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# Strong boundary control, weak boundary control and tailor-made solutions: the role of household governance structures in work-family time allocation and mismatch 

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# Strong boundary control, weak boundary control and tailor-made solutions: the role of household governance structures in work-family time allocation and mismatch 

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#### Abstract

To date, the gaps between actual and preferred working hours are mostly theorised and analysed at the individual level. This article provides new insights as to what extent different household arrangements relate to matches or mismatches concerning the achievement of a desired time allocation. The concept of household governance refers to regulations and practices families apply to keep work-family relationships under control, like the earner model, outsourcing of household task and household rules. This article explores by linear regression analyses how these are related to time-use problems of families: the gap between actual and preferred working hours, lack of free time and the experience of time pressure. The rivalling perspectives of flexibility, regulation and boundary theory have different predictions as to which modes of governance produce favourable outcomes. The results generally support boundary theory. However, households often are unable to choose their earner model optimally.


Keywords: work-family; time allocation; household rules; boundary theory
A la fecha, las brechas entre horas de trabajo reales y preferidas han sido teorizadas sobre todo desde la perspectiva del individuo. Este artículo proporciona nuevas ideas sobre cómo distintos regímenes del hogar se relacionan con ajustes o desajustes relativos a la asignación deseada del tiempo. El concepto de gobernanza del hogar se refiere al régimen y prácticas que las familias utilizan para mantener la relación entre trabajo y familia bajo control, tal como el modelo de ingreso, tercerización de tareas y las reglas del hogar. Este artículo explora a través de un análisis estadístico (regresión linear) cómo estos aspectos se relacionan con problemas del uso del tiempo en las familias: la brecha entre horas de trabajo preferidas y reales, falta de tiempo libre y la experiencia de apremio. Las perspectivas teóricas de la flexibilidad, la regulación y la Teoría de límites ofrecen distintas predicciones en relación a qué regímenes producen resultados favorables. En general, los resultados del estudio apoyan la Teoría de límites. Sin embargo, éstos también indican que los hogares son a menudo incapaces de elegir un modelo de ingreso de manera óptima.

Palabras claves: trabajo y familia; asignación del tiempo; reglas del hogar; teoría de límites

[^0]
## 1. Introduction

'One isn't enough, but both is too much'; these words by a female blue-collar worker express the current dilemma of many working couples in combining work and care (see Becker-Schmidt, 1984). In all modern societies, couples face an increasing need to arrange the combination of work and care in a new way. The traditional household model with a male breadwinner who is responsible for paid work, career and income, and his wife, who takes care of all household obligations, is losing its relevance, and fits the values and preferences of the majority of couples less and less well (Blossfeld \& Drobnic, 2001). A wide variety of different earning models and household constellations has emerged. In some countries, like the Netherlands or Germany, the majority of couples are two-earner couples.

Current research provides evidence that a considerable number of these couples are not able to achieve the work-life balance desired (European Foundation, 2012a, p. 90). Several studies report an increase in hours of paid work and a high overall work load in the household (Breedveld et al., 2006; European Foundation, 2012b), a widespread mismatch between actual and desired hours of paid work (Fagan, Tracey, \& McAllister, 2001; Reynolds \& Aletraris, 2006) and a high level of perceived time pressure (Garhammer, 2007). This also holds true for the Netherlands, a country that is known for its part-time culture and far-reaching legal working-time options (Portegijs \& Keuzenkamp, 2008; Visser, 2002).

One would expect households to develop structural and organisational arrangements to cope with these challenges. However, the role and impact of such arrangements have not yet received much attention in existing accounts dealing with household time allocation. The standard microeconomic model of labour supply ignores the organisation of the household. It treats leisure as a consumer good and assumes that spouses will choose their working hours according to given preferences and wage rates (see, e.g., Cahuc \& Zylberberg, 2004). Sociological household research stresses that these choices are not made in a social vacuum and emphasises the impact of gender norms and role expectations that commit women to a higher extent than men to care and household duties (Bittman, England, Folbre, Sayer, \& Metheson, 2003; Van der Lippe \& Siegers, 1994). Organisational research has discovered several features of organisations that induce employees to work long hours and sacrifice family time (see Anger, 2006; Campbell, 2002; Van Echtelt, Glebbeek, \& Lindenberg, 2006).

However, to the best of our knowledge, how households organise themselves to deal with these pressures has not received proper attention. Even though the household level is gaining more importance in recent time-use surveys (like the surveys directed by EUROSTAT) and time-use studies (see e.g., Laurent, 2008), there is still a considerable void in the scientific work-family literature concerning the influence that varying regulation practices have on household time allocation and mismatch.

This article attempts to fill this void, but at an institutional level rather than from the perspective of time management behaviour. To do this, we employ the concept of household governance. By this we understand the whole of regulations and practices families apply to keep work-family relationships under control (see also Ellickson, 2008). The leading question in this article is whether some forms of household governance are superior to others in terms of time allocation and mismatch. Our basic assumption is that the extent to which these governance structures are related to objective and subjective time troubles is a crucial indicator of the extent to which they are in
balance. Standard labour supply theory suggests such balance because it assumes that households are able to allocate their time optimally. However, now that studies repeatedly show that there are considerable disparities between actual and desired working hours (taking into account the related changes in income), this assumption has increasingly come into question (Reynolds \& Aletraris, 2006). If there is a considerable gap between preferred and actual working hours, individuals must consequently be facing barriers that inhibit them from realising the desired amount and distribution of working hours. While the economic literature mostly stresses variations in labour demand, sociological research stresses the institutional biases of the work and household setting (Boheim \& Taylor, 2004).

We contribute to this latter line of research by focusing on the strategies households use to achieve a desired time allocation and to keep the level of time pressure low. First, we elaborate on three dimensions of household governance and derive hypotheses as to how these end up affecting the achievement of a desired time allocation. Second, we test these hypotheses against three criteria: the gap between actual and preferred hours of paid work, the number of hours of free time and the level of perceived time pressure. We draw on data from the Time Competition Survey (2003), which provides information on 528 employees in 30 Dutch work organisations as well as their partners.

## 2. Theoretical approach and hypotheses

With respect to the main strategies spouses use to realise and maintain a desired time allocation, several ways of coping have been identified in the literature. Notably, the work of Phyllis Moen has focused attention on such coping in terms of various 'work-life strategies' (e.g. Moen, 2011; Moen \& Sweet, 2003; Moen \& Yu, 2000). Moreover, a number of studies have begun to identify the distinct ways households distribute and divide paid and unpaid work activities on a day-to-day basis (see Gill, 1998; Perlow, 1998). Yet, whether these strategies impact the achievement of a desired time allocation has not yet been systematically investigated.

Our approach distinguishes three dimensions of what we call 'household governance'. We consider them as important elements of couples' coping strategies. The first dimension (the earner model) results from the choice of the basic earning arrangements in the household: How many contractual hours does each spouse work for pay? The second dimension (the outsourcing level) results from the household's outsourcing behaviour: To what extent do households leave care and household duties to third parties? The third dimension (the household rules) results from the modus of day-to-day time allocation: To what extent does the household choose flexible time-use patterns or, in contrast, regulate household activities through informal rules and routines? Together, these dimensions constitute the structural arrangements families make in order to steer the work-family relationship.

The term household governance has not been chosen coincidentally. It refers directly to transaction cost theory (Williamson, 1975), which occupies a prominent place in organisational theory. Initially, this theory was introduced to explain the make-or-buy decisions of organisations. Modern households also face make-or-buy decisions, for instance, with regard to outsourcing of care and household tasks (De Ruijter, Van der Lippe, \& Raub, 2003). Yet, the underlying idea of the concept of household governance is a more fundamental one. It acknowledges the fact that couples (despite the emotional character of their relationship and family life) face risks in exchange relationships, and
aim to cope with these risks by institutionalised agreements. As household research has repeatedly shown, the idea of a unit preference structure does not fit the reality of the private household (Beblo, 2001), nor does the assumption that opportunistic behaviour and conflicting interests would be absent in intimate relationships (see van Berkel \& de Graaf, 1999; Wotschack \& Wittek, 2008). Since the household consists of two individuals with particular interests and goals (e.g., with regard to career, income, care or family), cooperation and coordination problems easily arise. In the literature, the division of paid and unpaid work between spouses is often theorised as the outcome of differences in power and resources or as the result of (gendered) norms, roles and expectations (see for an overview Blossfeld \& Drobnic, 2001). The role of institutionalised arrangements of couples to steer the work-family relationship is for a large part neglected. This (neglected) aspect is provided by transaction cost theory. In the view of this theory, problems and risks in exchange relations can be minimised by a shared, institutionalised arrangement (or structure) that 'governs' the division of tasks in the household and defines the expected contributions of each partner.

Ellickson (2008) has convincingly shown the fruitfulness of this approach in discussing the different forms household relationships tend to assume under different circumstances. He mainly focuses on the formal versus informal nature of the arrangements, however, not on their substantive content. The latter is more of our concern. We submit that households design their three dimensions of governance with a view to minimise cooperation and coordination problems in their division of tasks. And we expect that these solutions will affect household time allocation and mismatch. This does not imply that household governance structures would be designed and functioning in a social vacuum. In our view, they are embedded in and working in addition to given normative, cultural, institutional, organisational and financial influences, which have been explored by various household studies (see e.g., Blossfeld \& Drobnic, 2001). With respect to childcare, it is for instance quite evident that (formal) outsourcing strategies of households will also depend on the availability of public-provided childcare facilities, financial resources or given social norms on motherhood. However, it is not the concern of this article to explore how household governance structures come into being and are shaped by their normative and institutional environment, but to investigate how they impact on household time allocation and mismatch. Previous research showed evidence that couples in similar work and household settings apply different solutions of household governance (Wotschack, 2009; see also Gill, 1998). This makes their role in household time allocation and mismatch a particular interesting subject of research.

Table 1 shows the specific forms that can be distinguished in the three dimensions we may conceive them as layers - of the household's governance structure. The specific forms are located on an underlying continuum between two 'ideal types' of strategies: 'weak' and 'strict' governance strategies. Practices that generally ${ }^{1}$ increase the household's responsiveness to and availability for demands from paid work are denoted as 'weak' governance practices. These households refrain from fixed roles, standards or routines that would impede the integration of work and home. In contrast, 'strict' governance practices restrict the household's flexibility towards and availability for demands from paid work. A lively debate has arisen in the work/family literature concerning the merits of these two types for dealing with the time troubles of households.

Table 1. A continuum of household governance structures and strategies.

|  | Strategies |  |  |
| :---: | :---: | :---: | :---: |
| Household governance structure (three layers) | A) Weak governance (giving room to job demands) | $\leftrightarrow$ | B) Strict governance (claiming time for household demands) |
| Earner model | Role sharing <br> Dual One-and-a-half earners earners | $\leftrightarrow$ | Specialisation <br> Breadwinner household |
| Outsourcing | Outsourcing <br> Formal help for cleaning (in)formal help for child care | $\leftrightarrow$ | In-household production Cleaning Child care |
| Household rules | Flexible time use <br> Flexible task distribution <br> No time claims <br> No time routines <br> Low-quality standards | $\leftrightarrow$ | Institutionalisation <br> Fixed task distribution <br> Time claims <br> Time routines <br> High-quality standards |

### 2.1. Giving room to high job demands - 'trade-off households'

Some scholars have pointed out the positive role of blurring boundaries, which allow working families to integrate work and family or to organise household time in a flexible way (e.g., Bailyn, Drago, \& Kochan, 2001; Rapoport, Bailyn, Fletcher, \& Pruitt, 2002). An Australian study by Gurjeet Gill (1998) is a strong example of this position in the debate. Gill points out that different ways of handling work and household demands have strong effects on the performance of the household, independent of its size, income or number of children. She argues that certain 'management rules' or 'interaction orders' prove to be decisive for the success of the household in combining work and family life. In this respect, 'trade-off' households are distinguished from 'rigid' households:

> Families under the Trade-off model have flexible ends and in this way they have increased their means through role sharing, lowered standards, and by sharing household responsibilities. In contrast, families under the rigid model wish to achieve traditional ends. They have only limited means because of their viriarchal role ideology and traditional division of labour, and a desire to achieve higher household standards. (Gill, 1998, p. 195)

According to this view, an egalitarian and adaptive use of roles, rules, goals, standards and responsibilities makes it easier for spouses to cope with high work and family demands. The best coping strategy for the household is 'flexible adaptation' to changing circumstances. In this way, the household can smoothly increase the time for work activities with an eye towards what is needed. This vision can be summed up in the following hypothesis:

Weak governance-hypothesis: The more household governance structures leave room for high job demands, the closer the household comes to a desired time allocation.

### 2.2. Claiming time for household demands - 'repulsing households'

Leslie Perlow's (1998) well-known case study of IT-engineers illustrates an opposite view. She describes how control practices in the firm and the household influence the
working hours of employees. While management attempts to extend the work days of its employees by strengthening and monitoring their internal (time) competition, the spouses of employees are reacting to these control attempts by 'resisting' or 'accepting' the long work days of their husbands and wives. Whether employees were conforming to the firm's control practices thus also depended on the way spouses regulated household duties (see also Hecht \& Allen, 2009; Nippert-Eng, 1996).

Perlow's study demonstrates the fruitfulness of extending the traditional view of labour supply by conceiving of the household as a system of social control in which spouses actively influence each other's work and family behaviour. Perlow's study does not conclude that strong regulation and strong boundary control are superior to flexibility. Other authors have made this claim more explicitly, stating, for instance, that 'individuals may need to have the opportunity to keep work away from family' (Kossek, Lautsch, \& Eaton, 2006, p. 363; see also Hall \& Richter, 1988). These views support the idea that the more the household regulates its time by strict boundaries, the less the work sphere can intrude and steal time from domestic activities. This view of what might be conceived of as a 'repulsing household' can be summed up in the following hypothesis:

Strict governance-hypothesis: The more household governance structures claim time for
household demands, the closer the household comes to a desired time allocation.

### 2.3. Preference and context dependency - 'tailor-made solutions'

With the introduction of 'boundary theory' (Ashfort, Kreiner, \& Fugate, 2000) and 'work-family border theory' (Clark, 2000), an attempt has been made to overcome the opposition between the two polar extremes (see also Nippert-Eng, 1996). Researchers have stated that there are insufficient grounds to generally propound the superiority of one pole over the other. Boundary theory presumes that both integration and separation may be advantageous for individuals, depending on their work and home situation and individual preferences (Clark, 2000, p. 755).

This third position suggests a different role and interplay for weak and strong structures of household governance. Spouses, from this standpoint, will choose household governance structures according to their given preferences and circumstances, which give room to job demands in some respects while claiming time for household demands in other respects (Clark, 2000; De Man, 2007; Kreiner, 2006; Olson-Buchanan \& Boswell, 2006). Whether and to what extent weaker or stronger boundary control is beneficial to the household is thus not an a-priori thing, but will depend on the interplay of time demands, time preferences and available opportunities.

However attractive this line of thought may be, the accompanying testing strategy presents major issues for researchers. A reliable relationship of the form 'the more flexibilisation (respectively regulation), the better the results' is no longer predicted, but instead there is a subtle balance between preferences, restrictions and policies. The literature refers to this as the Person-Environment Fit Approach (see Edwards, 1996; Kreiner, 2006). In line with Edwards' (1996) study, Kreiner (2006) states that simple difference scores do not suffice to assess this fit and that it is advisable to depict and analyse the relationships in a three-dimensional plane of preferences, practices and outcomes. Polynomial regression analysis and response surface methodology are used to generate and interpret the coordinates (cf. the figures in Kreiner, 2006, p. 498). Despite whatever admiration one may have for the thoroughness of this approach, it is not easy to
interpret Kreiner's figures and the research does not lead to univocal results (Kreiner, 2006, p. 502).

We suggest a more practical and simpler way of examining the implications of a fit approach, by drawing a parallel with the contingency approach in the study of organisational structures. Contingency is based on the notion that organisations gear their structures and processes optimally to their objectives and circumstances (Donaldson, 2001, p. 3). Donaldson raises the problem that it is difficult to determine the fit-performance relationship empirically because, in reality, the non-fitting structures are avoided as much as possible due to the optimal choice process of actors: 'High misfit would be very damaging to organisational performance, so that organisations in misfit tend to change their structure and move into fit' (Donaldson, 2001, p. 231). Weak correlations between fit and performance may lead researchers to conclude that fit is obviously not important, but, according to Donaldson, this would be an entirely incorrect conclusion. Because of the potential importance of fit, management does everything to realise it in its principal aspects. Thus, the measured effect indicates not so much the importance as it does the optimality of the chosen structure.

The implication of this vision is easily obtained for work-family researchers: in a state of perfect balance ('fit'), the correlation between structures and outcomes disappears. And vice versa, the existence of correlations indicates a condition of nonfit. In this condition, not all actors have attained their P-E optimum. In our case, this would mean that in a cross-section of households, certain 'weak governance' (or instead 'strict governance') households do better than others, so there are opportunities for learning and improving for imbalanced families.

Because both balance and imbalance are among the options, the contingency theory entails an interpretative framework rather than a specific empirical hypothesis. Such a hypothesis can, however, be presented in the spirit of the boundary theory. As we saw above, according to this perspective there is no generally (a priori) superior form of household governance:

> Contingency hypothesis: Because households optimally choose their specific mix of weak and strong household governance structures, no significant relationship exists between variations in these structures and the realisation of a desired time allocation.

Formulating a 'no relationship' hypothesis generally invokes the objection that bad research suffices to confirm it. After all, poor measurements result in random responses, due to which the relationships that exist in reality remain invisible. This objection is certainly correct, but, in our view, can never be decisive if a zero correlation is predicted on proper theoretical grounds. Stating a 'no relationship' hypothesis therefore is an accepted practice in organisational science (compare Carson, Madhok, \& Wu, 2006, Hypotheses 2 and 4). Besides, a zero correlation is not the only result we are looking for. Individuals and households strive for balance, but nothing in the boundary theory suggests that they will reach this on all points (De Man, 2007, p. 13). Contingency theory implies that where significant correlations are found, there are obviously difficulties in realising a balance between wishes and realities.

## 3. Data and variables

The Time Competition Survey 2003 is used for testing the hypotheses. For this survey a multi-stage, multi-level research design was used. 30 Dutch work organisations, profit
and non-profit, participated in the research. In each firm, human resource and department managers completed a written questionnaire on firm and work characteristics. In a second step, a random sample of four to ten employees from each occupational group was drawn. In total 1114 employees and their partners (if applicable) were interviewed by both face-to-face interviews and written questionnaires (including a pre-coded time-use diary for one week).

The following analysis is based on the subsample of 528 cohabiting employees. When employees were not cohabiting with a partner or when relevant employee and partner information was missing, the household was excluded from the original sample. The resulting subsample consists of 298 male and 230 female employees from 79 different occupational groups in the 30 companies. $19 \%$ of the households in our sample are young couples without children; $41 \%$ are couples with young resident children (12 years or younger); and $40 \%$ are couples with older children or without resident children. The subsample covers different earner categories, like the breadwinner model, the one-and-a-half earner model, and the dual-earner model. To accommodate for partners who do not work for pay an imputed wage rate was calculated based on a well-specified wage equation for respondents without missing data (see Van der Lippe \& Siegers, 1994 for this procedure). For reasons of consistency, the imputed wage rate was used for all individuals in the following analysis.

### 3.1. Dependent variables

Whether households achieve a desired time allocation was the focus of our research. A mix of 'subjective' and 'objective' indicators was used (see below). Their combination gives a clear picture of the desirability of the realised time allocation within households. Therefore, they are used as three separate dependent variables in the analysis. Since our focus is at the household level, the scores were aggregated to this level (i.e., the sum of the scores of both spouses). In order to keep the risk of over- or underestimation low (see e.g., Shelton \& John, 1996), we used different instruments, including time-diary data as well as careful measurement of perceived time strains. Since the individual scores of both partners are summed up to a household score possible biases due to systematic differences between partners' responses are reduced.

First, the gap between actual and desired weekly working hours was measured as the difference between the number of actual weekly working hours ('How many hours are you factually working on average per week? Please take into account overtime, but not your travelling time') and the number of desired weekly working hours ('If you could determine how many hours per week you spent on paid work, how many hours would you choose, if your hourly wage remained the same and your partner did not work more or less?'). To get to the household level, the stated gaps of the two partners cannot be simply added up, since each partner's preferences would adjust to the other's change in working time. ${ }^{2}$ The mean gap is therefore the better measure, which does not overestimate the total imbalance in the household. So the scores based on the answers of the employee and the partner were added together and then divided by two. Since we are interested in the ways households are trying to cope with competing time claims from family and work, the minority of households that in the aggregate worked less than desired were left out. This kind of mismatch is more indicative of a labour market problem (unemployment, underemployment) than of a work-family problem. This reduced the sub-sample, for this part of the analysis, to 405 households. ${ }^{3}$ A gap between
actual and desired working hours thus solely indicates that the household would prefer to supply fewer hours of paid work. Higher values indicate a larger gap between actual and desired weekly working hours.

The second dependent variable, hours of free time, was calculated based on the timeuse data from the pre-structured time-use diary, which was conducted for each day and person over a period of one week. The category free time is the sum of hours for seven days reported under the categories 'leisure activities' like 'going out, reading, talking, watching TV, playing sports, shopping, doing nothing, group activities in a sports club or church, etc'. Necessary activities like eating and sleeping were not included in the measure. The hours of free time were calculated for the employee and the spouse and then added together.

The third dependent variable, frequency of perceived time pressure, was based on Garhammer's cumulative scale of seven items (see Garhammer, 2007). Sample items were, for instance, 'I cannot sleep properly' or 'I cannot recover from illness due to a lack of time'. The frequency of perceived time pressure on each item was measured on a fivepoint scale (from 'always' to 'never') and added together for the employee and the spouse. The internal consistency reliability of this scale (Cronbach's alpha) was 0.794.

### 3.2. Independent variables

We included a number of work and household variables, which have been identified as important restrictions on household time allocation in previous research ${ }^{4}$. The presence of young children (represented by a dummy variable) and the net wage rates of both partners are essential controls. The same holds for the intensity of the paid workload ('employer demands'), which however was not observed at the household level (the one exception), since this information was only available for the employee, not for the partner. In order to avoid common-method variance, we obtained the information for this variable mainly from the employer instead of the employee.

High employer demands stimulate employees to work long hours (Hochschild, 1997; Perlow, 1998; Van Echtelt et al., 2006). The cumulative amount of employer demands was measured using five items (see Wotschack, Siegers, Pouwels, \& Wittek, 2007): (1) whether the firm was a for-profit or a non-profit organisation; (2) whether the job was characterised by a high-performance culture; (3) whether the workers in these jobs were frequently confronted with targets and deadlines; (4) whether there was understaffing in these jobs; (5) and whether the employee had a supervisory position. The last item was answered by the employee; the other information was obtained from the employer. The items were first dichotomised and then added together. The minimum value was zero (hardly any employer demands), the maximum value five (high employer demands).

The three household governance layers contained the following variables. With regard to the earner model, we used dummy variables for breadwinner households (one spouse with at least 33 contractual hours per week, the other spouse not more than seven hours) and dual earner households (both spouses working at least 33 contractual hours per week). Reference category was one-and-a-half earners households (one spouse working at least 33 contractual hours per week, the other between 8 and 33 hours).

Outsourcing behaviour was represented by dummy variables for formal help for cleaning (i.e., a cleaning woman or a cleaning service), formal help for childcare (i.e., day care, after-school childcare, paid baby-sitters, etc.) and informal help for childcare (family, friends or neighbours).

The household rules were represented by five dummy variables. These indicated whether the household used a fixed task distribution; strict time routines (for example, 'having dinner together'); mutual time claims (for example, 'not working on weekends'); high quality standards (indicated on a scale from 1 to 10); and shared responsibilities for unpaid work (equal or unequal). These variables were based on a more extensive list of items and subsequent scaling procedures.

### 3.3. Descriptives

Inspection of the descriptives (see Appendix Table A1) revealed considerable variation for every layer of the household governance structure (see for a detailed overview Wotschack, 2009, pp. 25-32). A gendered division of responsibilities for paid work is still dominant in the majority of households: $10 \%$ of the households have a breadwinner model, $21 \%$ are dual earners and $69 \%$ are one-and-a-half earners.

Our time-use diary data also show quite a bit of variation in the number of hours of paid and unpaid work. Almost half of the households (46\%) face a workload of more than 130 hours per week; on average per person and day almost 10 hours are taken up by job and household responsibilities. In this group, households with young children and high employer demands are clearly overrepresented. Only $12 \%$ of the households in our sample realise the preferred amount of working hours; $73 \%$ work more hours than actually preferred and $39 \%$ considerably more hours (more than four hours per week).

## 4. Results

In a first exploratory step, we examined in which way households in our sample combine 'weak' and 'strict' elements of household governance. These analyses (not reported here) show that only a small minority of households refer to a clear strategy of 'weak governance' ( $7 \%$ ) or 'strict governance' ( $9 \%$ ). The majority of more than $80 \%$ of households combine elements from both strategies: in some dimensions of the governance structure they give room to high job demands, in others they claim time for household demands. This finding could be a first indicator for 'tailor-made solutions' instead of clear 'weak' or 'strict' types of household governance regimes. It is confirmed when we look at the sort of interplay of the different ('weak' and 'strict') governance structures. Our results (not reported here) do neither show strong correlations among the household governance variables nor a clear pattern in terms of 'weak' or 'strict' types of governance. Thus, the three layers of governance cannot be reduced to a single dimension but need to be treated as separate practices.

In order to look at the impact of these different ('weak' or 'strict') practices on the achievement of a desired time allocation, we estimated (in a second step) separate linear regression models for our three time-allocation indicators. Because the data are clustered in 30 work organisations, implying interdependence between observations, we used robust standard errors (adjusted for these 30 clusters). Multilevel analysis is not necessary, since all hypotheses refer to the household level and not the organisational level. The baseline model represented how these indicators were related to the basic work and household influences. In subsequent models, the three layers of household governance were added to the analysis (see Table 2).

In keeping with our theoretical approach, we interpret the effects of governance structures on problems of time allocation in the following way: A negative effect ${ }^{5}$

Table 2. Gap between actual and preferred weekly working hours.

|  | Baseline | Model 1 | Model 2 | Model 3 | Full model |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Constant | 0.907 (1.433) | -0.967 (1.361) | 3.261* (1.514) | 0.271 (1.480) | 0.850 (1.525) |
| Baseline model |  |  |  |  |  |
| Wage-rate employee | -0.001 (0.092) | 0.101 (0.087) | -0.075 (0.091) | -0.015 (0.092) | 0.005 (0.089) |
| Wage-rate partner | 0.216** (0.064) | 0.188** (0.064) | 0.100 (0.060) | 0.232** (0.067) | 0.095 (0.067) |
| Young kids ( $<13$ ) | $-1.350 * *(0.403)$ | -0.581 (0.344) | -1.240* (0.469) | -1.473** (0.421) | -0.595 (0.471) |
| High employer demands | 0.722** (0.192) | 0.615** (0.194) | 0.667** (0.169) | 0.709** (0.191) | $0.573 * *$ (0.172) |
| Earner model |  |  |  |  |  |
| Male breadwinner |  | $-1.783 * *(0.540)$ |  |  | $-1.613 * *(0.461)$ |
| Dual earner |  | 2.222** (0.375) |  |  | 2.030** (0.389) |
| One-half earner |  | Reference |  |  | Reference |
| Outsourcing |  |  |  |  |  |
| Formal help cleaning |  |  | 2.356** (0.572) |  | 2.077** (0.523) |
| Formal help children |  |  | 0.721 (0.662) |  | 0.731 (0.660) |
| Informal help children |  |  | -1.101 (0.696) |  | -1.044 (0.693) |
| Household rules |  |  |  |  |  |
| Fixed task distribution |  |  |  | 0.494 (0.504) | 0.315 (0.525) |
| Time routines |  |  |  | -0.414 (0.398) | -0.231 (0.405) |
| Time claims |  |  |  | 0.272 (0.424) | 0.230 (0.398) |
| High-quality standards |  |  |  | 0.764* (0.357) | 0.374 (0.362) |
| Unequal responsibilities |  |  |  | 0.328 (0.429) | 0.576 (0.453) |
| $N$ | 405 | 405 | 405 | 405 | 405 |
| $F($ Prob $>F)$ | 12.38 (.00) | 20.24 (.00) | 9.84 (.00) | 8.44 (.00) | 16.53 (.00) |
| Adjusted $R^{2}$ | . 057 | . 101 | . 116 | . 059 | . 147 |

Note: Standard errors are adjusted for the clustering of observations in 30 companies. Unstandardised effects (robust standard errors reported in parentheses). ${ }^{*} p<.05 ;{ }^{* *} p<.01 ;{ }^{\dagger} p<.10$.
indicates that this sort of arrangement helps to reduce problems in time allocation (e.g., diminishes time pressure or the gap between actual and preferred hours). Households making use of it are generally better off than comparable households that don't. A positive effect indicates the opposite, which can mean that these structures aggravated problems or - a bit more agreeable - that they were associated with already unfavourable circumstances. Though households use this sort of arrangements they - or at least some of them - still have a larger amount of time trouble. No effect would support our third perspective, indicating that it is neither a weak nor a strong practice which is systematically related to problems in time use.

### 4.1. Gap between actual and desired working hours

According to the baseline model, the gap between actual and desired hours decreases (by more than 1.3 hours) when young children live in the household. It increases (by 0.2 hours per euro) when the partner has a higher earning capacity and also when employer demands are higher. As these demands are correlated with the employee's wage rate, the effect of employee's wage rate is suppressed. Additional analyses (not reported here) show that, when employer demands are excluded from the baseline model, the employee's wage rate regains the expected positive sign, albeit not statistically significant.

By adding variables for the different household governance structures (Models 1-3) we find a strong effect for the earner model (primary layer) and a rather weak effect for outsourcing behaviour (secondary layer). Household rules and quality standards (tertiary layer) do not seem to make a systematic difference.

The first model shows that the baseline model overestimates the effects of young children. The effect is not significant anymore when we add variables for the household's earner model. At the same time the explained variance increases by more than four percent (from $5.7 \%$ to $10.1 \%$ ). We can conclude that in the first place it is not the presence of young children as such that accounts for variation in the gap between actual and desired working hours but the choice of the earner model. Compared to one-and-ahalf earner households (the reference category), dual earners would like to reduce their labour supply by more than four hours per week. It is interesting to note that the unbalancing effect of a demanding workplace remains significant, notwithstanding the chosen earner model.

The second model shows that differences in the use of help from third parties also contribute to the explained variance (an increase from $5.7 \%$ to $11.6 \%$ ). By adding these outsourcing variables, the former effects of young children and partner's wage rate are not significant anymore. It is especially the use of a cleaning service that absorbs these effects. However, these households still experience an overload of working hours, signifying that the use of this outsourcing device is often more a stopgap measure than the aspired conduct of life. At the least, this result is not in accord with the weak governance hypothesis: Giving room to job demands by outsourcing of household tasks does not (sufficiently) avoid mismatch in household time allocation. The use of formal or informal help for childcare does not significantly affect the gap between actual and desired working hours.

The third model focuses on differences in the regulation of household time allocation by informal household rules. None of our five indicators significantly affects the gap between actual and desired working hours. Nor is there a considerable growth in
explained variance. Thus, for this layer, our weak and strict governance hypotheses are refuted, supporting our contingency hypothesis (tailor-made solutions).

### 4.2. Perceived time pressure, hours of free time

For reasons of space, we only present the full models for the two indicators (see Table 3). Compared to one-and-a-half earner households (reference category) perceived time pressure is significantly higher in dual-earner households. Correspondingly, their amount of free time is less, especially when compared to the breadwinner households. This finding supports the strict-governance hypothesis. Giving room to job demands by having the dual-earner model increases the time troubles in the household. In this respect, households with a more specialised division of paid and unpaid work are better off (in terms of time, not gender equality) than dual-earner households.

With regard to outsourcing, households using formal help for childcare report considerably more time pressure and less free time, while formal help with cleaning shows no systematic relationship with these outcomes. These results somewhat contradict the results for the first indicator and especially the interpretation given there. Now formal childcare seems to be the stopgap measure that is chosen in response to feeling pressed.

Table 3. Perceived time pressure and hours of free time (only full models presented).

|  | Full model | Full model |
| :--- | :---: | :---: |
|  | Time pressure | Hours free time |
| Constant | $8.638^{* *}(2.873)$ | $83.569^{* *}(10.602)$ |
| Baseline model |  |  |
| Wage-rate employee | $0.008(0.083)$ | $-0.078(0.524)$ |
| Wage-rate partner | $0.339^{* *}(0.107)$ | $-0.095(0.568)$ |
| Young kids $(<13)$ | $1.010(0.711)$ | $-14.361^{* *}(3.027)$ |
| High employer demands | $0.118(0.262)$ | $-1.728^{\dagger}(0.936)$ |
| Earner model |  |  |
| Male breadwinner | $-0.560(0.704)$ | $4.677(3.475)$ |
| Dual earner | $1.761^{*}(0.611)$ | $-2.805(2.597)$ |
| One-half earner | Reference | Reference |
| Outsourcing | $0.902(0.791)$ | $-2.024(2.457)$ |
| Formal help cleaning | $3.922^{* *}(0.994)$ | $-9.255^{*}(2.579)$ |
| Formal help children | $-1.056(1.044)$ | $0.208(2.628)$ |
| Informal help children | $-0.294(0.484)$ | $1.725(1.735)$ |
| Household rules | $0.758(0.648)$ | $1.736(2.815)$ |
| Fixed task distribution | $1.310^{\dagger}(0.595)$ | $2.516(2.104)$ |
| Time routines | $-0.516(0.649)$ | $1.986(2.255)$ |
| Time claims | $-0.622(0.844)$ | $4.150^{\dagger}(1.951)$ |
| High-quality standards | 528 | 528 |
| Unequal responsibilities | $19.62(.00)$ | $41.26(.00)$ |
| $N$ | .123 | .172 |
| $F$ Prob $>F)$ | $F$ |  |
| Adjusted $R^{2}$ |  |  |

[^1]This is speculation, however, since our data contain no information on the subjective reasons for different outsourcing behaviours. Yet it is clear that more outsourcing is not associated with less time pressure or with more free time. This again refutes the weakgovernance hypothesis.

The same holds true for differences in the use of household rules. Household rules and quality standards are not significantly related to variations in perceived time pressure and hours of free time. Here we have to refute both the weak- and strict-governance hypotheses, while we again find support for our contingency hypothesis (tailor-made solutions).

An objection to this conclusion might be that the case for more flexible household rules only applies to dual earner families. Gill's (1998) argument clearly implies that especially these pressured households need room to manoeuvre and are hampered by rigid tasks and routines. Strict household rules are therefore likely to have different effects in dual and single earner households. To check this possibility, we eliminated the breadwinner households and calculated the interaction effects between the household rules and the remaining earner types (dual and one-and-a-half earners). Table 4 shows significant interactions in the predicted direction for two of the three dependent variables. For dual earner families, strict household rules have unfavourable effects for the amount

Table 4. Subsample without breadwinner households.

|  | Gap actual desired working hours | Gap actual desired working hours | Time pressure | Time pressure | Hours of free time | Hours of free time |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Constant | 1.081 | 1.490 | 8.020** | 7.148* | 85.557** | 79.934** |
| Baseline model |  |  |  |  |  |  |
| Wage-rate employee | 0.004 | -0.013 | 0.016 | 0.024 | -0.385 | -0.406 |
| Wage-rate partner | 0.096 | 0.118 | 0.357** | 0.362** | -0.246 | -0.257 |
| Young kids (<13) | -0.704 | -0.791 | 0.986 | 0.964 | -12.032** | $-11.703^{*}$ |
| High employer demands | 0.560** | 0.541** | 0.139 | 0.147 | -2.047* | $-1.721^{\dagger}$ |
| Earner model |  |  |  |  |  |  |
| Dual earner | 2.010** | 0.838 | 1.710* | 3.936* | -3.067 | 13.109* |
| One-half earner | Reference | Reference | Reference | Reference | Reference | Reference |
| Outsourcing |  |  |  |  |  |  |
| Formal help cleaning | 2.124** | 2.210** | 0.502 | 0.437 | 0.841 | 0.643 |
| Formal help children | 0.807 | 0.807 | 4.040** | 4.026** | -10.891** | $-11.038^{* *}$ |
| Informal help children | -0.986 | -0.855 | -1.558 | -1.442 | -0.259 | -0.339 |
| Household rules |  |  |  |  |  |  |
| Fixed task distribution | 0.197 | -0.334 | -0.131 | -0.097 | 0.985 | $3.778^{\dagger}$ |
| Time routines | -0.298 | $-0.937^{\dagger}$ | 0.982 | 1.236 | 1.652 | 2.697 |
| Time claims | 0.134 | 0.003 | 2.015** | $1.758^{\dagger}$ | 0.747 | 3.074 |
| High-quality standards | 0.276 | 0.521 | -0.471 | -0.058 | 1.696 | 2.453 |
| Unequal responsibilities | 0.580 | $0.907^{\dagger}$ | -0.569 | -0.119 | 3.207 | 6.014** |
| Interaction effects |  |  |  |  |  |  |
| Dual earner $\times$ fixed tasks |  | 1.793 |  | 0.227 |  | -10.054* |
| Dual earner $\times$ routines |  | 2.345* |  | -1.124 |  | -1.933 |
| Dual earner $\times$ time claims |  | 0.317 |  | 1.362 |  | -11.119* |
| Dual earner $\times$ high quality standards |  | -1.299 |  | -1.789 |  | -0.689 |
| Dual earner $\times$ unequal responsibilities |  | -0.978 |  | $-1.540$ |  | -10.367* |
| $N$ | 387 | 387 | 474 | 474 | 474 | 474 |
| $F($ Prob $>F)$ | 17.23 (.00) | 42.52 (0.00) | 13.01 (.00) | 13.00 (.00) | 20.74 (.00) | 32.74 (.00) |
| Adjusted $R^{2}$ | . 137 | . 155 | . 128 | . 126 | . 173 | . 187 |

[^2]of free time and (in one instance) for the gap between actual and preferred working hours. There are no significant interactions in the opposite direction. This may be taken as a tentative support for Gill's position and therewith for the weak-governance hypothesis. The number of dual earner households in our sample is too small to analyse this matter for them separately. However, conforming to our line of reasoning, these results indicate that some dual earner households could benefit from moving into a more flexible direction. The most likely interpretation is that traditional role patterns impede them from doing so.

## 5. Discussion and conclusions

The question addressed in this article is how couples arrange their household to decrease time strains. By the concept of 'household governance' we discerned three layers - the earner model, the outsourcing arrangements, and the household rules - which constitute the framework for the daily time allocation. The specific practices within these layers have been identified as the contrast between 'weak governance structures' (giving room to high job demands), 'strict governance structures' (claiming time for household demands), and tailor-made solutions (boundary theory). In order to test the boundary (i.e. contingency) hypothesis, we used an innovative and, admittedly, unusual criterion: the zero correlation principle. The idea was that when people successfully adopt structures to match their personal circumstances and preferences, the relationship between structure and outcome will tend towards zero. It requires a shaking off habits to accept this insight. Researchers require unbalance in order to be able to establish the effects of causal variables. Individuals, households and organisations, however, try to distance themselves from the imbalance as much as possible.

The weak governance hypothesis is clearly rejected in the sense that there are no indications that households in general can solve their time problems by giving (even more) room to high job demands. Only for dual earner households the weakening of household rules may provide some benefits. There are also some points in favour of stronger boundary control, but the pattern is too scattered to recommend a strict governance approach as a general solution either. The unfavourable effects of outsourcing house cleaning and childcare that we found in our analyses support the view that this practice is the busy household's refuge: Households that already experience time troubles resort to these means, perhaps contre coeur, without being able to solve all their problems. Overall, we believe that our results can best be understood in the light of the boundary theory casu quo contingency hypothesis - spouses choose household governance structures according to their given preferences and circumstances, which give room to job demands in some respects while claiming time for household demands in other respects - that is, with the important caveat that households are unable to choose their earner model optimally.

Fewer households would be 'in trouble', as least as time is concerned, if they were a one-and-a-half or single earner household. This is consistent with a previous study by the Netherlands Institute for Social Research (SCP), examining discontent with existing time allocations (SCP, 2000, p. 146). This raises the question of why couples don't act upon these preferences. In various countries, it remains an unexplained puzzle why this does not happen (Bielenski, Bosch, \& Wagner, 2002; Fouarge \& Baaijens, 2003; Reynolds \& Aletraris, 2006).

One explanation is that employees feel forced to work more hours than they wish because their employer requires it. In labour economics this is sometimes referred to as the 'lumpiness' of labour demand, meaning that employees have to choose between 'no job' and a 'forty-hour job'. This explanation still holds in the literature (e.g., Boheim \& Taylor, 2004), but it seems to apply less to the flexible Dutch labour market. In the Netherlands, part-time jobs have become generally accepted and the 'Working Hours Adjustment Act', which came into effect in 2000, gives employees the official right to adjust their contractual hours according to their preferences.

Another explanation follows from transaction cost theory. From this perspective, partners in households also choose (within constraints) governance structures with a view to reduce the risks of their transactions (Ellickson, 2008; Pollak, 1985). The choice for a breadwinner or one-half earner model may be very attractive for the household as a whole, but the difficult question as to which of the two partners is to cut back their hours then poses itself. This is not simply a question of a fair division of the direct loss of income - which seems a solvable issue - but instead of the difficulty of assessing future costs, benefits and risks. In the Netherlands as well as elsewhere, in the long run parttimers (as well as people on leave) sustain damage to their careers in the form of lower hourly incomes and fewer career opportunities (Román, Fouarge, \& Luijkx, 2004; Smithson, Lewis, Cooper, \& Dyer, 2004). This reality creates risks that extend to the partner relationship. Even the most romantic marriages may fail and each partner has to pose the question to him or herself about what his or her position will be when left to their own resources. The breadwinner model utilises the advantages of specialisation and makes work-family relations simpler, but it is vulnerable to opportunism and gender inequality. Spouses who are aware of these risks will weigh the importance of their economic independence when choosing the earner model of their household. We believe the fact that the partner's wage rate proves to have an unfavourable effect on the household's time strains (see the preceding results) fits this view. After all, the greater the earning capacity of the employee's spouse, the more he or she has to give up in the case of fewer working hours, so the less this happens.

Obviously, these choices do not only affect household time allocation and mismatch but also gender inequality in terms of work, income and career opportunities. It is usually women 'who pay the price' in change for a better work-family balance at the household level (see Blossfeld \& Drobnic, 2001). In this sense, household governance has a clear gender dimension (see Wotschack \& Wittek, 2008), raising important questions for future research. Given the specific Dutch context of this study, the question rises how these choices are made in countries where the compromise model of the modernised (one-and-a-half-earner) breadwinner household is less institutionalised and where the alternatives are more limited to either the breadwinner or the dual earner model. Second, it was a hidden assumption of our concept that household governance structures work similarly for both spouses. Yet, with regard to household rules we can easily imagine that these structures define different contributions for each spouse (also in a gendered sense) or vary in the 'strictness' of the rules. Due to limitation of our data we cannot control for such differences. Still, we found in previous analyses that women more often reported having rules in the household than did men (Wotschack, 2009, p. 49). Is this just due to a different perception or definition of rules? Or does it mean that women are in fact exposed to a greater extent to household rules? If the latter holds true, we might well have identified an additional factor that accounts for the gender gap in labour supply. Further research should focus more attention on these issues.

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## Notes

1. These practices rather refer to general differences in household strategies. At the same time, there might be quite some additional variation according to different elements of household work (e.g. when it comes to emotional elements, like childcare) that we could not consider in this study.
2. We are grateful to one of the reviewers for spelling this out to us.
3. For the two other dependent variables, the analyses were conducted on the subsample of 528 households. We checked whether it would make any difference if we also performed these analyses for the reduced sample. This proved not to be the case. There is an undesirable loss of power, but the patterns remain the same.
4. Since the research unit is the household and our theory and research question refer to the household level, individual characteristics (like gender or age) were not included in the analysis.
5. For the third indicator (hours of free time) these effects are the other way around.

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## References

Anger, S. (2006). Overtime work in Germany. Herzogenrath: Shaker Verlag.
Ashforth, B. E., Kreiner, G. E., \& Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. Academy of Management Review, 25(3), 472-491.
Bailyn, L., Drago, R., \& Kochan, T. A. (2001). Integrating work and family life. Cambridge, MA: MIT Sloan School of Management.
Beblo, M. (2001). Bargaining over time allocation. Heidelberg: Physica-Verlag.
Becker-Schmidt, R. (1984). Eines ist zuwenig, beides zuviel. Erfahrungen von Arbeiterfrauen zwischen Familie und Fabrik [One isn't enough, but both is too much. Experiences of female blue-collar workers between family and factory]. Bonn: Neue Gesellschaft.

Bielenski, H., Bosch, G., \& Wagner, A. (2002). Working time preferences in sixteen European countries. Dublin: European Foundation for the Improvement of Living and Working Conditions.
Bittman, M., England, P., Folbre, N., Sayer, L., \& Metheson, G. (2003). When does gender trump money? Bargaining and time in household work. American Journal of Sociology, 109, 186-214. doi:10.1086/378341
Blossfeld, H.-P., \& Drobnic, S. (Ed.). (2001). Careers of couples in contemporary societies. Oxford: Oxford University Press.
Boheim, R., \& Taylor, M. P. (2004). Actual and preferred working hours. British Journal of Industrial Relations, 42, 149-166. doi:10.1111/j.1467-8543.2004.00308.x
Breedveld, K., Van den Broek, A., De Haan, J., Harms, L., Huysmans, F., \& Van Ingen, E. (2006). De tijd als spiegel. Hoe Nederlanders hun tijd besteden [Time as a mirror. How the Dutch spend their time]. Den Haag: SCP.
Cahuc, P., \& Zylberberg, A. (2004). Labour economics. Cambridge, MA: MIT Press.
Campbell, I. (2002). Extended working hours in Australia. Labour and Industry, 13, 91-110. doi:10.1080/10301763.2002.10669258
Carson, S. J., Madhok, A., \& Wu, T. (2006). Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. Academy of Management Journal, 49, 1058-1077. doi:10.5465/AMJ.2006.22798187
Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. Human Relations, 53, 747-770. doi:10.1177/0018726700536001
De Man, R. (2007). Where to draw the line? Antecedents and consequences of the integration of work in home life (PhD dissertation). Vrije Universiteit, Amsterdam.
De Ruijter, E., van der Lippe, T., \& Raub, W. (2003). Trust problems in household outsourcing. Rationality and Society, 15, 473-507. doi:10.1177/1043463103154003
Donaldson, L. (2001). The contingency theory of organizations. Thousand Oaks, CA: Sage.
Edwards, J. R. (1996). An examination of competing versions of the person-environment fit approach to stress. Academy of Management Journal, 39, 292-339. doi:10.2307/256782
Ellickson, R. C. (2008). The household. Informal order around the hearth. Princeton, NJ: Princeton University Press.
European Foundation. (2012a). Fifth European working conditions survey. Luxembourg: Publications Office of the European Union.
European Foundation. (2012b): Foundation findings: Working time in the EU. European foundation for the improvement of living and working conditions. Dublin.
Fagan, C., Tracey, W., \& McAllister, I. (2001). Gender, employment and working-time preferences in Europe. Report of the European Foundation for the Improvement of Living and Working Conditions. Luxemburg: Office for official Publications of the European Communities.
Fouarge, D., \& Baaijens, C. (2003). Veranderende arbeidstijden. Slagen werknemers er in hun voorkeuren te realiseren? [Changing working hours. Do employees succeed in realizing their preferences?] Tilburg: OSA.
Garhammer, M. (2007). Time pressure and quality of life. In T. van der Lippe \& P. Peters (Eds.), Competing claims in work and family life (pp. 21-40). Cheltenham: Edward Elgar.
Gill, G. K. (1998). The third job. Employed couples' management of household work contradictions. Brookfield, WI: Ashgate.
Hall, D. T., \& Richter, J. (1988). Balancing work life and home life: What can organizations do to help? Academy of Management Executive, 2, 213-223. doi:10.5465/AME.1988.4277258
Hecht, T. D., \& Allen, N. J. (2009). A longitudinal examination of the work-nonwork boundary strength construct. Journal of Organizational Behavior, 30, 839-862. doi:10.1002/job. 579
Hochschild, A. R. (1997). The time bind. When work becomes home and home becomes work. New York, NY: Metropolitan Books.
Kossek, E. E., Lautsch, B. A., \& Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work-family effectiveness. Journal of Vocational Behavior, 68, 347-367. doi:10.1016/j.jvb.2005.07.002
Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: A personenvironment fit perspective. Journal of Organizational Behavior, 27, 485-507. doi:10.1002/ job. 386
Laurent, L. (2008). Off-scheduling within dual-earner couples: An unequal and negative externality for family time. American Journal of Sociology, 114, 447-490. doi:10.1086/590648

Moen, P. (2011). From 'work-family' to the 'gendered life course' and 'fit': Five challenges to the field. Community, Work \& Family, 14(1), 81-96. doi:10.1080/13668803.2010.532661
Moen, P., \& Yu, Y. (2000). Effective work/life strategies: Working couples, work conditions, gender, and life quality. Social Problems, 47, 291-326. doi:10.2307/3097233
Moen, Ph., \& Sweet, St. (2003). Time clocks: Work-hour strategies. In Ph. Moen (Ed.), It's about time: Couples and careers (pp. 17-34). Ithaca, NY: Cornell University Press.
Nippert-Eng, C. E. (1996). Home and work: Negotiating boundaries through everyday life. Chicago, IL: University of Chicago Press.
Olson-Buchanan, J. B., \& Boswell, W. R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. Journal of Vocational Behavior, 68, 432-445. doi:10.1016/j.jvb.2005.10.006
Perlow, L. A. (1998). Boundary control. The social ordering of work and family time in a high-tech corporation. Administrative Science Quarterly, 43, 328-357. doi:10.2307/2393855
Pollak, R. A. (1985). A transaction cost approach to families and households. Journal of Economic Literature, 23, 581-608.
Portegijs, W., \& Keuzenkamp, S. (Eds.). (2008). Nederland deeltijdland: Vrouwen en deeltijdwerk [The Netherlands - a part-time country. Women and part-time work]. Den Haag: Sociaal en Cultureel Planbureau.
Rapoport, R., Bailyn, L., Fletcher, J., \& Pruitt, B. (2002). Beyond work-family balance: Advancing gender equity and workplace performance. San Francisco, CA: Jossey-Bass.
Reynolds, J., \& Aletraris, L. (2006). Pursuing preferences: The creation and resolution of work hour mismatches. American Sociological Review, 71, 618-638. doi:10.1177/000312240607100405
Román, A., Fouarge, D., \& Luijkx, R. (2004). Career consequences of part-time work: Results from Dutch panel data 1990-2001. Tilburg: OSA.
SCP. (2000). De kunst van het combineren. Taakverdeling onder partners [The arts of combination. The division of tasks between partners]. Den Haag: Sociaal- en Cultureel Planbureau.
Shelton, B. A., \& John, D. (1996). The division of household labor. Annual Review of Sociology, 22, 299-322. doi:10.1146/annurev.soc.22.1.299
Smithson, J., Lewis, S., Cooper, C., \& Dyer, J. (2004). Flexible working and the gender pay gap in the accountancy profession. Work, Employment \& Society, 18(1), 115-135. doi:10.1177/ 0950017004040765
Van Berkel, M., \& De Graaf, N. D. (1999). By virtue of pleasantness? Housework and the effects of education revisited. Sociology, 33, 785-808. doi:10.1177/S0038038599000498
Van der Lippe, T., \& Siegers, J. (1994). Division of household and paid labour between partners: Effects of relative wage rates and social norms. Kyklos, 47(1), 109-136. doi:10.1111/j.14676435.1994.tb02252.x

Van Echtelt, P., Glebbeek, A., \& Lindenberg, S. (2006). The new lumpiness of work. Explaining the mismatch between actual and preferred working hours. Work, Employment \& Society, 20, 493512. doi:10.1177/0950017006066998

Visser, J. (2002). The first part-time economy in the world: a model to be followed? Journal of European Social Policy, 12(1), 23-42. doi:10.1177/0952872002012001561
Williamson, O. E. (1975). Markets and hierarchies. New York, NY: The Free Press.
Wotschack, P. (2009). Household governance and time allocation: Four studies on the combination of work and care. Amsterdam: Rozenberg Publishers/Thela Thesis.
Wotschack, P., \& Wittek, R. (2008). Negotiating work and household demands. The effects of conflict management strategies in Dutch households on the labour supply of male and female employees. In D. Anxo, Chr. Erhel, \& J. Schippers (Eds.), Labour market transitions and time adjustment over the life course. Amsterdam: Dutch University Press.
Wotschack, P., Siegers, J., Pouwels, B., \& Wittek, R. (2007). Labour supply: the effects of employer demands and household governance. In T. van der Lippe, \& P. Peters (Eds.), Competing claims in work and family life (pp. 161-175). Cheltenham/Northampton: Edward Elgar.

Table A1. Descriptives of dependent and independent variables.

| Variable | $N$ | Mean | Min. | Max. | Variance | SD |
| :--- | :---: | :---: | :---: | :---: | ---: | ---: |
| Gap actual - desired working hours | 405 | 4.91 | 0 | 23.5 | 17.94 | 4.24 |
| Perceived time pressure | 528 | 15.80 | 0 | 38 | 42.64 | 6.53 |
| Hours of free time | 528 | 67.41 | 16.5 | 132.92 | 564.30 | 23.75 |
| Wage-rate employee | 528 | 16.34 | 11.37 | 23.83 | 6.81 | 2.61 |
| Wage-rate partner | 528 | 15.05 | 8.38 | 21.22 | 6.85 | 2.62 |
| Young kids $(<13)$ | 528 | 0.511 | 0 | 1 | 0.25 | 0.50 |
| High employer demands | 528 | 1.96 | 0 | 4 | 1.29 | 1.14 |
| Breadwinner | 528 | 0.10 | 0 | 1 | 0.09 | 0.30 |
| One-half-earner | 528 | 0.33 | 0 | 1 | 0.22 | 0.47 |
| Dual earner | 528 | 0.21 | 0 | 1 | 0.16 | 0.41 |
| Formal help cleaning | 528 | 0.32 | 0 | 1 | 0.22 | 0.47 |
| Formal help children | 528 | 0.27 | 0 | 1 | 0.20 | 0.45 |
| Informal help children | 528 | 0.28 | 0 | 1 | 0.20 | 0.45 |
| Fixed task distribution | 528 | 0.66 | 0 | 1 | 0.22 | 0.47 |
| Time routines | 528 | 0.60 | 0 | 1 | 0.24 | 0.49 |
| Time claims | 528 | 0.19 | 0 | 1 | 0.15 | 0.39 |
| High-quality standards | 528 | 0.42 | 0 | 1 | 0.24 | 0.49 |
| Unequal responsibilities | 528 | 0.75 | 0 | 1 | 0.19 | 0.43 |


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[^1]:    Note: Standard errors are adjusted for the clustering of observations in 30 companies. Unstandardised effects (robust standard errors reported in parentheses).
    ${ }^{*} p<.05 ;{ }^{* *} p<.01 ;{ }^{\dagger} p<.10$.

[^2]:    Note: Standard errors were adjusted for the clustering of observations in 30 companies. Unstandardised effects (robust standard errors not reported for reasons of space).
    ${ }^{*} p<.05 ;{ }^{* *} p<.01 ;{ }^{\dagger} p<.10$.

