statements suggest that work tasks and their fulfillment are no longer measured in time, but rather by output indicators. This tendency is described in the respective literature, e.g. on the subjectification of work, which also assumes an increasing risk of selfexploitation: The decentralization of responsibilities does not only imply more autonomy for employees, but also increases the risk that employees are held responsible for failing to achieve the self-imposed goals. In this context, it can be assumed that the measurement of work performances by output indicators constitutes a barrier for work time reduction. However, this observation mainly applies to respondents with low or medium levels of occupational position and educational attainment. Although employees in high occupational positions or with a tertiary education, respectively, are assumed to have greater responsibilities and rooms for action, in our sample there is a strong tendency that those persons have chosen the leisure option. Hence, here the effect described in the first thesis seems to dominate, saying that that employees with higher educational levels value leisure time and family time as intrinsic values, which tempt them to reduce working time.

Table 11: Overview about interviews

											Leisure			
ID	Leisure	Gender	Household	No.* (age) of children	Seniority	Looding	Actual	Preferred	Mismatch	Occupational	Education	Income	Mativos	option
ID	option	(age)	type	or children	(years)	Leading Non-	hours	hours	Mismatch	position	Education Lower	range**	Motives	again
1	Yes	M (52)	Couple	-	35.7	leading	42.0	35.0	-7.0	Skilled worker	secondary	Medium	Leisure, work pressure	Yes
2	Yes	F (50)	Couple	1 (12)	30.3	Non- leading	40.0	30.0	-10.0	Elementary worker	Lower secondary	Low	Leisure	Yes
3	Yes	F (48)	Couple	1 (24)	25.2	Non- leading	40.0	40.0	0.0	Elementary worker	Upper secondary	Low	Leisure, characteristics of leisure option	No
4	Yes	F (47)	Couple	1 (22)	31.6	Leading	40.0	35.0	-5.0	Skilled worker	Lower secondary	Medium	Leisure, characteristics of leisure option	No
5	Yes	F (50)	Couple	-	13.0	Non- leading	38.5	35.0	-3.5	Service worker	Tertiary education	Medium	Leisure	No
6	Yes	M (38)	Single	-	3.9	Non- leading	45.0	30.0	-15.0	Service worker	Lower secondary	Medium	Money, balance out workload fluctuations	No
7	Yes	M (53)	Couple	3 (13,17,20)	28.5	Non- leading	44.0	30.0	-14.0	Professional	Tertiary education	NA	Leisure	Yes
8	Yes	M (49)	Couple	2 (10,15)	3.0	Leading	48.0	NA	NA	Executive	Tertiary education	High	Leisure	No
9	Yes	M (32)	Couple	-	1.8	Non- leading	38.5	38.5	0.0	Professional	Tertiary education	Medium	Leisure	Yes
10	No	F (53)	Couple	-	38.6	Non- leading	38.0	35.0	-3.0	Service worker	Lower secondary	High	Money, too much holidays	
11	No	F (34)	Couple	1 (8)	16.7	Non- leading	20.0	20.0	0.0	Service worker	Lower secondary	Low	Money, functioning child care	
12	No	M (50)	Single	-	35.0	Non- leading	45.0	45.0	0.0	Service worker	Upper secondary	High	Money, too much holidays	
13	No	M (48)	Couple	1 (13)	23.6	Leading	48.0	45.0	-3.0	Service worker	Upper secondary	Medium	Money, too much holidays	
14	No	F (40)	Single	-	36.7	Non- leading	43.0	35.0	-8.0	Service worker	Lower secondary	Medium	Too much holidays/work	
15	No	F (32)	Couple	-	1.8	Non- leading	38.5	30.0	-8.5	Service worker	Tertiary education	Medium	Still undecided	
16	No	M (40)	Couple	4 (1,5,8,9)	24.6	Non- leading	53.5***	53.5	0.0	Skilled worker	Lower secondary	High	Money	
17	No	M (47)	Couple	2 (15,19)	32.0	Non- leading	44.0	39.0	-5.0	Skilled worker	Lower secondary	High	Money, too much holidays	

<sup>\*</sup> Number of children living in the same household

Source: own analysis

<sup>\*\*</sup>Income ranges (monthly net earnings): EUR 1,100 - 1,500: low; EUR 2,000 - 2,800: medium; EUR 3,000 - 4,500: high

<sup>\*\*\*</sup> This person is working 38.5 hours per week in his main job and another 15 hours in his secondary job.

# 8 Synthesis and Concluding Remarks

This master thesis examines the preferences for shorter work hours in Austria by applying both quantitative and qualitative methods. We apply this approach because we are of the opinion that neither quantitative, nor qualitative methods alone are able to produce a comprehensive picture of individuals' attitudes towards reduced work time, as the two methodological strands both have their strengths and limitations. Whereas quantitative methods are able to create a general picture of relations between key variables, they are not capable to comprehend how people argue their decision. Conversely, qualitative methods provide a deeper understanding of individuals' perceptions and motives; however, they have limitations regarding the representativeness of the sample and the generalization of results. Hence, in triangulating our empirical research methods, we try to overcome these restrictions to a certain extent, aiming to provide a more comprehensive, valid and appropriate picture of attitudes towards work time reduction compared to using only one method.

Mixing methods in social research is a challenging endeavor with respect to both organizing the research team and combining the results of various empirical parts. It requires an open state of mind for qualitative as well as for quantitative examinations during the research process, as mixing methods is most fruitful if unforeseeable outcomes and occurring questions in one of the examinations feed into the other. The present study makes use of the triangulation approach meaning that two separate empirical parts are run in parallel and results are synthesized in the end. In fact, our research project comprises three phases. In the preparation phase we developed the research questions in close cooperation with each other. In the core phase the empirical parts then were conducted separately. Lastly, in the final phase we synthesized our main results again in close cooperation. According to our opinion this approach meets the requirements of the complex social phenomenon of work time reduction.

The quantitative analysis is based on a regression model applying several factors for explaining the mismatch between preferred and actual working hours by using data from the Austrian Microcensus 2012. In the course of the analysis, the group of Reducers (comprising people who want to work less than they actually do) have been compared with the group of Nonchangers (those who do not want to change their actual work hours). Moreover, in order to achieve a better understanding of attitudes towards work time reduction, we have conducted 17 qualitative interviews among employees of the electrics and electronics industry in Austria, who had the possibility to opt for the leisure option ("Freizeitoption")<sup>54</sup>. Those interviews are more of an exploratory nature, with its main purpose to shed light on the motives that people state to argue their decision between a pay increase and

<sup>54</sup> This novel work time policy, first implemented via the collective agreement 2013, enables workers and salaried employees to individually choose between a wage increase and equivalent leisure time.

additional leisure time. As we have also collected data on socio-demographic factors, household and family characteristics, employment conditions and extrinsic motivators that are related to the variables used in the regression model, we are able to compare those data obtained in the course of our qualitative interviews with the results of the regression model. The qualitative part is mainly based on comparing the group of employees who have taken the leisure option, and those who have opted for the pay increase. Hence, to some extent these two groups correspond to the analysis groups of the quantitative part, namely Reducers and Nonchangers. However, whereas the quantitative analysis relies on data on stated work time preferences, the qualitative part deals with employees who have actually taken a decision on reducing their work time.

In the following, we synthesize our results, discuss contradicting findings and issues that only have become apparent by scrutinizing work time preferences by two different methodological angles.

First, what becomes obvious in both empirical parts is that the reasons for work time preferences are diverse and subject to high complexity. This is reflected by the fact that the regression model is able to explain only a maximum of 18.5% of the existing variation, depending on the measurement. Hence, the majority of variation is beyond the information conveyed in the 14 variables applied for predicting Reducers and Nonchangers. The qualitative interviews reveal that the two groups of interviewees – those with the leisure option and those with the wage increase – are quite heterogeneous in their socio-demographic characteristics and the motives that were decisive for their choice. In fact, it turns out that the specific life situation is crucial for a respondent's decision.

From this finding we infer that there is a demand for reduced work time in all socio-demographic groups of the employed population in Austria. Even though our study shows that within some groups people are more inclined towards shorter working hours, the individual position in the course of life seem to be (at least) equally important. Policies on work time reduction therefore should be open to all employees and they should not be limited to only a small fraction as it was originally intended when the leisure option was set up.

The results of the two empirical parts most strongly overlap regarding the observed tendencies on educational attainment: Both the quantitative and the qualitative analysis show that employees with higher educational levels tend to prefer a reduction of work hours. The regression results show that higher educated employees are more likely to be in the group of Reducers; in fact, the level of educational attainment explains a relatively large share of the variation, both for women and men. Regarding the qualitative results, the group of employees with the pay raise only comprises one person with a tertiary education; interestingly, this person is the only one who considers taking the leisure option in 2014. The qualitative analysis provides some deeper insights into this connection:

We find that for employees with higher educational levels, leisure time and family time constitute intrinsic values, which induce them to reduce working time. This positive association of educational attainment and a more pronounced inclination towards work time reduction can be explained by the notion of adolescent socialization, meaning that persons who receive education for longer periods are confronted with working environments at a later point in time; thus it can be expected that their preferences regarding the awareness towards work are more strongly molded by everyday experiences.

With respect to income, in neither of our empirical parts we could notice an influence of the income level on preferences, or respectively, the actual decision to reduce work time. In the quantitative part the theory of the backward bending labor supply curve is applied to capture the relation between income and the preference for reducing working hours; however, the results do not support this theory. The interview analysis reveals that there is no major difference between the group with the leisure option and the one with the pay raise regarding net income. Some of the employees who have chosen the pay raise are in a relatively good financial situation and have not specifically indicated for what reason they preferred the pay increase. However, as the decision against the leisure option was frequently justified by the otherwise negative implications on income development and pension, it can be concluded that the preference for money is often associated with a long-term perspective and security aspects. This significance attributed to financial security is supposed to impede reductions in working time.

A major finding of the quantitative analysis is related to the gendered nature of work time preferences, assuming the male breadwinner & part-time norm to be appropriate for Austria. This proposition is based on the profound analysis of household and family characteristics, revealing that the number of children, the age of the youngest child and the number of earners in the household strongly shapes women's preference for reduced work time, but hardly those of men. Obviously, the nature of our qualitative part does not allow for analyzing such relationships. The statements of the interviewees also do not reveal any differences between women and men regarding their time use for caring activities or the like.

We infer from these findings that there is still a great demand for national policies aiming at establishing equal possibilities for men and women to participate in employment as well as in non-paid care and housework. These policies should on the one hand encourage and enable men to take time off in times of high demand for care and housework. On the other hand, they should foster generating good quality part- and full-time jobs for women. Such a policy mix might facilitate the development to equal possibilities of participation in employment.

In the quantitative analysis, actual weekly work hours have by far the largest explanatory power. It is found that the longer people work the more probable they want to reduce their working hours. This positive relation between weekly work hours and the preference for reducing work hours suggests that the work time norm strongly molds employees' work time preferences. In the qualitative data, no substantial difference regarding actual weekly work hours is observed. However, in this context it is also important to raise the issue of different concepts of working time. The question is whether the way people make use of the leisure option corresponds to the notion of weekly working hours that is applied in the Microcensus survey which provides the basis of our quantitative part. The point here is that also more than half of the interviewees who have chosen the wage increase wish to reduce their weekly work hours. Conversely, two of the employees using the leisure option are satisfied with their weekly working time. This implies that the leisure option is not perceived as a tool to reduce weekly work hours. It is rather the case that people who opted for the leisure option either take a whole day off, or they consume the time accumulated as additional holidays. Hence, the leisure option is perceived as a prolonged holiday or as an additional long weekend, resulting in shorter monthly or yearly working hours. Therefore, the leisure option is not perceived and not used for reducing normal weekly work hours.

The reason for this partly lies in the different kinds of employment contracts which have an important repercussion on the way the leisure option can be consumed. Firstly, a shift contract, which applies for manual workers in the production process, is the most inflexible work time arrangement. Ensuring constant use of machines, in our case company production runs in three shifts of eight hours per day. Workers' daily working time is therefore fixed according to the shift length. Thus, shift contracts only allow using the leisure option on a daily basis. Secondly, flexitime contracts, which apply for most salaried employees, enable choosing one's daily working time around a core period, in which employees are expected to be at work. In this work time arrangement, the weekly working time is fixed by collectively agreed working hours, which allows employees to make use of the leisure option on an hourly basis. Finally, some interviewees have all-inclusive contracts, which neither explicitly define daily, nor weekly working time. Employees with all-inclusive contracts are expected to adjust their working time according to the business situation, which often generates long working weeks. In this case the leisure option again can only be used on a daily basis. In summary, the question of how the leisure option is used is heavily interwoven with the nature of the work contract. Salaried employees with flexitime contracts are the only ones that can consume the leisure option hourly. Shift workers and employees with all-inclusive contracts, by the construction of their work time arrangement, can make use of the leisure option only on a daily basis.

These findings were generated by examining both the preference for work time reduction for the employed population in Austria and the arguments for the actual decision for working shorter hours in a company of the electrics and electronics industry. We see that our combination of methods has been very fruitful. Both our research process and our results would have been very different if we had conducted only one of the methods applied. The close cooperation during the first phase of our research process has helped us to broaden our view, causing us to take into account also aspects that initially had not been considered relevant in each of the empirical approaches. Also, in the final stages of our analysis the consideration of both empirical parts considerably enhanced the validity of our results. From our experience, we conclude that mixing methods makes great sense with respect to the analysis on attitudes towards work time reduction. Combining the findings from both examinations generates a comprehensive picture on what people and what groups of people regard work time reduction as beneficial. This knowledge is getting more and more important as work time reduction is increasingly demanded lately by those who strive for a more socially just society and also by those who aim for a more ecologically sustainable development.

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# 10 Appendix A: Quantitative Empirical Part

Table A1: Classification table for women

Predicted Observed Nonchangers Reducers Sum Nonchangers 26079 374 26453 99 Nonchangers % 1 Reducers 4036 786 4822 Reducers % 84 16 30115 Sum 1160 31275 Sum % 96

Source: Microcensus 2012, own calculation

Table A2: Classification table for men

	Predict		
Observed	Nonchangers Reducers		Sum
Nonchangers	27616	1196	28812
Nonchangers %	96	4	
Reducers	5967	1958	7925
Reducers %	75	25	
Sum	33583	3154	36737
Sum %	91	9	

Source: Microcensus 2012, own calculation

Table A3: Odds ratios and significance for women and men – complete table

		Wo	men	Men		
Variables	Levels	Odds Ratios	Significance	Odds Ratios	Significance	
Socio-demographic Factors						
Age	-	1,084	***	1,051	***	
Age2	-	0,999	***	0,999	***	
Educ	Primary education	ref		ref		
	Lower secondary	1,477	***	1,256	**	
	Upper secondary	1,833	***	1,546	***	
	Tertiary education	1,852	***	1,549	***	
Household and	Family Characteristics					
Relation	Couple	ref		ref		
	Single	1,145	0.072	1,049	0.409	
	Other	0,845	0.174	0,866	0.122	
Children	No child	ref		ref		
	1 child	0,77	***	0,818	***	
	2 children	0,773	***	0,833	**	
	3+ children	0,543	***	0,843	0.067	
Agechild	No child < 15	ref		ref		
	0-2 years	1,94	***	1,148	0.063	
	3-5 years	2,051	***	1,046	0.61	
	6-14 years	1,333	***	1,001	0.993	
Earners	Single earner	ref				
	Multiple earner	1,241	**			

Notes:

Table is continued on next page.

Significance: p-values>0.05; \*\*<0.01; \*\*\*<0.001 N=31275 for Women; N=36737 for Men

Source: Microcensus 2012, own calculation

Table A3 continued: Odds ratios and significance for women and men – complete table

		Wo	men	Men		
Variables	Levels	Odds Ratios	Significance	Odds Ratios	Significance	
Employment Cor	nditions					
Position	Salaried employees	ref		ref		
	Workers	0,682	***	0,679	***	
	Civil servants	0,858	*	0,801	***	
Premsize	L	1,222	***	1,156	**	
	Q	0,99	0.845	0,993	0.872	
	С	0,93	0.112	0,999	0.988	
Seniority	-	0,995	0.165			
Leading	Non-leading			ref		
	Leading			1,095	0.061	
Temporary	Non-temporary	ref		ref		
	0-35 months	1,103	0.327	1,023	0.84	
	36+ months	1,199	0.268	0,736	*	
Sector	3. sector	ref				
	1. sector	0,517	0.098			
	2. sector	0,951	0.494			
Occupation	Service workers	ref		ref		
	Executives	1,181	0.24	1,039	0.659	
	Professionals	1,183	*	1,085	0.273	
	Skilled workers	0,839	0.24	0,895	0.065	
	Elementary workers	0,723	**	0,829	**	
Whactual	-	1,13	***	1,129	***	
xtrinsic Motivat	tors					
Incperwh	-	0,989	0.105	0,994	0.164	
Adj. McFadde	en R <sup>2</sup>	18,5		17,0		
Adj. Count R <sup>2</sup>	!	8,5		9,5		

Notes:

Continuation of table from previous page.
Significance: p-values>0.05; \*<0.05; \*\*<0.01; \*\*\*<0.001

N=31275 for Women; N=36737 for Men Source: Microcensus 2012, own calculation

Table A4: General variance inflation factor test for women

Variable	GVIF	Df	GVIF^(1/(2*Df))
Age	71,17	1	8,44
Age2	68,44	1	8,27
Educ	2,91	3	1,19
Relation	2,24	2	1,22
Children	1,93	3	1,12
Agechild	1,82	3	1,11
Earners	2,13	1	1,46
Position	2,26	2	1,23
Premsize	1,25	3	1,04
Seniority	1,95	1	1,40
Temporary	1,87	2	1,17
Sector	1,22	2	1,05
Occupation	3,44	4	1,17
Whactual	1,23	1	1,11
Incperwh	1,93	1	1,39

Source: Microcensus 2012, own calculation

Table A5: General variance inflation factor test for men

Variable	GVIF	Df	GVIF^(1/(2*Df))
Age	66,51	1	8,16
Age2	62,98	1	7,94
Educ	2,84	3	1,19
Relation	1,32	2	1,07
Children	1,81	3	1,10
Agechild	1,89	3	1,11
Position	2,00	2	1,19
Premsize	1,14	3	1,02
Leading	1,36	1	1,16
Temporary	1,86	2	1,17
Occupation	3,19	4	1,16
Whactual	1,14	1	1,07
Incperwh	1,79	1	1,34

Source: Microcensus 2012, own calculation

# 11 Appendix B: Qualitative Empirical Part

### 11.1 Interview Guide

#### **Narrativer Stimulus:**

Vor knapp einem Jahr gab es die Möglichkeit, sich für die Freizeitoption zu entscheiden. Warum haben Sie sich damals für die Lohn-/Gehaltserhöhung entschieden? Erzählen Sie uns bitte einfach, was Ihre verschiedenen Beweggründe waren!

#### Strukturierter Teil:

#### Familiäre Situation

- o Welche Rolle spielte Ihre familiäre Situation bei Ihrer Entscheidung?
  - Familiäre Verpflichtungen
  - PartnerIn
  - Kinder (Anzahl, Alter), ...
- o Was meinen Familie, PartnerIn, Freunde zu Ihrer Entscheidung?

#### • Aktuelle Arbeitszeit

o Gestaltungsfreiheiten, Flexibilität, Gleitzeit, etc.

#### Finanzielle Situation

- o Welche Rolle spielte Ihre finanzielle Situation bei Ihrer Entscheidung?
- Haben Sie auch bedacht, dass sich die Entscheidung für die Freizeit anstatt für das Geld auf das zukünftige Einkommen ausgewirkt hätte? Haben Sie auch an die Pension gedacht?

#### Arbeitsumfeld

- Wie zufrieden sind Sie generell mit Ihrer Arbeit? (mit T\u00e4tigkeit, Arbeitszeit, Verantwortung, Flexibilit\u00e4t, Arbeit mit nach Hause nehmen...)
- o Wie würden Sie Ihre Arbeitsbelastung einschätzen?
- o Wie hoch würden Sie Ihre Arbeitsplatzsicherheit einschätzen?
- o Haben diese Aspekte Ihre Entscheidung beeinflusst?
- o Welche Rolle spielte Ihre aktuelle Arbeitszeit bei Ihrer Entscheidung?
- ArbeitskollegInnen
  - Welche Rolle spielte die Entscheidung von Arbeitskolleginnen- und kollegen?
  - Gab es Diskussionen unter Ihren Arbeitskolleginnen und –kollegen?
  - Haben Sie das Gefühl, dass man sich hier gegenseitig beeinflusst hat?

#### Art der Inanspruchnahme

o Wofür haben Sie das Geld aus der Lohn-/Gehaltserhöhung verwendet?

### • Zufriedenheit mit Entscheidung

- o Wie zufrieden sind Sie bisher mit Ihrer Entscheidung?
- o Würden Sie Kolleginnen und Kollegen von der Freizeitoption abraten?
  - Wenn ja, warum?
  - Wenn nein, warum nicht?
- Die Freizeitoption wird ja heuer wieder im Kollektivvertrag angeboten. Haben Sie vor, die Freizeitoption dieses Jahr zu ziehen?
  - Wie oft würden Sie dies tun?

# 11.2 Questionnaire

1. Wie al	t sind Sie?								
2. Geschl	2. Geschlecht:  weiblich männlich								
3. Was is	3. Was ist Ihr Familienstand?								
] ] ]	Verwitwet								
4. Was tr	ifft für Ihren Haushalt am ehesten zu?								
]	Einfamilienhaushalt mit Kind(er) Einpersonenhaushalt ohne Kind(er) Einpersonenhaushalt mit Kind(er) Mehrfamilienhaushalt	t (Wohngemeinschaf	t)						
		Anzahl der Kinder	Alter						
Wie viele	(inder leben in Ihrem Haushalt?								
Für wie vie	ele Kinder kommen Sie finanziell auf?								
5. Was is	t Ihre konkrete Tätigkeit?								
		Erläuterungen	, Beispiele	Angestellte(r)	Arbeiter(in)				
	Lehrvertrag (Lehrling)								
	Hilfstätigkeit (manuell)		iterIn, Raumpflegerin						
Manuell	Angelernte Tätigkeit	_	chlossen, arbeitet in f, welcher angelernt ist						
	Tätigkeit als Facharbeiter(in)	Lehre oder ad Mechaniker	äquate Ausbildung, z.B.						
	Tätigkeit als Vorarbeiter(in)/ Meister(ir	n) mit Meisterprü	fung						
	Tätigkeit als Vorarbeiter(in)/ Meister(in Lehrvertrag (Lehrling)	n) mit Meisterprü	fung						
		n) mit Meisterprü		_					
	Lehrvertrag (Lehrling)		Inventur						
anderes	Lehrvertrag (Lehrling) Hilfstätigkeit (sonstige)	Dateneingabe,	Inventur						
anderes	Lehrvertrag (Lehrling) Hilfstätigkeit (sonstige) Mittlere Tätigkeit	Dateneingabe, Büro, Handel, Studium o.ä. fü	Inventur /erkauf ir Tätigkeit erforderlich r, Personen die spezielle						
anderes	Lehrvertrag (Lehrling) Hilfstätigkeit (sonstige) Mittlere Tätigkeit Höhere Tätigkeit	Dateneingabe, Büro, Handel, Studium o.ä. fi Wissenschafte EDV programn	Inventur /erkauf ir Tätigkeit erforderlich r, Personen die spezielle						
Was mach  6. Haben	Lehrvertrag (Lehrling)  Hilfstätigkeit (sonstige)  Mittlere Tätigkeit  Höhere Tätigkeit  Hochqualifizierte Tätigkeit  Führende Tätigkeit  en Sie genau?  Sie in Ihrer Tätigkeit Leitungsfunktion?	Dateneingabe, Büro, Handel, Studium o.ä. fü Wissenschafte EDV programn Geschäftsfühe	Inventur  Verkauf  ir Tätigkeit erforderlich  r, Personen die spezielle nieren  rInnen, Vorstände  er Beaufsichtigung von Mi	tarbeiterInnen)					

8. Ist Ih	re Haupt	tätigkei	it zeitlich	befristet?					
	□ Ja, i	nsgesan		3 Jahre (=36 M als 3 Jahre	onate)				
				•	ttätigkeit norma 0 Minuten bitte	•	ro Woche ei	nschließlich regel	mäßig
	St	tunden							
	□ Sehi	r stark s	chwanker	nd zwischen	und	Stund	len		
10. Habe	n Sie nel	ben Ihre	er Haupte	rwerbstätigke	it noch eine wei	ere Tätigk	eit?		
	□ Ja □ Neir	า							
Wenn ja:	Wie viel	e Stund	en arbeite	en Sie normale	rweise pro Wocl	ne in Ihrer 2	Zweittätigkei	t?	
	St	tunden							
	□ Sehi	r stark s	chwanker	nd zwischen	und	Stund	len		
11. Wie v		nden pr	o Woche	möchten Sie ir	nsgesamt (also a	lle Beschäf	ftigungen zus	sammen) normale	erweise
	St	tunden							
12. Was	ist Ihre h	öchste	abgeschlo	ossene Schulbi	ldung?				
	<ul> <li>□ Pflichtschule, nicht abgeschlossen</li> <li>□ Pflichtschule abgeschlossen</li> <li>□ Lehre mit Berufsschule</li> <li>□ Fach- oder Handelsschule ohne Matura</li> <li>□ Höhere Schule mit Matura</li> <li>□ Studium an Universität, Fachhochschule</li> <li>□ Zusätzliches Doktorat nach akad. Erstabschluss</li> </ul>								
And	ere Ausb	ildung r	nach der N	/latura:					
		<b>O</b> ,	urientenle Pädak, So	ehrgang zAK, MedTecl	h. Akademie)				
13. Habe	n Sie sor	nst noch	eine wei	ter Ausbildung	g abgeschlossen	?			
	☐ MBA	A, MAS, eres, nä	anderer F mlich	neisterprüfung Postgraduate-L		e 11 ër			
14. Wie	noch ist I	hr durc	nschnittli 	ches Netto-Mo	onatseinkomme	i (inkl. Ube	erstunden un	id Zuschlage)?	
15. Bitte	geben S	ie uns z	u den wei	tern berufstät	igen Personen i	ı Ihrem Ha	ushalt noch f	folgende Informa	tionen.
Weitere Person	Geschl m/w)	lecht(	Alter	Höchste abge Schul-/Ausbi		Beruf			Arbeitsstunden pro Woche
1									
2									
3									
4	<del>                                     </del>					-			