MARIANNA SCHAUBERT

A STUDY OF HUMAN BEHAVIOR UNDER THE SHADOW OF GERMAN REGULATIONS:

EMPIRICAL INVESTIGATIONS OF THE 2008 ALIMONY REFORM, CHILD SUPPORT OBLIGATIONS, AND CAREER–LIFE RECONCILIATION

DISSERTATION

In partial fulfillment of the requirements for the degree of Dr. rer. oec.

University of Wuppertal, Faculty of Economics

2018, Wuppertal

The PhD thesis can be quoted as follows:

urn:nbn:de:hbz:468-20191212-111406-0
[http://nbn-resolving.de/urn/resolver.pl?urn=urn%3Anbn%3Ade%3Ahbz%3A468-20191212-111406-0]

DOI: 10.25926/h6vf-sd76
[https://doi.org/10.25926/h6vf-sd76]

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ACKNOWLEDGEMENTS

First of all, I wish to thank Prof. Dr. Hendrik Jürges for his patience, competence and kindness. My work benefited greatly from his thoughtful criticisms and constructive suggestions. His aid during the writing of this thesis is very appreciated. I am especially grateful to my supervisor for the opportunity to work on my dissertation under excellent conditions and in complete creative freedom. I am also very grateful to Prof. Dr. Kerstin Schneider, who has kindly taken over the task of a second supervisor. I thank my second assessor for her valuable comments and suggestions. I thank both professors for sharing their excellent scientific knowledge with their doctoral students.

I thank the participants at the internal workshops at the Chair of Health Economics and Management, the Brown Bag Seminar in Business and Economics 2017, the European Society for Population Economics Annual Conferences 2015/2018, the 2015/2018 Annual Conferences of the Verein für Socialpolitik, and the 71st Annual Congress of the International Institute of Public Finance for helpful comments. Further, I benefited from seminars for doctoral students at the University of Wuppertal – Seminar in Advanced Econometrics, Empirical Methods, Health Econometrics, Advanced Microeconometrics, and Selected Issues in Advanced Macroeconomics.

Completing this thesis would have been more difficult without the friendship with other members of the Schumpeter School of Business and Economics. I am indebted to them for their emotional support. Thanks also to all the people who have discussed with me my thesis, especially Dinara Issabekova, Franz Westermaier, Luca Stella, Karolina Beifus, and Rudolf Bauer. Further, thanks to all current and previous members of the staff of the Chair of the Health Economics and Management, in particular, Tatjana Bruditz, Sameh Hallaq, Lars Thiel, and Sophie Meyer. Finally, I thank Prof. Dr. Kemnitz for his introduction to family economics during my studies at the Dresden University of Technology.

I dedicate this thesis to my grandparents Valentina and Anatoliy Chernushevich who raised me.

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1 INTRODUCTION

> "[T]he distinctiveness and importance of economics remains entirely in its insistence on applying the scientific method to the study of human behavior."
> Diane Coyle, in her book *The Soulful Science: What Economists Really Do and Why It Matters* (Coyle 2007, p. 5)

1.1 MOTIVATION

The present dissertation is in the spirit of "the economist's skeptical, empirical way of thinking about society" (Coyle 2007, p. 3) as it aims to investigate individuals' behavior related to certain aspects of the German family-related policies or regulations in a quantitative way (Figure 1.1). Naturally, this work reflects my own personal interests. Above all, however, it is devoted to producing credible results that might help us to understand human behavior closer to home.

Chapter 2 addresses the question of how a paradigm shift in German politics toward financial self-responsibility after a finalized divorce impacted spouses' time allocation. When the first *Act on the Reform of Marital and Family Law* was introduced in 1976, the primary policy goal was to establish the principle of an irretrievable breakdown of a marriage and the abolishment of the principle of fault. However, the economically weaker partner was protected financially by the legal doctrine of long-lasting solidarity between the former spouses after a marriage breakdown (see §1361 and §1569-1586b of the first *Act on the Reform of Marital and Family Law*, 06.14.1976). The new *Reform of the German Maintenance Law* introduced in 2008, by contrast, has the explicit purpose of reducing post-marital solidarity to a minimum and of imposing self-sufficiency after a finalized divorce. It thus marks a fundamental departure from the course of West Germany's traditional family policy, which had been built on the assumption of a male breadwinner model (Mätzke and Ostner 2010, p. 121) and, consequentially, on a man's responsibility for a former wife.[1] I analyze whether West German individuals who remain married responded to this change in the law by altering their time-allocation behavior. Since "intact" marriages were not targeted by this change in the law, I investigate the 2008 reform's unintentional side effects.

1 Note, lawmakers always use a gender neutral language. In the legal texts, the assumption that wives are the second earners in the family is never explicitly stated per se.

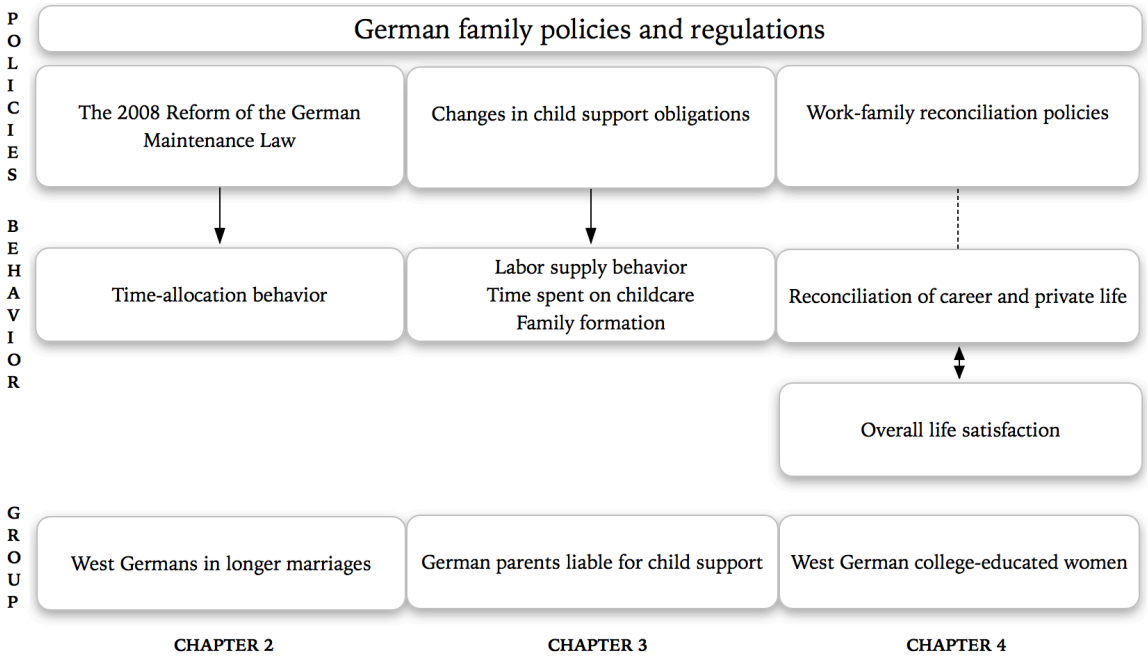
In the subsequent Chapter 3, I estimate the effect of changing child support obligations on the post-separation behavior of parents liable for child maintenance. One of the main functions of child support schemes is to reduce the reliance of children on governmental transfers after parental separation. The appellate courts in West Germany began publishing tables and guidelines for child maintenance in 1962 in order to simplify and standardize the case law. To date, this remains the way by which the amount of child support is determined in Germany. Unlike in some other countries, German courts follow the "percentage of net income" model (Allen and Brinig 2012, p. 311).[2] This system incorporates three main factors: The number of non-resident biological/adopted children, thus, of children entitled to child support, their age, and the net income of the liable parent.[3] The child support tables and guidelines have evolved over time, taking into account, among other aspects, reformed and new laws which regulate maintenance. First and foremost, however, the adjustments in these tables are subject to judicial provisions. Judges make adjustments unsystematically but on an ongoing basis, without taking into account the potential incentive effects on affected parents. I take advantage of the fact that this variation in child support can reasonably be treated as exogenous to the affected parents, i.e. those who are liable for child support payments. A question that has not been studied before is whether changes in the tables designed by the German courts and thus in the child support obligation amount could have an influence on the behavior of the obligated parents. I consider several outcome variables for family formation, labor supply, and time spent on childcare to address this question.

In Chapter 4, I describe to what extent college-educated women in my data managed to achieve a professional career or to establish a stable relationship or family. Furthermore, I attempt to answer the following question: If these women managed to "have it all" at the same time, what is the relationship between this attainment and their subjective life satisfaction? Traditionally, the West German model of family policy focused on high transfers to families and not on the reconciliation between professional careers and having or raising children (Rürup and Gruescu 2003, p. 7). This changed profoundly after the 2005 Bundestag election. Now, reconciliation policies are in place to foster birth rates in combination with labor market activities (von Wahl 2008, p. 25). Thus, increasing birth rates is one of the declared policy goals, especially of individuals with academic degrees (Mätzke and Ostner 2010, p. 121). At the same time, German family policies "unambiguously aim[] at reducing female career interruptions" (Erler 2009, p. 129), which echos firms' demand for the labor-market specific human capital of increasingly educated women (Federal Society of the German Employer Associations 2013, p. 5). Before examining various reconciliation measures at a company or state level, it is important to establish the achievements in

2 Some countries adopted the "income share" model. In this system, payments depend on the relative earnings of both parents besides other determining factors (see Allen and Brinig 2012, p. 311 for more details).

3 In Germany, the parent resident with the child provides maintenance in form of provision of housing, food, etc.

the reconciliation of women's working and private lives and to understand its relation to their subjective well-being.



Notes: Dashed lines present relationships that are not explored in this thesis. Child support obligations are payments laid down by the Higher Regional Courts.
Source: Own illustration

Figure 1.1: Conceptual framework of this thesis

1.2 OVERVIEW

Chapter 2: Do Alimony Regulations Matter Inside Marriage? Evidence from the 2008 Reform of the German Maintenance Law

In a contemporary modern society like the German one, individuals can enter marriage and exit out of it at will. It is impossible for two individuals to enter into a marriage which cannot later be dissolved through divorce. Even marriage contracts cannot prevent an eventual exit from said marriage (Browning et al. 2011, pp. 3 et seq., 121). However, marriage dissolution incurs considerable costs. These costs include not only fixed costs like legal fees, but for some individuals also long-lasting obligations like child support (if joint children exist) and alimony payments. In bargaining models, we compare the utility of a given married individual in two different situations: Remaining in the marriage versus being divorced (being single). An individual's threat point describes the utility level he/she could reach in the case of a marriage breakdown. In theory,

extra-household environmental factors like the legislation governing alimony payments directly impact the intra-marital decision process without affecting preferences or budget constraints directly (Browning et al. 2011, p. 122). Thus, these parameters influence the risk or the threat of divorce. In the absence of post-divorce transfers, the spouse with a relatively lower intra-marital income is financially worse off materially when the marriage breaks up. His/her threat point is lower in comparison to a situation with existing alimony payments. In models with the possibility of renegotiation, this second earner would react to regulations restricting post-divorce payments by increasing his/her investment in labor-market specific human capital (Stevenson 2007, p. 76). Thus, he/she would try to increase his/her threat point and gain more relative bargaining power within the marriage. Irrespective of the particular bargaining concept, we expect that a change in a extra-household environmental parameter would result in a shift in intra-marrital bargaining power.

A key difficulty in examining an intra-marital negotiation process is the fact that bargaining power has no apparent empirical counterpart (Rangel 2006, p. 627). Nevertheless, empirical research on household bargaining focuses on three decision spheres: Fertility, income spending behavior, and division of labor (Beblo and Boll 2014, p. 121). In the second chapter of this thesis, I contribute to the strand of literature that investigates time-allocation behavior in the face of a changing institutional environment. Specifically, I consider individuals who married during an era of strong post-marital solidarity and were suddenly confronted with a new regulation that demands financial self-sufficiency after a finalized divorce. Thus, I help to empirically verify bargaining models by exploiting an arguably exogenous source of variation in the extra-marital environment. In addition, my investigation represents an important contribution in two ways. First, to my knowledge, it is the first causal analysis of the 2008 change in the law including individuals in longer marriages. Second, my approach to identifying those who have been (dis)advantaged by this reform is a new one, proposing a method that reflects the realities of alimony arrangements and one that could be applied in future research. In contrast to other empirical papers that study similar natural or quasi-experiments in the field of family economics, I do not make the assumption that the wife is the financially weaker spouse per se and is therefore necessarily positively or negatively affected by a legal change. Here, I determine the amount of alimony for every individual in the case of divorce in the last pre-treatment period that is suddenly at stake due to the *2008 Reform of the German Maintenance Law*. This approach allows me to identify those wives whose relative bargaining position has actually deteriorated and those husbands whose position has indeed improved. Moreover, based on the amount of alimony, I am able to create different treatment groups ranging from low- to high-intensity.

Estimating difference-in-differences (DiD) models, I find a positive labor supply response for the low-intensity-treatment wives, i.e., for a group of women with a decreased threat point. This result is consistent with the idea of intra-household bargaining and cannot be explained with competing approaches like the unitary model of the household. My message, therefore, is that intra-marital bargaining is most likely. Consequently, theoretical family models should not be based on the assumption of intra-household consent or of one decision maker in the family. At the same time, my results imply that lawmakers should not ignore decision power within "intact" marriages when designing alimony reforms. To date, legislators in Germany do not even discuss or consider possible reactions of individuals not directly targeted by a law change. A reform of alimony should always be considered from the point of view of its incentive effect on married individuals.

Chapter 3: Behavioral Response of Non-Resident Parents to Child Support Obligations: Evidence from SOEP

The proportion of parents who are living apart from their children will increase rather than decrease over the time.[4] Therefore, the problems surrounding child maintanence will probably become even more prominent in the future. To date, researchers have made little effort to understand the behavior of German parents liable for child support payments. The vast majority of studies in the German context focus on the problems of child support payments, usually from the perspective of single mothers residing with their children (see, e.g., Federal Ministry for Youth, Family, Women, and Health 1977; Napp-Peters 1985; Postler et al. 1988; Vaskovics et al. 1994; Großmann 1996; Proksch 2001; forsa 2002; Allensbach Institute 2008; Hartmann 2014). However, it is crucial to understand how non-resident parents respond to changes in child support obligations as well. Do payments for children as laid down by the courts represent a channel through which lawmakers and courts may affect these parents – their hours spent on childcare, engagement on the labor market or family formation?[5] In general, maintenance has three declared objectives: Meeting the needs of children without burdening the taxpayer, and the equitable distribution of child-rearing costs among the parents (Altman 2003, p. 173). Unintended side effects of changes in child support obligations would complicate the issues surrounding child maintenance.

4 Last year, about 17% of German children who are younger than 18 years of age lived with only one parent. Without this age restriction, the rate is about 22%. Twenty years ago the percentage was already significant, but lower – at just 12% (Federal Office of Statistics 2018a, pp. 7 et seq.).

5 Labor market behavior includes working hours and the likelihood of working full time or belonging to the labor force. Family formation is captured by examining the likelihood of marrying or cohabiting with a new partner, and of having a new biological child.

Child support obligations differ from other levies or taxes in some aspects. The recipient of the payments is one's own biological child.[6] The liability ends when the child reaches a certain age. Unlike expenses for a child living in the household, however, non-resident parents do not influence the purpose of spending and only to a limited extent, if at all, enjoy time with their children. Moreover, they are not free to decide on the amount of child support and also not on the changes in these obligations over time. Higher Regional Courts establish the level of obligations in tables and guidelines and adjust them over time. This means that the variation of maintenance obligations is driven by factors beyond the control of these parents, with two exceptions. The non-resident parent can only change the amount due by adjusting his/her own income and changing his/her own employment situation. Therefore, to measure a causal influence of obligations on parents' behavior during the period of child support liability, I construct an instrument variable. This instrument is based on a parent's income and employment status before separation from his/her family. These pre-obligation variables are kept constant over time. Any changes in the instrument occur only due to changes in child support tables and guidelines and in children's age, but not because of a parent's change in his/her labor supply. Thus, the potential endogeneity of child support obligations is approached with such simulated obligations as an instrument.

Employing the SOEP data and applying a fixed-effects instrumental variable (FE-IV) approach, I find no impact of changing obligations on a parent's labor supply. A reduced labor supply would have implied that increased payment obligations would have led to lower tax revenue, and vice versa. Furthermore, an increase in obligations does not affect the time spent on childcare by non-resident parents. Thus, in contrast to Del Boca and Ribero (2001) and Rossin-Slater and Wüst (2017), I find no indication for substitution between financial obligations and time invested in children by their parents. Concerning the other aspect of post-separation life – family formation – there is only a weak indication for positive marriage incentives.[7] Further, my findings suggest that an increase in obligations might have negative fertility incentives: For parents younger than 50 years of age, a €10 increase in monthly obligation reduces the likelihood of having an additional biological child by 0.39 percentage points (about 3% at the sample mean). Finally, there is no evidence of an impact on the likelihood for post-separation cohabitation.

To the best of my knowledge, my study is the first attempt to capture a causal effect of child support obligations on the post-separation behavior of German parents. It complements the research into child support issues by using exogenous variations in child support determination

6 In general, the child participates in the rising standard of living of the parent responsible for payments of child support. Conversely, the child participates in income deterioration. Alimony, on the other hand, can be considered time-invariant because it is determined by so-called "marital living conditions" that are shaped before separation (Borth 2011, p. 492). Furthermore, child support payments unlike alimony are not tax-deductible (Krause 2008, pp. 8 et seq.).

7 When considering all post-separation years from 1985-2013, there is no statistically significant change as a reaction to increasing child support obligations. After the *Law on Modification of Child Support* the coefficient of interest is statistically significant at a 0.10 level: A €10 increase in a parent's monthly obligation increases his/her likelihood of being (re)married by about 0.33 percentage points (about 2% at the sample mean).

and studying the reduced-form impacts of child support obligations on a wide range of parental behaviors. Whether a fertility response is a desirable side effect of changing child support obligations should be clarified by policymakers and the designers of child support tables and guidelines. This study should be understood as an invitation to do so.

Chapter 4: Career, Private Life, and Well-Being among College-Educated West German Women

Since 2005, women account for more than 50% of university graduates (including university of applied sciences degrees). The trend toward higher numbers of university entrance qualifications and higher education among women continues (Weishaupt et al. 2010, p. 10; Federal Office of Statistics 2018b, pp. 8 et seq.). Given this educational success, the question arises as to what extent women holding a college degree manage to combine a career and private life at the same time. The second question I address is whether achieving both is associated with superior life satisfaction.

Using college-educated men in the same age group as a reference group for defining women's "career" in every year,[8] I find that only 25% of woman-year observations are classified as having a career. About 18% of the observations are categorised as having a career and cohabitation simultaneously and about 5% of woman-year observations show a time-wise overlap of both career and family. Considering different birth cohorts and generations of West German women, there are no improvements in the reconciliation of career and family. These two phenomena – on the one hand, the increasing success in higher education and, on the other hand, the low compatibility of career and family – raise important questions which lawmakers and future research must address.

Estimating fixed-effects (FE) models, I find life satisfaction premiums related to both "career" and "cohabitation/family" separately. However, their interaction terms throughout are negative. Women who "have it all" do not report superior life satisfaction premiums. This finding is opposite to the intuitive expectation that women, who can reconcile "full" professional and private lives, enjoy the highest well-being. This result applies to West German but not to the East German college-educated women. This study should be understood as an invitation to investigate concrete measures that could improve women's work-life balance without losing track of their well-being.

8 Using microdata from the *SOEP*, I compute for each year and each age group (25-29, . . . , 50-54) the 25th percentile of the income distribution among college-educated men living in West Germany. Thus, I assume that these men are the relevant reference group for West German college-educated women. A given woman is defined as having a career if her monthly gross earnings are above the 25th percentile in the relevant year and age group.

1.3 OUTLINE

The main body of this doctoral thesis consists of three self-contained Chapters 2, 3 and 4. It begins with an investigation of the 2008 alimony reform's impact on married individuals in West Germany (Chapter 2). Following the abstract and the introduction to this chapter in Sections 2.1 and 2.2, theoretical household models are briefly introduced and the literature on related empirical topics is presented in Section 2.3. The institutional background is explained in Section 2.4, including details on the 2008 reform and the method for calculating the amount of alimony. Based on the theoretical considerations, existing empirical evidence, and the nature of the 2008 reform, hypotheses are derived in Section 2.5. Section 2.6 describes the data and Section 2.7 the identification strategy. Section 2.8 provides descriptive statistics and results from my DiD analysis in reference to the previously stated hypotheses. Additional robustness checks are included in Section 2.9. Potential threats to internal validity are addressed in Section 2.10. This part also contains a discussion on the external validity of the found effect. The last section of the second chapter revisits the stated hypotheses and concludes. In addition, it proposes ideas for future research.

Chapter 3 presents the empirical analysis of the German child support obligations. Specifically, it shows the behavioral response of parents liable for child support to an increase in obligations. After the abstract and a short introduction to this study in Sections 3.1 and 3.2, related literature is presented in Section 3.3. The reader is introduced to the German child support system in Section 3.4, which helps to understand what sources drive the establishment and the changes in child support obligation. Derived from the existing evidence on child support and the German child support system, hypotheses are formulated in Section 3.5. Section 3.6 describes the data. Section 3.7 presents my identification strategy, while Section 3.8 presents my results from FE-IV models and robustness checks. The last section addresses previously stated hypotheses and draws conclusions. It also includes suggestions for future research.

Chapter 4 investigates the reconciliation of the private and career life of West German women who hold a college degree. Additionally, it uncovers the relation of this achievement to their subjective life satisfaction. Sections 4.1 and 4.2 offer an introduction and overview of the study. Section 4.3 presents related literature. Section 4.4 uses theoretical constructs from psychology to explain why it might be challenging to have a healthy work-life balance and how this challenge might impact individual life satisfaction. Section 4.5 describes the data. Section 4.6 is the main part of this study. It gives an overview on how many woman-year observations are classified as having a career and a cohabitation and/or motherhood. Further, it is shown whether the share of career-and-private-life observations varies across birth cohorts or generations. Section

4.7 presents the empirical approach used to investigate the relationship of the double attainment – career and cohabitation and/or motherhood – and women's life satisfaction. Results from pooled ordinary least squares (OLS) and FE regressions are presented in Section 4.8. Section 4.9 summarizes and concludes.

The last four chapters of the thesis, A-D, comprise the appendix. Given the length of the supplement, all tables and figures are presented in appendices A and B instead of after each corresponding chapter in the main body of work. Appendix C includes German laws on maintenance, while Appendix D presents additional remarks on Chapter 2.

2 DO ALIMONY REGULATIONS MATTER INSIDE MARRIAGE? EVIDENCE FROM THE 2008 REFORM OF THE GERMAN MAINTENANCE LAW

"A crucial issue is that this reform disadvantages those spouses who undertook family and household duties and who reduced or interrupted their earning capacity, in agreement with the other spouse, in order to do so; and who should now be sent back to the labor market as quickly as possible. [...] "

Dieter Schwab, family law expert, at the public hearing held by the Legal Committee of the German Parliament on the draft bill concerning reform of the maintenance law (German Bundestag 2006c, p. 25)

I am grateful to the participants at the internal workshops at the Chair of Health Economics and Management that took place between 2013-2015, the Brown Bag Seminar in Business and Economics 2017, the European Society for Population Economics Annual Conference 2018, and the 2018 Annual Conference of the Verein für Socialpolitik for valuable comments and suggestions.
Note, work on this chapter was completed by end of 2017. Accordingly, my literature research is based on search results obtained up to that point.

2.1 ABSTRACT

This chapter investigates how spouses adjusted their division of time as a response to the alimony reform introduced in 2008. This reform imposed financial self-responsibility after a finalized divorce.

In general, alimony constitutes regular payments from one former spouse to the other. Thus, the 2008 reform focused on divorcees and did not target individuals in "intact" marriages directly. However, in a bargaining framework, it represents a change in the institutional environment that proxies exogenous redistribution of bargaining power within "intact" marriages. This reform weakened the relative bargaining position of the spouse with comparatively lower income and increased the relative bargaining power of its spouse. Therefore, the present study helps to verify bargaining models by considering the 2008 policy change as a shift of spousal bargaining power. To explore the impact of postmarital financial self-sufficiency on spouses' time use, the 2008 reform is used as a natural or quasi-natural experiment. Estimating DiD models I find that, indeed, wives who face a potential small financial loss might have increased their working hours as a result of the 2008 reform. Husbands whose relative bargaining position improved, however, seem not to have changed their time use.

The contribution of the present study is twofold: First, to my knowledge, it is the first analysis of the behavioral response of individuals in longer marriages[1] to the 2008 reform. Second, its approach to identifying those who have been (dis)advantaged by this reform is a new one, proposing a method that reflects the realities of alimony arrangements. Unlike other empirical papers that study similar legislative changes in the field of family economics, I do not make the assumption that the wife is the financially weaker spouse per se. Here, I determine the potential alimony for each spouse that is at stake due to the *2008 Reform of the German Maintenance Law*. This approach allows me to identify those wives whose relative bargaining position actually deteriorated and those husbands whose position did indeed improve in the context of bargaining models. Moreover, based on the amount of alimony I am able to create different treatment groups ranging from low- to high-intensity. The increase in the working hours of the low-intensity treatment group of wives can be explained as a response to their decreased extra-marital option in a bargaining framework.

1 The term longer marriage implies marriages that existed for at least three years before the reform took place.

2.2 INTRODUCTION

Few laws are as important for a large part of the population as those governing marriage, divorce, and its financial aftermath. In 1976, the first *Act on the Reform of Marital and Family Law* was passed in West Germany which still constitutes the foundation of German maintenance law in the present day (Borth 2011, p. 1). Since then, few modifications in the regulation of post-dissolution rights and responsibilities, including alimony, have been made. Although lawmakers tried to reduce alimony obligations in 1986[2], 2008 marks a crucial turning point with regard to the regulation of alimony for divorcees (Peschel-Gutzeit 2008, pp. 10 et seq.). Without question, the 2008 reform is inescapably relevant to anyone contemplating or going through a divorce. However, the present study is focused on measuring its causal effect on a group of people not directly targeted by the 2008 reform, i.e., not on divorcing or divorced, but on individuals in "intact" marriages.

A quantitative evaluation of the *2008 Reform of the German Maintenance Law* is essential since it helps to expose its unintentional side effects. The analysis of this reform may serve two related goals: First, in understanding whether alimony regulations are a channel through which policy-makers may affect married individuals - thus, verifying bargaining models, in which a change in the institutional setting proxies an exogenous redistribution of power between spouses in "intact" marriages (Rangel 2006, p. 627). Second, the findings might suggest improvements vis-à-vis future changes in laws regarding maintenance in Germany, i.e., by supporting the lawmakers' learning process (Moran et al. 2008, pp. 367 et seq.). In particular, it might provide an understanding that laws *do* incentivize individuals not directly targeted by the law to change their behavior. As a consequence, maintenance laws to date might have disregarded financial implications.[3]

The introduction of the reform was motivated by changing social conditions and values, such as the rising divorce rate, the increasing number of children born out of wedlock, and the increasing number of "second families". Moreover, as was argued by the German Federal Government, an adjustment of the maintenance law was also required due to the increasing number of dual-earner couples, both with and without children, and of mothers who were re-entering the workforce (German Bundestag 2006b, p. 12). Some family law experts see in this explanation just the usual reasoning for reducing any consequences of a marriage (Breithaupt 2006, p. 11; Diwell 2006, pp. 1 et seq.). However, after reading Section 2.4.4, which introduces alimony calculations, it will become clear what would indeed be a logical reason for such a policy measure: A governmental

2 On February 20, 1986, the *Law Amending Maintenance of Legal, Procedural, and other Rules* was passed. It came into force on April 1, 1986. The reason for this change was the Federal Constitutional Court's position that maintenance would be an unreasonable restriction of the debtor's freedom in economic matters in cases where the party demanding maintenance had significantly severed marital ties (Martiny and Schwab 2002, p. 22).

3 The cost estimate in the draft law refers only the budgets of the federal German states and divorced individuals subject to maintenance arrangements, particularly those who are obliged to pay maintenance. It is vaguely conceded that in individual cases a strengthening of post-marital self-responsibility and extended possibilities to reduce maintenance entitlements might entail financial relief for divorcees (German Bundestag 2006b, p. 2).

response following years of an unusual high proportion of couples where the partners have the same intra-marital income shares or where the income gap is minimal. Such a trend would make old alimony regulations obsolete after some time.

The objectives of the law were threefold: Strengthening the best interests of the child, simplifying existing legislation and, more importantly for this study, reinforcing the principle of personal responsibility after divorce (German Bundestag 2007a, p. 1). The liability of divorced spouses to support themselves is strengthened by a new version of the principle of self-responsibility, the design of the gainful activity as an obligation, and the creation of a new, all grounds for maintenance claims covering, possibility of restricting alimony in terms of both amount and duration of such support (German Bundestag 2007c, pp. 3189 et seqq.). Additionally, the employment-resumption requirements after the finalization of divorce have been tightened (German Bundestag 2006b, p. 2; German Bundestag 2007a, pp. 1, 9). Unfortunately, the potential impacts of the reform on married individuals, or on their children, were completely ignored by lawmakers despite concerns being expressed by family law experts at a public hearing in 2006 (German Bundestag 2006c) and the existing empirical evidence regarding the redistribution of bargaining power and its consequences on family members as a result of similar policy measures (see Section 2.3.2). This study aims to fill this gap by empirically investigating the causal relationship between the restriction and reduction of post-marital alimony introduced in 2008 and spousal time-spending behavior. Specifically, I address the following questions: First, do married individuals adjust their time allocation in response to a legal change in maintenance claims, i.e., to marriage's insurance value loss? Second, if they do, is the response big enough to be considered important? I use the 2008 reform as a natural or quasi-experiment to identify the behavioral response of married individuals to imposed self-sufficiency after a finalized divorce.

Alimony law defines the ongoing claims of one spouse on the future earnings of the other and therefore determines one of the distributional rules of divorce (Mnookin and Kornhauser 1979, p. 959). The basis for the heterogeneous treatment intensity is the amount that was at stake in terms of periodic alimony payments: It matters whether, as a result of the alimony reform, the monthly alimony payment is reduced by €8 or €800 to €0 per month in the event of a potential divorce. That is why I use alimony distribution in the last pre-treatment period, 2007, to divide wives who lose such regular payments into different groups. Wives below the 25th percentile of the alimony distribution belong to the control group. The remaining wives are considered to be treated in my analysis and are subdivided into three groups: A low-intensity treatment group receiving alimony payments in the case of divorce between the 25th percentile and the 50th percentile, a medium-intensity treatment group with alimony between the median and the 75th percentile, and a high-intensity treatment group with alimony above the 75th percentile

of the alimony distribution. I therefore identify the effect of the legal reform as the difference between the change in time use of wives with significant alimony loss, but different in size, and the change in time use of wives with negligible alimony loss. The same logic applies to husbands who were the potential debtors in the case of divorce before the reform: The law's impact most likely varies significantly depending on the pre-treatment amount payable to their wives. It is of significance whether you are no longer liable to pay, for example, €8 or €800 per month in the event of a marriage dissolution. This is a novelty approach since I do not simply assume that all wives are disadvantaged and all husbands are better off based on the fact that men usually earn more than women. For every individual, I determine the alimony that he or she would pay or receive in the case of a separation. This is more realistic since data on court decisions shows that alimony is also granted to husbands. In West Germany (including Berlin) in 2006, for example, husbands received maintenance from their former wives in 21.51% of cases, while wives received alimony from former husbands in 78.49% of cases (Federal Office of Statistics 2008a, p. 26).[4]

By estimating DiD models, I find evidence that the total working hours of low-intensity treatment wives might indeed have increased due to the *2008 Reform of the German Maintenance Law*. The response is significant and between two and three hours per week. Limitation to 30-54 year old wives confirms this finding. However, when I split my sample using 45 as a cutoff age, the response seems to be stronger for younger wives. The use of a second control group - husbands with alimony payments below the 25th percentile in 2007 - also yields a positive but much bigger response and is disputable due to the violation of the parallel-trend assumption. There is no behavioral response of married men to the 2008 reform.

This study is organized as follows. Section 2.3 briefly introduces household models and presents related literature on this topic. Section 2.4 explains the institutional environment and alimony regulations in Germany. Hypotheses are stated in Section 2.5. Section 2.6 describes the data used in empirical estimations. The econometric specification is introduced in Section 2.7. Results are presented in Section 2.8, additional robustness checks in 2.9. Section 2.10 discusses internal and external validity. Section 2.11 revisits the stated hypotheses and finally concludes.

4 Family Courts statistics increasingly show spousal support in favor of men (Willenbacher 2010, p. 371). Of cases concerning alimony payments decided by the decree of dissolution in West Germany (including Berlin) in 2006 in about 22%, and in 2007 in about 16% of cases alimony was paid to former husbands. In Eastern states the percentages are higher than in Germany as a whole: 23% in 2004, 31% in 2005, 23% in 2006, and (without Saxony) 30% in 2007 (Federal Office of Statistics 2008a, p. 26; Federal Office of Statistics 2008b, p. 26; Willenbacher 2010, p. 371).

2.3 BACKGROUND

2.3.1 Conceptual framework

Two individuals who have entered a marriage are engaged in a continual decision-making process. They negotiate to find agreement on their choice of goods and on their time allocation, and on the distribution of the gains from their marriage (Manser and Brown, 1980, p. 35). In Becker's (1981) unitary model of the household, the distribution of alimony entitlements is irrelevant to determining outcomes in the family.[5] Households' preferences are those of the family head, an intra-household consent is assumed (Ott 1995, p. 80; Apps and Rees 2007, p. 3). However, the literature in the field of family economics seems to have arrived at a consensus that the unitary model relies on an overly simplistic understanding of interactions and relationships within a family. Thus, a marriage should not be considered as a single decision-making unit (see Browning et al. 2011, pp. 221–225 for a collection of empirical evidence against the unitary model). The intra-household balance of power matters to determine the final allocation of resources in the household (Brassiolo 2013, p. 1; Grossbard 2011, p. 42). Both, cooperative bargaining models as well as dynamic models that allow for renegotiation, are usually used to explain negotiations among household members with disparate preferences (Rangel 2006, p. 630).

Therefore, suitable for answering my research questions are models that can be used to examine marital decisions in a bargaining framework. As stated by Nash (1953, p. 130), a "common device in negotiation is the threat". "[E]xtrahousehold environmental parameters (EEPs) serve as pure shifters of the threat points," suggests McElroy (1990, p. 559) and as examples of EEPs she refers to "parameters that characterize the legal structure within which marriage and divorce occur" (McElroy 1990, p. 567).[6] The *2008 Reform of the German Maintenance Law* serves as a perfect EEP and thereby affects the threat point of married couples within the framework of such models. Specifically, it exclusively influences the economic status of spouses after a marriage dissolution without affecting the preferences or couple's budget constraint directly. In the context of these

5 Becker (1993) later rejects criticism offered by McElroy and Horney (1981), Boserup (1987) and many others stating that he neglects "power" in marriages. He argues that he does consider bargaining over whether to divorce and that he simply emphasizes the fact that intra-marriage bargain happens in the shadow of competition in the marriage markets (Becker 1993, pp. 13 et seq.).

6 The so-called divorce-threat cooperative Nash-bargaining models proposed by Brown and Manser (1978), Manser and Brown (1979, 1980) and by McElroy and Horney (1981) suggest similarly that institutional variables or EEPs might influence the relative bargaining positions of spouses (Manser and Brown 1980, p. 42; McElroy and Horney 1981, pp. 336, 346; Manser and Brown 1979; Brown and Manser 1978). These models are based on the assumption that spouses are able to make irrevocable "commitments to implement an agreed set of actions" (Apps and Rees 2007, p. 28). Further, these binding contracts are assumed to be complete and based on symmetrical information. Thus, these cooperative Nash bargaining models have some limitations and weaknesses. First, the assumption of binding contracts is difficult to justify. Although there may be formal laws, customs, traditions or social norms (Ott 1992, pp. 120-125), it is very arguable whether these are sufficient to provide an enforcement mechanism for contracts (Apps and Rees 2009, p. 76). A number of papers present environments where cooperation or commitment does not work (Kemnitz and Thum 2013, pp. 2 et seq.). Second, the assumption of completeness of information seems to be an issue. Further, the two players have the same level of information which seems to be also a far-fetched assumption. Another general question is whether children (if present) are actively involved in decision-making process (see, e.g., Lundberg et al. 2007).

models, new restrictions and limitations on alimony payments between divorced individuals lower the standard of living that an economically weaker spouse can expect following a divorce. This prospect makes it more difficult for him/her to leave his/her spouse in a bad marital situation, weakening the credibility of the threat of divorce (Phipps and Burton 1995, p. 152; Lundberg and Pollak 1996, p. 149). As a result, policies putting the financially stronger spouse in a relative better position shift resources within marriage to the main earner in the family (Lundberg and Pollak 1996, p. 149).

In models with the possibility of renegotiation as the response to the improved bargaining position of the first earner in relation to the second, the latter will try to increase his/her threat point since it would result in an increase of his/her utility. Thus, the spousal time spending behavior can be expected to change as a result of the 2008 reform due to an intra-marital shift of bargaining power.

Note, the 2008 alimony reform is to some extent comparable to the introduction of no-fault divorce laws, because it decreases marriage's insurance value. In response to this, the optimal - from an individual point of view - degree of specialization in home production decreases (Parkman 2004, p. 772). Married second earners respond by increasing their investment in labor-market specific human capital (Stevenson 2007, p. 76). Various authors model human capital acquisition as experience on the labor market (see, e.g., Olivetti 2006, p. 557, Attanasio et al. 2008, p. 1518). Alternatively, human capital investments can be thought of as direct investments in education. Under the new alimony regime, spouses can be expected to place less emphasis on home production and more on involvement in the workplace as a form of protection in the case of divorce.

2.3.2 Related literature

Empirical papers which examine the issue of bargaining within marriage primary cover three decision spheres: Fertility, work division and income spending behavior (Beblo and Boll 2014, p. 121). Here, I firstly introduce a number of important studies that explore the influence of EEPs on time allocation or labor force participation (LFP) within a household. Secondly, I look at a strand of literature concerning investments in children (see Appendix Tables A.1.1 and A.1.2 on page 142 et seq. for literature overviews).

Time use and labor force participation

Phipps and Burton (1995) conduct empirical tests of EEPs on the LFP of married women. They exploit the variation in social/institutional factors across seven European countries. Their empirical results indicate that the outcome is significantly influenced by national institutions. Specifically,

higher social transfers for singles or higher levels of child support for single parents seem to reduce levels of LFP among married women, ceteris paribus (Phipps and Burton 1995, pp. 167 et seq.).

Research on the influence of no-fault divorce laws on spouses' labor supply outcomes has produced inconsistent results. Gray (1998), for example, exploits the regional variation in the adoption of unilateral divorce laws, which grant one spouse the right to seek a divorce without the consent of the other, during the 1970s in the U.S. He additionally considers underlying marital property laws in each state. Divorce laws that reassign marital property rights "can be interpreted as an unexpected and exogenous shift in the unearned income of each spouse" (Gray 1998, p. 628). He finds that wives who were favored by this reassignment increased their labor supply and reduced their time spent for home production, and vice versa. No changes in their leisure consumption were found (Gray 1998, p. 638). Unlike Gray (1998), Stevenson (2008) finds that the implementation of unilateral divorce laws in the U.S. leads to an increase in LFP by married women irrespective of the preexisting property division laws.[7] Moreover, unilateral divorce seems to have the largest effect on women married for between 5 and 15 years and effectively no impact on those in long-term marriages (Stevenson 2008, pp. 853, 867 et seq.). Voena's (2011) findings suggest that unilateral divorce decreased women's LFP and increased men's working hours in those states where assets are divided equally (community property states). Genadek et al. (2007) find that married mothers are more likely than non-mothers to increase their LFP in reaction to no-fault divorce laws. Moreover, women with young children seem to respond more strongly than women with older children (Genadek et al. 2007, p. 269).

A different group of studies explores the extension of alimony rights to cohabitations as an exogenous source of variation influencing the distribution of power within the household. Rangel (2006) investigates the 1994 regulation change in Brazil. Applying a DiD approach, the author shows that women with increased power reduce the frequency of housekeeping activities and the labor supply relative to their married counterparts after the law change (Rangel 2006, pp. 639, 650). Lafortune (2010), Chiappori et al. (2011) and Lafortune et al. (2012) find that granting alimony entitlements to cohabitations in Canada affected women, under the assumption that their bargaining power was increased: The likelihood that women in cohabiting couples work full-time decreases and the likelihood of them stopping work altogether increases (Lafortune 2010, pp. 20, 24). Results for men are mixed: They show no reaction to the law change (Lafortune 2010, Lafortune et al. 2012) or indeed the opposite pattern (Chiappori et al. 2011, p. 30).

Kapan (2008) analyzes the legislative change imposed by the 2000 House of Lords decision which led to a more equitable asset division in England and Wales between divorced individuals. This

7 Stevenson (2008) points out that Gray's (1998) inability to find an effect without controlling for different marital property regimes can be explained by omitted variable bias and heterogeneity in the treatment of females based on marriage duration (Stevenson 2008, p. 872).

change entitled the economically weaker spouse to a higher share of family wealth in case of divorce. Using Scotland as a control group, the DiD estimations reveal that married women, assuming they were favored by the 2000 decision, reduced their labor supply after the legislative change (Kapan 2008, pp. 1 et seqq.). Another study on property division regulations in Spain finds that the labor supply of wives reacts to changes in such laws (Brassiolo 2013, p. 24).

Most closely related to my study is the recent paper of Bredtmann and Vonnahme (2017). The authors also aim to study the behavioral response of married individuals to the new alimony regime introduced in 2008. However, they consider individuals who had first married between 2005-2007 as treated. Whereas I exclude individuals in short marriages.[8] Overall, the authors do not find labor supply responses of women and men. They argue that "[t]hese effects can be interpreted as a lower bound to the overall effects, as [the chosen control group] might also have reacted to the reform, but to a lesser extent" (Bredtmann and Vonnahme 2017, p. 3).

The findings presented here represent a substantial body of evidence showing how extramarital opportunities for spouses affect intra-household decisions on their division of time. The presented paper builds on this strand of literature by testing the influence of the revised 2008 law on the time-spending behavior of married individuals and thus their relative bargaining positions within the marriage. However, unlike the previous studies, I do not rely on the assumption that the law favors or disadvantages women in general, an assumption which is based on the fact that men are more likely to earn higher incomes (e.g., Rangel 2006; Lafortune et al. 2012; Bredtmann and Vonnahme 2017). Here, I calculate for every individual the actual amount of maintenance for the last pre-treatment period that is at stake as a result of the considered legislative change. This approach reflects the realities of alimony arrangements in Germany. For example, of cases concerning alimony payments decided by decree of dissolution in West Germany (including Berlin) in 2007, in about 16% of cases alimony was paid from former wives to former husbands (Federal Office of Statistics 2008b, p. 28).

Impact on children

Given that an increase in female bargaining power might reduce the labor supply of women, and vice versa, time spent on childcare might also change as a result of the relative power shift. If the 2008 reform weakens the relative bargaining position of the mother, this may result in lower lev-

8 There are some crucial differences to my work. First, at the time the *Act for the Reform of the Maintenance Law* came into force couples in their included sample were married for less than 3 years. The average marriage duration is 2.11 at pre-treatment. Overall, women in the treatment group are married for 3.18 years on average (Bredtmann and Vonnahme 2017, pp. 23, 30). However, a maintenance claim is refused in the case of short marriages for reason of gross inequity, except a former spouse cares for a child (see §1579 (1) of the Civil Code on page 226). This restriction existed already before 2008. Therefore, I exclude individuals who have been married for less than 3 years because I consider them not to be affected by the 2008 alimony reform. Second, the authors do not calculate the alimony for every individual, but assume that women are alimony receivers and men alimony payers per se. Further, unlike in my study Bredtmann and Vonnahme (2017) include East and West Germans in the same analysis and estimate OLS models controlling i.a. for federal state and year fixed effects interactions. They consider a 5-day week and a different time frame (for a full explanation of the differences to my study see additional remarks in the appendix starting on page 228).

els of child supervision and investment in children. Empirical studies have found that resources directly available to the mother are more likely to benefit children (see, e.g., Thomas 1994; Lundberg et al. 1997; Duflo 2003; Rotz 2012). Lowering or eliminating post-marital maintenance can also lead to parents providing a lower level of resources to their children for two reasons. First, the incentives to invest in the marriage-specific capital[9] might decrease. Second, spouses' savings behavior in anticipation of a potential divorce might change (see, e.g., González and Özcan 2013) to the detriment of their children. In Rangel's (2006) analysis, a shift toward stronger bargaining position for mothers benefited first-born daughters' schooling in Brazil. This result is stronger in regard to the daughters of women who themselves have a level of education which is lower than elementary school. On the other hand, no effect is found for daughters of more highly educated women (Rangel 2006, pp. 645 et seq., 650).

Gruber (2004) examines the long-term effects on children of making divorce easier through the implementation of unilateral divorce laws in the U.S. in the 1970s. There are two possible channels through which the change in divorce regime could affect children: Through the increasing divorce rates of parents and/or through affecting family bargaining (Gruber 2004, p. 809). He finds that being exposed to the new divorce regulations at youth leads, i.a., to reduced educational attainments and family incomes for men and women, and lower attachment to the labor market and earnings for women (Gruber 2004, pp. 815, 817). However, Gruber (2004) cannot test for the mechanisms through which the unilateral divorce regime leads to outcomes at adulthood. Nevertheless, the results appear too large to be explained solely by increased exposure to parental divorce while young. That is why he argues that these laws had an impact on the upbringing of young people in "intact" marriages (Gruber 2004, pp. 820, 830). Exploiting the different timing of unilateral divorce legalization across EU-15 countries, González and Viitanen (2008) confirm negative effects of the new law on the labor supply and earnings for women who were exposed to the regime of unilateral divorce as children.

Reinhold et al. (2013) also investigate the impact of growing up under a unilateral divorce law on children's later life outcomes. They use the different timing of divorce regime reforms across 11 European countries to explore human capital investments in children. The authors find adverse effects of this exposure such as an increased probability of being overweight in adulthood (Reinhold et al. 2013, p. 1046). These results seem to be driven by the impact of divorce laws on family bargaining in "intact" marriages, and less by the effect on the probability of parental divorce. Authors conclude that changed divorce laws led to a reduction of investments in children. Since both spouses had to engage more in the labor market in order to maintain their extra-marital

9 Stevenson (2007), for example, finds evidence for an impact of unilateral divorce laws on marriage-specific capital such as a spouse's education, children, and household specialization. Thus, showing how laws can alter partners' incentives to invest in their marriage.

bargaining options, less time was spent on childcare. The institution of marriage has partly lost its function as an insurance (Reinhold et al. 2013, pp. 1054 et seq.).

> As Reinhold et al. (2013, p. 1038) point out, "alimony laws that were recently reformed in Germany [...] would give additional incentives to women to invest in their careers with potentially similar effects on children's outcomes than the shift to unilateral divorce regime".

In her statement on the draft bill which resulted in the 2008 reform, family law expert Diwell (2006) warns similarly about the effects on mothers: That as a result of the alimony reform, mothers would return to full-time employment and rely on the full usage of external childcare immediately following the end of paid maternity leave, except where the fathers would agree to participate in childcare and housework on a fifty-fifty basis (Diwell 2006, p. 5). Therefore, it seems to be important to assess the impact of the 2008 reform on hours spent on childcare as well.

2.4 INSTITUTIONAL ENVIRONMENT

In this section, I provide first some background on the introduction of the 2008 reform and then on the alimony regulations that are the subject of this study. After presenting alimony arrangements and their legislative foundations, I explain how alimony payments are actually determined. The understanding of this calculation is fundamental since it explains the varying impact of the 2008 reform on the individuals.

Before the finalization of divorce, partners must live apart for one year in the case of mutual consent to divorce (§1566 (1) Civil Code).[10] During this year of separation, the marital standard of living must be guaranteed to the dependent spouse (Wörz 2011, pp. 10 et seq.). Reforms introduced in the following subsections target the provisions governing alimony after the divorce is finalized and not the alimony during the separation period.

2.4.1 The 2008 Reform of the German Maintenance Law

The introduction of the new legislation

Since I study a national policy effect and apply the DiD method, I need to discuss two important aspects. First, the public should be well-informed about the reform. This is a pre-condition for an

10 If one spouse is not willing to accept divorce, partners must live separated for at least three years (§1566 (2) Civil Code; Wörz 2011, p. 10).

effective policy. Second, the introduction of the new law should be unexpected or unforeseeable, coming as a "shock" to the affected couples.

It took lawmakers over one year and eight months to arrive at a final agreement concerning the law and its constitutive parts, starting on March 8, 2006, when some members of the German Bundestag presented a request to the Federal Government (German Bundestag 2006a). On June 15, 2006, a draft of the legislation about changes in the alimony regulations was submitted by the German Government. It immediately came under attack by some parts of the ruling party. Conservative members of the CDU and CSU opposed the bill from the beginning because of its "liberal" character. These attacks and the following coalition disputes were covered by the media.

> "We opposed these ideas for alimony regulation because we were concerned that post-marital solidarity and thus marriage itself would sustain damage."
> Norbert Geis, member of the German parliament and the CSU (Schulz 2007, accessed on 05.26.2017)

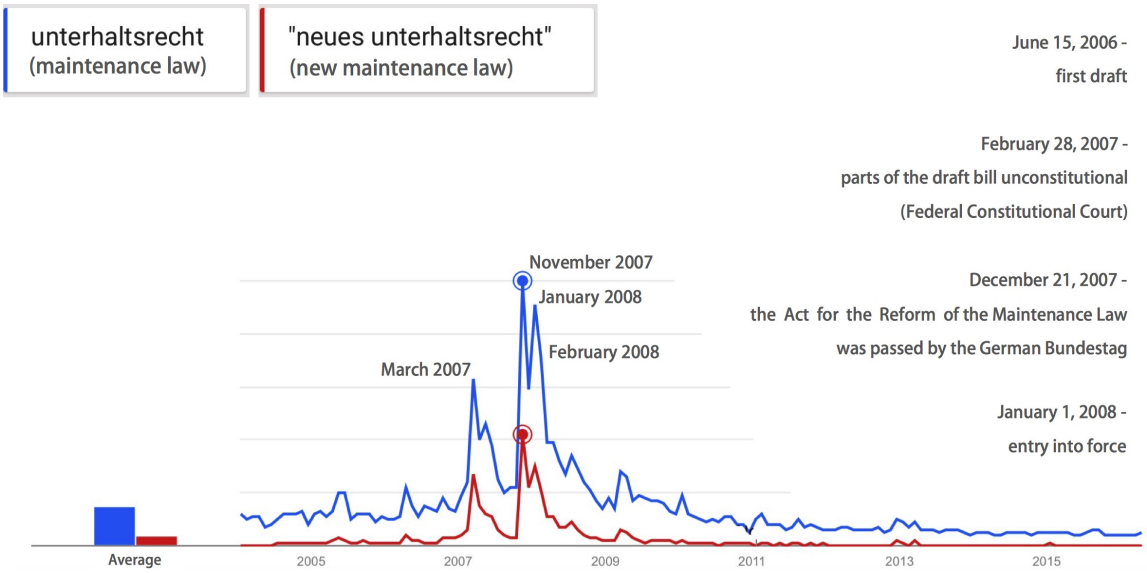
In February 2007, the grand coalition made progress on this issue, but failed to meet the planned commencement date of April 2007. Some parts of the draft bill were deemed not to conform with the constitution and thus the bill was in need of amendment (German Bundestag 2007a, p. 8). This was news in the media in May 2007.[11] From the public's point of view, at that moment it was not yet clear what it could expect from the upcoming regulation, i.e., what the final version would be, and when it could be expected. Germany's grand coalition continued to quarrel over content-related questions. Finally, in November 2007, the Committee on Legal Affairs issued a recommendation for the decision, which is debated in the Bundestag for the last time (German Bundestag 2007b, p. III). This means changes in alimony are decided. Between November 2007 and February 2008, the new reform received broad media coverage, in contrast to previous news treatment it was primary content-related.[12] The cover slogan of FOCUS' January 2008 issue "Zero Euro for the ex-wife? Lawyers are talking about a revolution" is just one of many examples. The leading journal at that time, SPIEGEL, publishes a special issue on women in February, including articles on the new alimony regime. Top-ranked political talk shows "Anne Will" and "Menschen bei Maischberger" try to identify the winners and the losers as a result of the reform.

As shown in Figure 2.1, web search interest for alimony regulations peaks in November, 2007, closely followed by search in January, 2008. This reflects an active interest in the 2008 reform.

11 See Appendix Table A.1.3 on page 144 for headlines from that time. Appendix Figure B.1.1 on page 211 shows the number of articles in top-ranked journals, while Appendix Table A.1.4 lists television programs that explain or discuss the reform of alimony.

12 Media spread the news that there will be no payments at all, in the best case that the alimony is severely limited: "Maintenance law: Temporary compensation" (FOCUS, 11.14.2007), "Alimony law: limited maintenance" (FOCUS, 11.15.2007), "Divorce law: Limits for greedy divorcees" (12.13.2007), "No money for the former wife" (DER SPIEGEL, 01.14.2008), "Society: The former wife gets nothing" (FOCUS, 01.28.2008), "Germany: The "responsible" one gets no money" (FOCUS, 01.28.2008), "Society: The former wife gets nothing" (FOCUS, 02.16.2008), etc. However, I cannot assess what message has reached the public and how the individual citizen has understood the 2008 reform.

Hamburg is the leading federal state in terms of web search interest for the very specific term "new alimony regulations" in 2007/2008. In comparison to Hamburg, people in other Western states seem to be interested in this topic as well, with the exception of Saarland. Taken as a whole, Eastern states do not show any active interest in comparison to Hamburg, with the exception of Saxony.[13]



Notes: The term "unterhaltsrecht" can be also translated as alimony regulations, and "neues unterhaltsrecht" as new alimony regulations.
Source: Google 2016b, accessed on 04.26.2016

Figure 2.1: Web search interest for "maintenance law" and "new maintenance law"

In summary, the public was sufficiently informed through various media channels about the key aspects of the maintenance reform (see, e.g., Appendix Figure B.1.3 and Table B.1.3). This reform became public knowledge between November 2007 and February 2008. On account of the delays in the legislative process, I argue that it was not possible to precisely forecast the date of adoption of the new law. Objection laws were on average adopted after 201 days in the previous two parliamentary terms (Burkhart and Manow 2006). Here, the time between the introduction of the legislative bill and the promulgation of the law was more that twice as long. Essentially, it is unlikely that matters related to post-marital alimony could be predicted before November 2007. In the end, parts of the draft bill needed revision for reasons of constitutionality. The necessary modifications became generally known to the public in November 2007.

13 Regional web search interest for "neues unterhaltsrecht" is displayed in Appendix Figure B.1.2 on page 211. Unfortunately, web search interest is not separately shown for West and East Berlin. East-West differences in Google Trend's search volume index can probably be explained in part by divorce numbers: In western states, 110.4 couples per 10,000 existing marriages were divorced in 2007, and 106.4 in 2008. In contrast, in eastern states, 85.4 per 10,000 existing marriages were divorced in 2007, and 83.7 in 2008 (Krack-Roberg 2010, p. 1195).

The key aspects of the 2008 reform

The *Act for the Reform of the Maintenance Law* was passed by the German Bundestag on December 21, 2007, and came into force 11 days later on January 1, 2008. One of the lawmakers' objectives was the strengthening of each spouse's personal responsibility to earn her/his own living after the finalization of divorce (§1569 Civil Code; Federal Constitutional Court 2011; Borth 2011, p. 3). Before 2008, divorced partners were expected to be self-sufficient. However, the principle of self-sufficiency, with many exceptions, had practical relevance only for childfree marriages of a relatively short duration (Borth 2011, pp. 19 et seq., 25; German Bundestag 2006b, p. 14; Wörz 2011, pp. 11 et seq.). Or, as stated by an expert in family law, from debtor's perspective the existing restriction regulations were basically not applied since 1986 (Peschel-Gutzeit 2008, p. V). Alimony was routinely awarded, including cases where the alimony-demanding spouse was working but had lower income than the other. (Trzcinski 2000, p. 32). The principle of the long-lasting post-divorce solidarity was a legal doctrine and broadly interpreted, although it is, to a certain degree, a contradiction of the principle of self-responsibility. Additionally, the notion of a "marriage-created need" was prevalent in the legal literature at that time (Martiny and Schwab 2002, p. 23; see Table 2.1).

The newly created §1578b of the Civil Code provides a tool to reduce postmarital maintenance, and/or to set a time limitation on it, covering *any* ground for alimony claims (Borth 2011, pp. 27, 222; see Figure 2.2). This measure is accompanied by stricter work requirements (Wörz 2011, p. 11). Until 2008, the divorced spouse was only expected to enter gainful employment that was appropriate for her/him (§1574 (1) Civil Code, old version). Since 2008, the divorced spouse is *under an obligation* to enter gainful employment that is appropriate for her/him (§1574 (1) Civil Code, new version). The definition of an appropriate gainful employment includes now a new criterion - a former employment - which makes it extremely difficult to argue that a (good) marital standard of living makes a spouse's professional activity inappropriate (see §1574 (2) Civil Code). That is, a former occupation which is now below somebody's educational level can no longer be dismissed as inappropriate (Borth 2011, pp. 134, 139 et seq.).

In the case of maintenance to care for a child, until 2008 a divorced spouse could demand maintenance from the other as long as she/he could not be expected to work due to being the primary carer of a child of the spouse from whom maintenance is being sought (§1570 Civil Code, old version). Now, the duration of the claim to maintenance can only be extended beyond three years following the birth of the child as long as, and to the extent that, this is equitable (§1570 (1) Civil Code, new version). An extension is de facto an absolute exception (Willenbacher 2010, p. 372; Schwab 2006, p. 4; Breithaupt 2012, pp. 269 et seq.). Furthermore, the ranking of several dependents in the event that the person liable for maintenance is financially incapable to pay

maintenance to all is changed in §1609 Civil Code: While the spouse had the same priority as minor children until 2008, divorced and subsequent spouses are now of lower priority (Schwab 2006, p. 13).

Table 2.1: Legal framework before and after the 2008 alimony reform

Before 2008	**After 2008**
Legal doctrine	
Long-lasting post-marital solidarity and the notion of a "marriage-created need"	Principle of personal responsibility (§1569 of the Civil Code, new version)
Restriction	
Restriction of (1)-(4) of §1573 Civil Code (Maintenance for unemployment and topping-up maintenance) is possible if an unlimited claim would be inequitable	Reduction and/or time limitation of maintenance, covering *any* ground for alimony claims (creation of §1578b of the Civil Code)
Work requirements	
The divorced spouse was *only* expected to enter gainful employment that was appropriate for her/him	The divorced spouse is *under an obligation* to enter gainful employment that is appropriate for her/him
Definition of an appropriate gainful employment	
	New criterion: A former employment (§1574 (2) of the Civil Code, new version)
Maintenance to care for a child	
No obligation to secure income due to being the primary carer of a ...	
0-8 years old child; part-time employment: 8/9-11 years old child; full-time: 12-16 years old child; Two children: No obligation to secure income until the youngest child is 14 years old; part-time employment: 15-16 years old child; Full-time: Youngest child is 18 years old (W. Schulz and Hauß 2008, p. 473)	0-3 years old child; exceptions if the best interests of the child so require (§1570 of the Civil Code, new version)
Ranking of several dependent entitled to maintenance	
The spouse had the same priority as minor children (§1609 (2) of the Civil Code, old version)	Divorced and subsequent spouses are now of lower priority (§1609 of the Civil Code, new version)

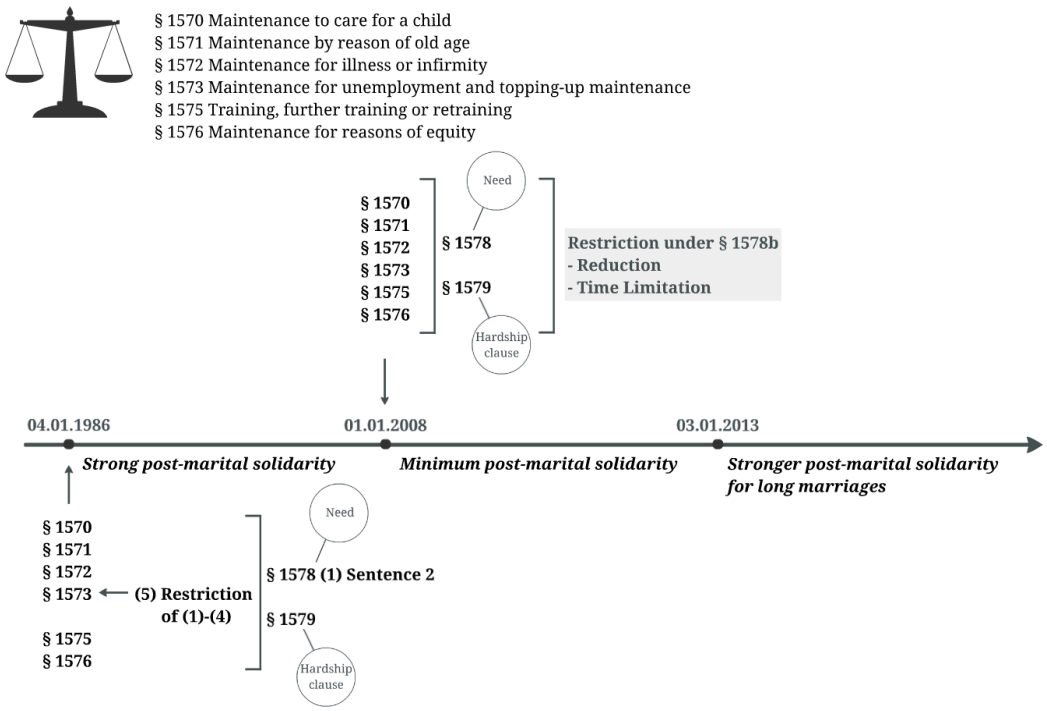
Notes: The relevant laws are listed in the appendix starting on page 225. Figure 2.2 illustrates the restriction regulations before and after the 2008 reform.
Source: Own compilation

In summary, the risks of human capital devaluation due to unemployment or part-time employment are redistributed at the expense of those who decided to take this risk, unless you care for a child aged 0-3 years (Willenbacher 2010, p. 373; Schwab 2006, p. 2).

Similar to the effect of unilateral divorce laws, marriage has lost a part of its insurance value since spouses are now under an obligation to secure their own income after divorce and post-marital solidarity is basically eliminated (Schwab 2006, p. 3). Note, all marriages are subject to the new regulation. Transitional arrangements are non-existent (Borth 2011, pp. 589 et seq. Schwab 2006, p. 3).

2.4.2 The 2013 Reform of the German Maintenance Law

The 2008 reform of the maintenance law was from the beginning criticized because of its massively disadvantageous treatment of the necessitous spouse. Moreover, spouses in marriages



Notes: The relevant laws are listed in the appendix starting on page 225.
Source: Modified figure, see Borth 2011, p. 222

Figure 2.2: Post-marital alimony regulations before and after the 2008 alimony reform

which were established long before 2008 had no possibility to adapt to the new legal situation that occurred in 2008 (German Bundestag 2012, p. 5).[14]

The German Bundestag partly reversed the 2008 alimony reform by passing an act concerning maintenance regulations[15] on February 20, 2013, which came into force on March 1, 2013. The legislature reformed §1578b of the Civil Code in order to resolve the problem of unjustified limitation of alimony payments for marriages of long duration.[16] As stated in the draft bill, the impression had been created that alimony payments were "automatically" limited by the courts in the case of the absence of disadvantages as a result of the marriage without due consideration of other aspects in individual cases, especially marriage duration (German Bundestag 2012, p. 5). The need of an amendment first and foremost reveals the reading of the new legislation by courts which was *a rigid interpretation of the principle of self-responsibility*. Although the lawmakers initially intended to protect long-term marriages from regulations introduced in 2008 (Willenbacher 2010,

14 The question arises as to why the lawmakers did not anticipate these problems in the first place and why no transitional arrangements were established.

15 The full name of the above-mentioned act is the *Act on the Implementation of the Hague Convention of 23 November 2007 on the International Recovery of Maintenance Claims of Children and Other Family Members as well as to Amend Provisions in the Field of International Procedural Law and Maintenance of the Substantive Law of Maintenance*.

16 Note, the term "long marriage" is not specified in the Civil Code, introducing further uncertainty from spouses' perspective. It is difficult to find the lowest boundary. There is no consistent specification in the legal literature, where there are references to periods such as more than 20 years (Borth 2013), 15 years (Federal Supreme Court, 06.01.1983, file number: IVb ZR 389/81), 10-15 years of marriage (Federal Supreme Court, 01.16.1985, file number: IVb ZR 61/83). Despite the adjustment in §1578b of the Civil Code, some law experts state that 15 to 20 years of marriage alone are not enough to give rise to alimony obligations (Kemper 2013).

p. 373; Schwab 2006, p. 2), the courts have not interpreted the case-law as such. Consequently, I do not generally consider long-term marriages as unaffected by the 2008 reform.
Concisely, the 2013 reform was aimed at resolving the issue surrounding long-term marriages. At a definite time "intact" marriages will end up in this stage, i.e., as a long marriage. My sample is married for about 18 years, on average. Thus, included individuals in my analyses are probably greatly influenced by this change in the law.

2.4.3 Other institutional changes

On November 2, 2000, the law governing child support was passed by the German Bundestag. The new law came into force on January 1, 2001 (German Bundestag 2000b). It affected parents in some income groups who were liable to pay support to their children. Now, if the allowable income of those parents exceeds a certain threshold (135% of minimum standards), then half of the child benefit is deducted from child support payments.[17] Before 2001, the full deduction, i.e., half of child benefit, was (partly) refused to parents paying child support whose income was lower, or more specifically, below minimum standards, i.e., below 100%. One could argue, that some support-paying parents are disadvantaged by the 2001 law on child support (Böttner 2001, p. 170). In the case of divorce in a family with children, this policy measure matters in the post-marital alimony calculations. That is why I include only the years since 2001.

2.4.4 Amount of alimony payments

To achieve consistent interpretation of the maintenance law the Appellate Courts issue so-called Düsseldorf Tables and corresponding guidelines. These publicly available documents provide information regarding the rules and calculations used to determine the amount of alimony granted by the courts (Martiny and Schwab 2002, p. 21).
The basis for calculating alimony payments is the allowable income of the two spouses in the previous 12 months. For self-employed individuals, the allowable income for the last three years is necessary in order to calculate the average monthly income. I exclude self-employed individuals because of a number of special regulations stated in the Düsseldorf Guidelines.[18] Allowable income is defined as a monetary income or earnings such as gross annual income or unemploy-

17 See Appendix Table A.1.5 as an example for different percentages of minimum standards and Table A.1.6 for minimum standards between 2001-2008.
18 See Higher Regional Court Düsseldorf 1999b, Higher Regional Court Düsseldorf 2003b, Higher Regional Court Düsseldorf 2005b, Higher Regional Court Düsseldorf 2007b, Higher Regional Court Düsseldorf 2008b, Higher Regional Court Düsseldorf 2010b, Higher Regional Court Düsseldorf 2012, or Wörz 2011, p. 11 for more details.

ment benefits which are corrected by subtracting taxes, occupational expenditures, etc.[19,20] The level of occupational expenditures is set at 5% of net income, but is limited by the Düsseldorf Tables. From the day of separation until the beginning of the following year spouses are taxed jointly. On January 1 of the following calendar year, a separate assessment takes place and the alimony payments are recalculated (Wittmann n.d., accessed on 03.24.2015). The alimony calculation after the finalization of divorce is based on net income under individual taxation (Sperling 2015; Appendix Figure B.1.4).

The so-called difference method is applied to determine the alimony amount. If the liable partner is employed, the dependent partner gets 3/7 of the difference between the allowable labor income and 1/2 of other earnings. If the dependent partner has no income, she/he receives 3/7 of the liable partner's allowable labor income and, again, the half of other earnings.[21] If the debtor is unemployed, the distribution ratio is always 50:50.

The monthly indicative rates for couples with children entitled to maintenance is subject to the so-called difference method as well, except for additional deduction of child support. In the case of separation or divorce, there are two kinds of maintenance regarding (minor) children: One parent provides maintenance in the form of food, provision of housing, etc. (§1606 (3) Civil Code), the other parent compensates in the form of monthly payments (§1612 (1) Civil Code). Nevertheless, some authors argue that the receipt of child-support payments represents a significant amount of household post-divorce income (Phipps and Burton 1995, p. 163; Kalmijn and Alessie 2008; Bonnet et al. 2015, p. 2). As a consequence, ignoring child support payments could lead to an overstatement of the standard of living of the paying parent and, correspondingly, to an understatement of the income of the parent with whom the child resides (Bonnet et al. 2015, p. 2).

Here, I start from the premise that child support is indeed spent on its obvious purpose – to maintain a child. Besides its legally defined spending target, I argue that child support paid is, in general, merely adequate to cover all costs for a child. In 2001, for example, at least 70% of alimony-paying parents belonged to the first six income groups defined in the Düsseldorf Table (Böttner 2001, p. 168). This implies that at least 70% of parents paid a maximum of €176 for a child aged 0-5 years, €228 for a child aged 6-11 years or €283 for a child aged 12-17 years

19 Other relevant incomes are: One-off payments such as gratuities, overtime compensation, releases and expenses, rental earnings, income from capital, and tax rebates. Relevant employee benefits are: Unemployment and sickness benefits, unemployment benefit II and other social security payments (only to the liable spouse), accommodation allowances, BaföG payments, accident benefits and annuities. Payments from nursing care insurance, monthly disability payments for the blind, special reductions for seriously disabled persons and caregiving after reduction of actual additional expenditures are income. Payments or benefits provided by the employer are income only if these benefits result in reduced expenditures. Dwelling value is income if the value of the house or flat is higher than its financial burden. Remuneration or salary for housekeeping is income.

20 Income or earnings are also corrected to account for social security contributions and/or moderate expenses of a provident nature, personal debts, childcare expenses.

21 If the dependent partner is employed without the obligation to secure income, §1577 (2) of the Civil Code applies (Soyka 2004). This case has no importance for my study since I include "intact" marriages, i.e., individuals with a given employment status.

(Higher Regional Court Düsseldorf 1999a). At the same time, the minimum subsistence level for a minor was € 288 per month (German Bundestag 2000a, p. 5). Moreover, in 2003, single parents' share of gross income[22] coming from non-public transfers (including child support) was about 7% (Federal Office of Statistics 2006, p. 30). In 2008, single parents received on average €276 in the form of support from other private households (including child support), representing about 14% of their issuable income and about 16% of households' private spending like food, housing, etc. (Federal Office of Statistics 2010, pp. 134, 136). Under those circumstances, it seems reasonable to assume in a hypothetical case of divorce that the money received for child maintenance would actually be spent on the child and would not represent a significant share of household post-divorce income.

Further, I assume that, in the case of separation or divorce, the economically weaker spouse would receive the right to live with the child in one household. This assumption is based on the idea that the opportunity costs of child-rearing are higher for the economically stronger partner, who is in a better position to contribute to the cost of child-rearing in the form of child-support payments. Another reasonable assumption is that the child would stay with the main child carer prior to separation (under the consideration of the right to determine place of residence in child custody and protection cases). It is safe to assume that the child-rearing spouse is typically a second-earner in the family. Apps and Rees (2009) show that married females work, on average, around 39% of the hours of married males when minor children are present in the household. Husbands spend, on average, around 33% of the hours of wives on childcare (Apps and Rees 2009, p. 11). The third possibility to deal with the problem of unknown agreements between former spouses with regard to their children's place of residence or unknown adjudications by the legal system is to assume that children would stay with their mother. In 2006, for example, about 88% of divorced or married but separated single parents were women (Krieger and Weinmann 2008, p. 30).

It is important to note that the Düsseldorf Tables regulate the minimum personal need of a person liable for maintenance (Higher Regional Court Düsseldorf 1999a; Higher Regional Court Düsseldorf 2005a). Being financially able to pay alimony is a precondition for the obligation to maintain (see §1603 (1) Civil Code).

In so-called cases of shortfall, meaning if the individual liable for maintenance is financially incapable to pay maintenance to all dependants, the redistribution amount available is shared between children and spouse according to the Düsseldorf Tables (before 2008, see Section 2.4.1). Let's assume the adjusted allowable income of a person, P_1, liable for maintenance in July 2003 is €1,300. Person P_1 owes maintenance to two children (C_1 7 years old and C_2 5 years old), and

22 Gross income includes gross labor income, income from assets, income from non-public and public transfers, and rental revenues. Non-public transfers include i.a. company pension, transfers from private insurance companies, and support from private households (Federal Office of Statistics 2006, p. 20).

to her/his ex-spouse P_2, who does not work. P_1 and P_2 live in West Germany. Furthermore, at that particular time the personal need of P_1 adds up to €840, resulting in a sum available for distribution of €460. Dependency benefits are €326 for C_1, €269 for C_2, and €730 for P_2, overall €1,325. In such a case, child C_1 would receive $\frac{326 \cdot 460}{1{,}325} \approx$ €113, child C_2 $\frac{269 \cdot 460}{1{,}325} \approx$ €93, and former spouse P_2 $\frac{730 \cdot 460}{1{,}325} \approx$ €253 from P_1. As explained in Section 2.4.1, the amount of payments in so-called cases of shortfall changed in 2008 i.a. because of a shift in priority ranking in favor of children.[23]

Married individuals can easily find out the alimony payments in the case of separation or divorce at any time. Plenty of alimony calculators are available online (see, e.g., Appendix Figure B.1.5 on page 212). Also, the Düsseldorf Tables, which have applied in West Germany since 1962, can be found online.[24] The web search interest in the Düsseldorf Tables underlines its relevance in all German federal states (see Appendix Figure B.1.6).

2.5 HYPOTHESES

Based on the theoretical considerations and empirical evidence presented in Section 2.3, I form two hypotheses concerning wives. In general, all second-earner wives that I include in my analyses suffer a financial loss in the case of divorce due to the 2008 reform. However, heterogeneous treatment effects on the outcomes by treatment intensity can be expected. Women who would lose higher alimony payments in the event of a potential divorce might respond in a stronger or different way under the new maintenance regime, while women in rather more financially equal marriages with potentially lower alimony loss might be less influenced by the law change. In principle, I expect to see a shift in the direction of activities which result in a better bargaining position of the wife in relation to the husband.

Hypothesis 1: Wives disadvantaged by the 2008 reform choose to invest more in their careers, leading to better labor market outcomes.

Thus, in order to improve their extra-marital option, wives increase their working hours or participation in the labor market as a reaction to the new legal situation. In reality, for women with no attachment to the labor market, re-entering the workforce might be very difficult and take some time. So, depending on employment history, age and other factors, this strategy is not a realistic option for every wife. And, as suggested by Stevenson (2008), the financially dependent spouses in long-term marriages may be older and, because of this, face poorer opportunities in

23 Note, that in cases of shortfall child benefit is not included in the calculation.
24 After the reunification, the courts in East Germany used so-called Berlin Tables until January 1, 2008 (Vossenkämper 2007).

the job market. There are also fewer remaining years from which they can benefit from entering or re-entering the labor market (Stevenson 2008, p. 868). In theory, wives could also increase their education level. This strategy of increased investments in her market-specific human capital would also result in a better relative bargaining position for the wife. However, one needs to keep in mind that there are restrictions and (in)direct costs for formal or advanced training or investments in education in general. It seems unlikely that wives who already have an educational qualification would increase the number of hours spent in education or enter a formal/further training program as a reaction to the law change, but this aspect is also examined.

Hypothesis 2: Wives who were potential alimony beneficiaries before the reform work longer hours doing housework.

This response to the 2008 reform seems to be plausible since wives' bargaining power decreased. In particular, wives with no possibility of pursuing a career could find themselves in this situation.

To hypothesize behavior of husbands is more challenging because empirical studies find hardly any response of males to extra-household environmental parameters. Nevertheless, I form two hypotheses considering the 2008 reform. Keep in mind that this maintenance reform decreases the costs of exiting a marriage for husbands who were liable to pay support in the case of divorce before 2008. Therefore, it increases their relative bargaining power. As a result, it increases their threat point and relative bargaining power within the household.

Hypothesis 3a: Husbands who were potential alimony debtors before the 2008 change in the law increase their working hours.

This reaction can be expected since in the case of a finalized divorce they benefit more from their effort and engagement on the labor market. Enforced self-sufficiency after divorce eliminates the incentive to keep track of the income gap between you and your spouse and reduces negative consequences on the primary earner.

Hypothesis 3b: Husbands who were potentially liable for the alimony before the 2008 reform reduce their labor supply.

I.e., a legislative change favoring male primary earners in the family might lead to their labor-supply reduction as their relative bargaining power has been improved.

In order to maintain or improve their extra-marital options, both spouse can be expected to reduce their investments in children as pointed out in Section 2.3.2.

Hypothesis 4: Both spouses reduce the number of hours invested in childcare as a result of the 2008 maintenance reform.

Such a finding would undermine one of the reform's main goals: Strengthening the best interests of the child, since children in "intact" marriages would experience lower levels of parental supervision.

2.6 DATA DESCRIPTION

Data source and restrictions

I use the German Socio-Economic Panel study *SOEP* (1984-2013) – a representative longitudinal study providing information on all household members.[25] I restrict the sample in several ways: Since I do not study marriage markets, I take couple matching as exogenously given. Thus, I include only individuals who married before the alimony reform took place. In theory, the new alimony regime may affect sorting into marriage as well. Further, I restrict the time frame to between January 1, 2001, and March 1, 2013 (see Sections 2.4.2 and 2.4.3 for an explanation).

Since a maintenance claim is refused in the case of short marriages for reason of gross inequity (§1579 (1) Civil Code, old and new versions), I exclude couples who have been married for less than three years. Note, that the terms "long marriage" or "marriage of short duration" are not explicitly given in the Civil Code. However, a look at the literature, previous court decisions or the Internet reveals a quite clear understanding of a short marriage: Less than three years as a general rule (Borth 2011, p. 271; Federal Supreme Court decision 01.27.1999, XII ZR 89/97; Higher Regional Court Celle decision 08.26.2005, 21 UF 27/05; Higher Regional Court Cologne decision 06.29.2007, 4 WF 105/07 OLGR Köln 2007, 649; Damm and Marquard 2015, accessed on 12.11.2015). This does not mean that courts cannot decide differently in an individual case and choose a higher threshold.

For the sake of convenience, I include only German citizens. In cases of binational couples or foreign spouses, first, one needs to clarify which national courts have jurisdiction, especially for couples with multiple residencies. Second, one needs to prove that German law is applicable (Hohloch 2001, p. 51). Third, changes in the legal framework which have harmonized alimony regulations have also been agreed at a European level (see Schmidt-Bandelow 2012, p. 14 for more information). I would have to take these changes into account.

I exclude couples where the payment or receipt of child support or other private transfers outside the household is reported. Advance child maintenance payments and caregiver alimony are taken into account in the same way. Here, only first marriages or widowed individuals who remarried

25 For more information see Wagner et al. 2007.

are included. Additionally, couples are excluded if one of the spouses reports separation from the other at some time. Thus, I look only at "intact" marriages, where both partners are members of the same household over the time in question. Finally, I do not include households that have other income earners besides the wife and husband, the focus being on spousal bargaining power. For each married individual in the dataset, I determine whether she/he would receive or pay any alimony after separation, i.e., at the day of survey participation. In order to do so, I need to calculate the amount of alimony, excluding individuals who are self-employed (as described in Section 2.4.4). Finally, I exclude pensioners or those who are married to a pensioner. The event of retirement itself can alter the outcomes considered here.

Dependent variables

The outcome variables of interest are related to an individual's time-spending behavior as measured by the question "What is a typical weekday like for you? How many hours per normal workday do you spend on the following activities?" and the same question for Saturday and Sunday. Possible answers (in number of hours) can be given for following areas: Work, apprenticeship (including travel time to and from work); errands (shopping, trips to government agencies etc.); housework (washing/cooking/cleaning); childcare; care and support of persons in need of care; education or further training (also school/university); repairs on and around the home, car repairs, garden work or lawn care; hobbies and other leisure-time activities. Incomplete answers are excluded.

It is important to include both a weekday and a weekend report because a father's involvement with his children might be primarily on the weekend. There is evidence for a negative relationship between a father's wages and work hours with the time they spend with a child on weekdays, which does not exist on weekends (Yeung et al. 2001, p. 136; Craig and Mullan 2012). Further, Hook and Wolfe (2012, p. 441) show a substantial weekday/weekend divide for German fathers in interactive care and time alone with their 0-14 year old children. Thus, the time constraint of full-time employment on individuals should be greatest on weekdays and less on weekends, since the majority of Germans have a 5-day working week. Some time-flexible duties like running errands or cleaning could be deferred to the weekend (Kimmel and Connelly 2007, p. 651).

Another report on German families confirms a different parental time spending behavior depending on the day of the week: Fathers spend more time taking care of a child on a day of a weekend/holiday in comparison to a regular weekday, mothers show the opposite tendency. Thereby, the gap in time spent on childcare is clearly smaller on weekends/holidays between mothers and fathers (Kott et al. 2016, p. 367). Thus, a significant variation in tasks by day of

the week can be expected, that is why an analysis based on a 7-day week gives a more complete picture of a task-specific division of time. Also, although the majority of Germans have a 5-day working week, there is an upward trend for more flexible working hours as shown by Hanglberger (2011) between 1995 and 2009. People in part-time employment and individuals in minor employment were disproportionately affected by an increasing frequency of Saturday and Sunday work (Hanglberger 2011, p. 12). Thus women, and especially mothers, are disproportionately affected by increasing work on weekends (Rübenach and Keller 2011, p. 333).
An underlying question is whether employees have control over their working time. Several studies show that even in the public service individuals can adjust their working hours. Additionally, an adjustment is possible through within- and between-employer job changes, and by entering/quitting a second employment (see, e.g., Böheim and Taylor 2004; Heineck and Schwarze 2004; Knaus and Otterbach 2016; Seifert et al. 2016).

Marriage duration

From the biographical questionnaire I know when an individual married for the first, second or third time and what happened to this marriage, whether it still exists, was divorced or whether the spouse has died. Additionally, for individuals married over the years (1984-2013) we can observe whether they still live together in the same household and whether they are still married. Based on this information, I calculate marriage duration for "intact" marriages. In some cases, I rely on a partner's marital information only, when a respondent does not give the information on family status. I make sure that these cases pass a plausibility check. For example, these individuals should live in the same household, should not report to be divorced, and one of the two partners reports being married and not separated. In order to increase the sample size, I also keep couples who do not report the year of marriage. I include these in the analysis when their marriage exists in the panel for more than three years (see Appendix Figure B.1.7 on page 213 for the observation number over the years 2001-2013).

Operationalization of alimony payments before 2008

In this study, I estimate the alimony in a purely hypothetical case of separation as a proxy for alimony in the case of divorce.[26] As a result of this approach I am able to classify couples into control and different treatment groups. Since I use reported incomes under joint taxation to estimate the amount of alimony, I probably slightly overestimate alimony payments after divorce

26 See Appendix Figure B.1.8 on page 213 for an illustration of alimony calculation.

(see Section 2.4.4). But then, would someone considering divorce perform a recalculation of their and their spouses's net income under individual taxation before determining potential alimony they would pay or receive in the case of divorce? Or would they simply take their current net income and that of their spouses and key in this information in an online alimony calculator?[27]

Although the *SOEP* contains a wide range of information about personal financial situations, some information relating to, for example, childcare expenses or gratuities, is missing. Other information such as ownership of a house/apartment, debt from private loans or information on financial assets is not available on an annual basis. That is why I ignore this information in my calculation of alimony.

I reduce a given net income by occupational expenditures, which are estimated at 5% of net income. Additionally, I take into account their maximum and minimum values regulated by the Düsseldorf Tables (as explained in Section 2.4.4). The created dataset is an unbalanced panel, that is why I impute the missing values in alimony for the last pre-treatment period, 2007, using a single exponential smoothing. A closer inspection of the data on alimony payments between 2001 and 2007 does not exhibit a linear or higher-order trend, but rather a variation in the mean. Nevertheless, I predicted the missing values using the linear trend and compared the two forecasting methods using performance measures such as median absolute deviation from the median (MAD), mean deviation (MDEV), mean square (MSE), and medium absolute percentage error (MAPE). Exponential smoothing performed better in MAD and MDEV and has a clear advantage for alimony calculation in 2007 for individuals with a few observations at the beginning of the pre-treatment period.

As described in Section 2.4.4, a parent may be required to pay maintenance support, as a percentage of the applicable minimum maintenance, to a minor child with whom she/he does not live in a single household. §1612a of Civil Code regulates the minimum maintenance of minor children by classifying children into three age brackets: 0-5, 6-11 and 12-17. Furthermore, unmarried children of full age are equivalent to the minor unmarried children, until these reach the age of 21, as long as they live in the parental household and are in general education (§1603 (2) sentence 2). For other children of full age, more severe requirements apply (Unterhalt.net 2016, accessed on 02.01.2016). Here, I assume that children aged 21 and over are financially self-sufficient and are not entitled to maintenance.

Since the Düsseldorf Tables include the applicable minimum maintenance and are used by the judges, I borrow their child-maintenance classification according to child's age, number of children, and income of the liable parent, in order to determine the amount payable to children.[28]

27 Even if you use the Düsseldorf Tables instead, it does not change the fact that you would probably use current net incomes instead of net incomes applying tax class I for your alimony calculation.

28 Appendix Tables A.1.5 and A.1.6 show the Düsseldorf Table valid for the year 2002 and minimum standards from 2001 to 2008. The Düsseldorf Table is updated regularly (German Bundestag 2006b, pp. 14, 27).

I need to take child support into account because it influences the alimony amount in so-called cases of shortfall. As described in Section 2.4.4, I assume that the alimony paying spouse is also paying child support.

I identify 792 wives in the time period between 2001 and 2013 for whom I can determine a positive alimony amount for the last pre-treatment period and who report their activities in hours at least once before the treatment and at least once after.[29] 794 husbands are identified as potential alimony debtors in 2007.

2.7 IDENTIFICATION STRATEGY

What thought experiment would (dis)prove my hypotheses stated in Section 2.5? In an ideal setting, one would compare the outcomes of individuals *randomly* assigned to different treatment states. Thus, one would like to find treatment and control groups who can be assumed to be similar in every way except for the treatment itself. Obviously, in this study individuals are self-selected into one of these groups, not actively, but based on previous individual or family decisions and preferences. Thus, treatment and control groups differ in many aspects in the absence of randomization. Consider, for example, a couple with a pronounced intra-household labor division - a single earner marriage, in which the wife decided to stay at home and support her husband's career development. Such housewives differ systematically from career-driven women, who are likely to be affected marginally by cuts in alimony, in terms of unobservable personality traits, choice of partner, preferences regarding time allocation and other life decisions. Fortunately, here, in the absence of randomization, the source of variation resembles an experimental design: The law change creates a natural division of spouses into treatment and control groups, based on the amount of pre-treatment alimony in 2007 (see Figure 2.3). The time at which the law change occurred adds another difference, distinguishing the groups before and after the commencement. Thus, the empirical strategy used here exploits the exogenous shock to different groups of married couples that occurred on January 1, 2008, to identify its causal effects using a DiD approach.

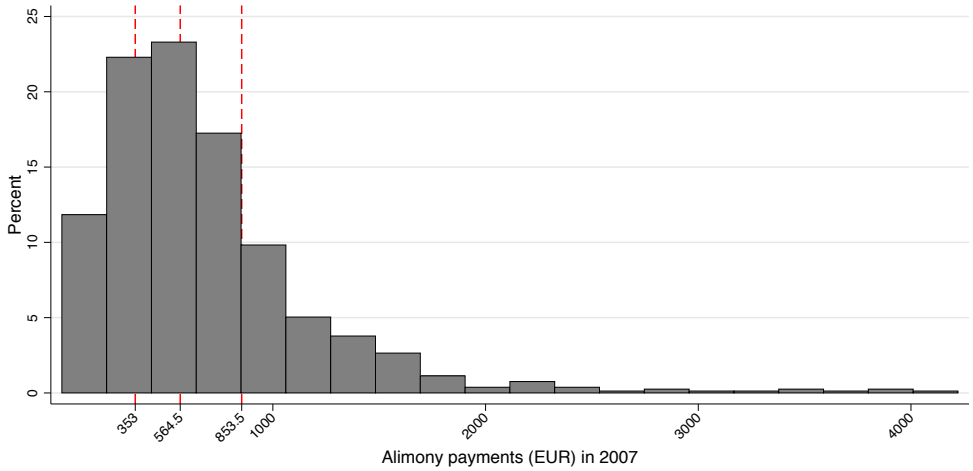
A convincing benefit of the DiD method is the fact that the results are robust to any possible confounder as long as it does not violate the common trend assumption (Gertler et al. 2011, p. 95; Lechner 2010, p. 179). This assumption posits that the average change in the reference group rep-

29 About 88% of wives in my sample would have received a positive amount of alimony in the case of separation in 2007, about 8% payed, and about 4% either way. These percentages differ from the official statistic concerning alimony payments: Of cases decided by decree of dissolution in West Germany (including Berlin) in 2007, in $\approx$ 84% of cases alimony was paid to former wives and in $\approx$ 16% of cases to former husbands (Federal Office of Statistics 2008b, p. 26). Here, when one ignores wives without an alimony claim nor obligation, in about 92% of cases alimony would be granted to wives in a hypothetical case of divorce in 2007.

resents the counterfactual change in the treatment group if there was no treatment (Angrist and Pischke 2015, pp. 184 et seq.). By construction this indispensable presupposition is untestable, meaning one cannot directly test the identifying assumption as we do not observe counterfactual worlds. Nevertheless, the parallelism of pre-treatment trends may give confidence. If the outcomes moved in tandem before 2008, we may believe that outcomes would have continued to move parallel in the post-reform era (Gertler et al. 2011, pp. 100 et seq.).

Another assumption of DiD is the additive structure of effects, i.e., a linear model where the time or group specific effects enter additively (see Equation 1). Furthermore, the group affiliation of an individual is assumed to remain unchanged over time.

Alimony payments for the last pre-treatment period 2007 in the case of separation are the basis for the classification of marriages into different treatment groups and the control group. Note, that the percentiles slightly differ between the male and female alimony distribution of West Germans. The 25th percentile in the male distribution is €349, in the female distribution €353; median is €562.50 and €564.50, respectively; the third quartile is €852 and €853.50, respectively. The ref-



Notes: Red dashed lines represent the percentiles; 792 wives are included. Data: SOEPlong v30

Figure 2.3: Distribution of alimony payments West German wives would receive in case of separation in last pre-treatment year

erence group includes spouses with maintenance payments below the 25th percentile. Treated spouses are divided into three groups based on the remaining quartiles. Married individuals with an alimony between the 25th percentile and the median belong to the low-intensity group (dummy $\texttt{Treat}_{low}$). Those with spousal support between the 50th and 75th percentile are classified as a group with medium-intensity treatment (dummy $\texttt{Treat}_{med}$). Couples with a substantial amount of alimony are labeled as $\texttt{Treat}_{high}$.[30]

30 In order to ensure that all individuals with the same alimony value are assigned to the same group, the above-named rule is applied. Note, that the even number of wives in 2007 and the fact that the 198th and 199th observations for alimony are equal results in imbalanced group sizes in 2007, i.e., 197 wives in the control group, 199 wives in the low-intensity treatment group. There are 198 wives in the medium- or high-intensity group. The same applies to husbands: There is

Running FE regressions, I cluster all standard errors at individual level to account for the presence of correlation within individuals over time (Bertrand et al. 2004, Angrist and Pischke 2015). The resulting specification

$$\begin{aligned} Y_{it} =& \beta_1 \text{Post} \cdot \text{Treat}_{low,i} + \beta_2 \text{Post} \cdot \text{Treat}_{med,i} + \beta_3 \text{Post} \cdot \text{Treat}_{high,i} + \\ & \beta_4 \cdot X_{it} + \delta_t + \epsilon_i + u_{it} \end{aligned} \tag{1}$$

is estimated. $\text{Post} \cdot \text{Treat}_{low,i}$, $\text{Post} \cdot \text{Treat}_{med,i}$, or $\text{Post} \cdot \text{Treat}_{high,i}$ indicate whether individual i was responding after the law change and whether the individual belongs to a treated group. The coefficients β_1, β_2 and β_3 are the average low-, medium-, and high-intensity treatment effects on the outcome variable Y. The ϵ_i captures time-invariant factors that vary across individuals (Greene 2012, p. 400). It is permitted for the ϵ_i to be correlated with the regressors (Cameron and Trivedi 2009, p. 231). All observable or unobservable time-invariant factors at individual level in FE models are ruled out. Thus, such factors are eliminated as a source of omitted variable bias. Note, the main effect of the individual's group membership remains unchanged over time and is therefore omitted in a FE model. The u_{it} are idiosyncratic disturbances that represent unobserved factors that change over time and affect the outcome (Wooldridge 2002, p. 251). Regressors are assumed to be uncorrelated with the u_{it} (Greene 2012, p. 400). In all presented FE models I control for year effects δ_t, i.e., the influence of aggregate trends is captured.

X_{it} is a vector with time-variant characteristics of the spouse i. Including it means allowing for a "trend" resulting from changes in X_{it}, i.e., I adjust for changes in X_{it}. Thus, the identifying assumption is common trend conditional on these observable characteristics (Lechner 2010, p. 179). Generally, variables measured *after* the treatment should not be included in the model. Only if these variables can be reasonably assumed to be unchanged by the reform, controlling for them is appropriate (Gelman and Hill 2006, pp. 188, 229). Most importantly, the key identifying assumption must hold either conditionally on some observables or unconditionally (Lechner 2010, p. 214). Thus, X_{it} is primarily at the service of the common trends assumption.

So, what variables can be assumed to be unchanged by the treatment and should thus be included in the model? The individual's age as a second order polynomial or age group ($<$ 30, 30-34, 35-39, ... , 60-64 years old) and number of minors in each age group (0-1, 2-4, 5-7, 8-10, 11-12, 13-15 and 16-18 years old) should be included. Highest educational attainment might be a bad control, since investment in education is a possible response to the 2008 reform. The same applies for years of work experience, i.e., full-time and part-time employment in years as a second order polynomial. Controlling for their husbands' or wives' characteristics like income or education

an even number of husbands, 794, and two husbands who would pay €852 in case of divorce in 2017. The 75th percentile in male alimony distribution is at €852. Thus, I have 198 husbands in the control group, 199 in the low-intensity group, but 197 in the medium- and 200 in the high-intensity group.

might be problematic for the same reason. Nevertheless, I include a number of presumably bad controls to see if their addition has any effect on estimates.

Equation (1) is estimated separately for alimony paying husbands and receiving wives in the event of a potential separation just before treatment. This model specification investigates whether the reform endangering after-marriage maintenance was associated with changes in time-spending behavior.

Granger-type causality test

Here, in a model with multiple treatment groups and multiple periods, it is more difficult to provide a simple visual inspection for the evolution of group specific trends in the pre-treatment periods. But, since the sample includes many years, it is possible to test for causality in the spirit of Granger (Angrist and Pischke 2009, p. 237). Granger (1969) has proposed a working definition of causality based upon the concept that "cause precedes effect". The Granger idea is to test "the direction of causality between two related variables and [to decide] whether or not feedback is occurring" (Granger 1969, p. 424).

If the 2008 reform causes Y_{it} but not vice versa, then future treatments IA_{t+1}, IA_{t+2}, IA_{t+3} and IA_{t+4} should not matter in an equation like

$$Y_{it} = \lambda_i + \delta_t + \sum_{\eta=1}^{3} \gamma_{-\eta} \cdot IA_{t-\eta,i} + \sum_{\eta=1}^{4} \gamma_{+\eta} \cdot IA_{t+\eta,i} + \beta \cdot X_{it} + \nu_{it} \tag{2}$$

where Y is the outcome for spouse i and time t, λ and δ are individual and year fixed effects. $IA_{t,i}$ are interactions of year dummies and treatment indicator. The sums on the right-hand side allow for four "leads" (γ_{+1}, γ_{+2}, γ_{+3}, and γ_{+4}) and three "lags" (γ_{-1}, γ_{-2} and γ_{-3}). The last pre-treatment period 2007 is used as the baseline year, meaning all other interactions are expressed relative to the omitted period. If the anticipatory effects (γ_{+1}, γ_{+2}, γ_{+3}, and γ_{+4}) are different from zero, future treatment would predict current outcomes, suggesting that causality also runs from the outcome to the treatment. For example, the mere announcement of lower future maintenance or of alimony-claims correction might have an impact on the labor supply of the affected groups of wives. The pattern of post-treatment effects (γ_{-1}, γ_{-2} and γ_{-3}) shows whether the treatment effect fades out over time, stays constant, or even increases (Angrist and Pischke 2009, p. 237).

In general, if Granger causality holds, this alone is not sufficient for causal inference (Angrist and Pischke 2009, p. 237). But, it suggests that treatment might be causing the outcome. If there appears to be a treatment effect before treatment, that is evidence of divergent trends.

A pre-treatment dip

DiD also fails to uncover the causal effect in a situation where prior to the treatment the average outcome in the future treatment group drops or deteriorates (Abadie 2005, p. 1; Caliendo and Hujer 2006, p. 208). For example, assume that wives were affected by the 2008 reform when their working hours were particularly low. That is, there was a dip in working hours prior to the treatment but one would expect working hours to raise anyway even without the reform. This raises the question of whether an observed increase in the outcome can be attributed to the considered law change (Cahuc and Zylberberg 2004, p. 674; Caliendo and Hujer 2006, p. 208). A pre-treatment dip can often be detected graphically.

2.8 RESULTS

2.8.1 Descriptive results

Descriptive statistics for wives

Based on 3,514 woman-year observations, my sample is on average 45 years old, married for about 18 years, and has an intermediate vocational education. For descriptive statistics and balancing tests for the all treatment and control groups, refer to Appendix A.1.1 starting on page 147.
Balancing tests at pre-treatment time reveal significant but not unexpected differences between each treatment group and the reference group. On average, wives in the control group working in full-time employment for a significant higher number of years, and in part-time for a lower number of years. Taken as a whole, wives in the control group worked significantly more man-years. Their husbands, on the contrary, have less experience in full-time employment in comparison to the husbands of the treated wives. Further, wives in every treatment group have significantly lower income than wives in the reference group, on average. Their husbands, on the other hand, have higher incomes in comparison to husbands in the control group, on average. This implies that wives' contribution to the household income is bigger and the spread in spousal incomes is smaller in the reference group. That is a logical consequence of the alimony calculations (presented in Section 2.4.4) and classification of spouses into different groups (presented in Section 2.7).
Furthermore, the husbands of the reference wives are more engaged in housework in comparison to husbands married to low-, medium- or high-treatment wives, on average. Wives in the control

group, although not living in perfectly egalitarian households, do seem to live in more egalitarian households compared to the other groups.

As is evident from Appendix Table A.1.8, the high-intensity treatment group differs in many aspects from the comparison group, whereas low- or medium-intensity treatment wives are similar in age, migration background, marriage duration, husbands' age, and husband's migration background to the reference group, on average. Low-intensity treatment wives and their husbands are, on average, less educated than the reference wives and their husbands. However, the share of marriages with wives who are equally or higher educated than their husbands is similar in both groups.

Descriptive statistics for husbands

My sample of husbands is, on average, 47 years old, married for about 18 years, and has an intermediate vocational education (based on 3,630 man-year observations).[31] Balancing tests at pre-treatment period mirror the findings for wives presented above. Husbands in the high-intensity group work, on average, more hours and invest more hours in education in comparison to the reference group, whereas men in low- and medium-intensity groups spend similar hours on these activities, on average. Furthermore, the high-intensity treatment group is, on average, older and married for a longer time than the control group. Men in the reference group devote more hours to domestic work in comparison to husbands in other groups, on average. They spend also more hours running errands than husbands in the medium- or high-intensity treatment group, on average. Differences in average childcare hours, caregiving hours, or average hours spend on hobbies are not statistically significant.

2.8.2 Results from a difference-in-differences framework

Impact on wives' labor supply

The results for females' labor supply are presented first, with reference to Hypothesis 1. The primary outcome variable here is the number of usual hours worked per day, including zero. Since working hours is a non-negative random variable that equals zero for some part of the sample, the overall difference in average hours can be divided into two parts: The difference in the probability of working any hours at all (participation effect or extensive margin), and the difference in hours conditional on participation (conditional-on-positive effect or intensive margin). Nevertheless, I only present results for non-conditional, thus, total working hours and for the LFP. The difference in hours conditional on participation has no causal interpretation (Angrist and Pischke

31 For descriptive statistics, refer to Tables A.1.10 and A.1.11 on page 151 et seqq. of the Appendix A.1.1.

2009; Brassiolo 2013, p. 16, Eissa 1995, p. 17). As demonstrated by Angrist and Pischke (2009), the treatment itself changes the composition of the group with positive working hours introducing a form of selection bias (see Angrist and Pischke 2009, pp. 99-102 for conditional-on-positive effects).

Table 2.2: Fixed effects models, average working hours per day

	Dependent variable: Wives' working hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in $\texttt{Control}$	4.863		4.884		4.844		4.739	
$\texttt{Post}\cdot\texttt{Treat}_{low}$	0.386*	0.321	0.492***	0.357**	0.492***	0.330**	0.438**	0.320**
	(0.229)	(0.214)	(0.185)	(0.176)	(0.169)	(0.161)	(0.171)	(0.160)
$\texttt{Post}\cdot\texttt{Treat}_{med}$	0.223	0.238	0.324*	0.246	0.336*	0.179	0.226	0.047
	(0.239)	(0.219)	(0.192)	(0.177)	(0.184)	(0.169)	(0.185)	(0.166)
$\texttt{Post}\cdot\texttt{Treat}_{high}$	0.228	0.244	0.217	0.187	0.103	0.004	-0.053	-0.151
	(0.222)	(0.207)	(0.189)	(0.175)	(0.184)	(0.170)	(0.186)	(0.170)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,084	1,084	2,326	2,326	3,057	3,057	3,514	3,514
Obs in $\texttt{Control}$	276	276	609	609	796	796	913	913
Obs in $\texttt{Treat}_{low}$	276	276	577	577	754	754	877	877
Obs in $\texttt{Treat}_{med}$	254	254	574	574	762	762	884	884
Obs in $\texttt{Treat}_{high}$	278	278	566	566	745	745	840	840
Wives	542	542	733	733	779	779	792	792
Av. obs. per wife	2.0	2.0	3.2	3.2	3.9	3.9	4.4	4.4
$\texttt{Adj. R}^2$	0.0083	0.1228	0.0117	0.1237	0.0168	0.1479	0.0148	0.1711

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Means in $\texttt{Control}$ refer to the working hours at baseline. Based on the sample used in Column (7), the mean at pre-treatment in $\texttt{Treat}_{low}$ is 2.929, in $\texttt{Treat}_{med}$ 2.504, and in$\texttt{Treat}_{high}$ 2.207. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

In Columns (1), (3), (5), and (7) of Table 2.2, I provide the basic DiD estimates from models where no additional covariates are included except for year fixed effects. The coefficients on the interaction terms correspond to the average treatment effects β_1, β_2, and β_3 of Equation 1 (without X_{it}). There might be a positive effect of the 2008 reform on the working time of wives with low-intensity treatment ranging from 0.386 to 0.492 hours. Controlling for additional covariates, i.e., age as a second order polynomial and the number of minor children in the household, in Columns (2), (4), (6), and (8), reduces these estimates. More importantly, varying the time frame produces similar results ranging from 0.320 to 0.357.

The interpretation of these coefficients is straightforward: Relying on the estimate from Column (7), for example, a loss of monthly alimony of between €353.00 and €564.50 instead of a loss of less money in case of a potential divorce leads to a 26-minute increase of daily working time (about 15% at baseline). Projected onto a 7-day week, that is an increase of about 3.1 hours.

Taking the rather conservative estimate from Column (8) leads to an increase of 2.24 hours weekly (conditional on individual characteristics).

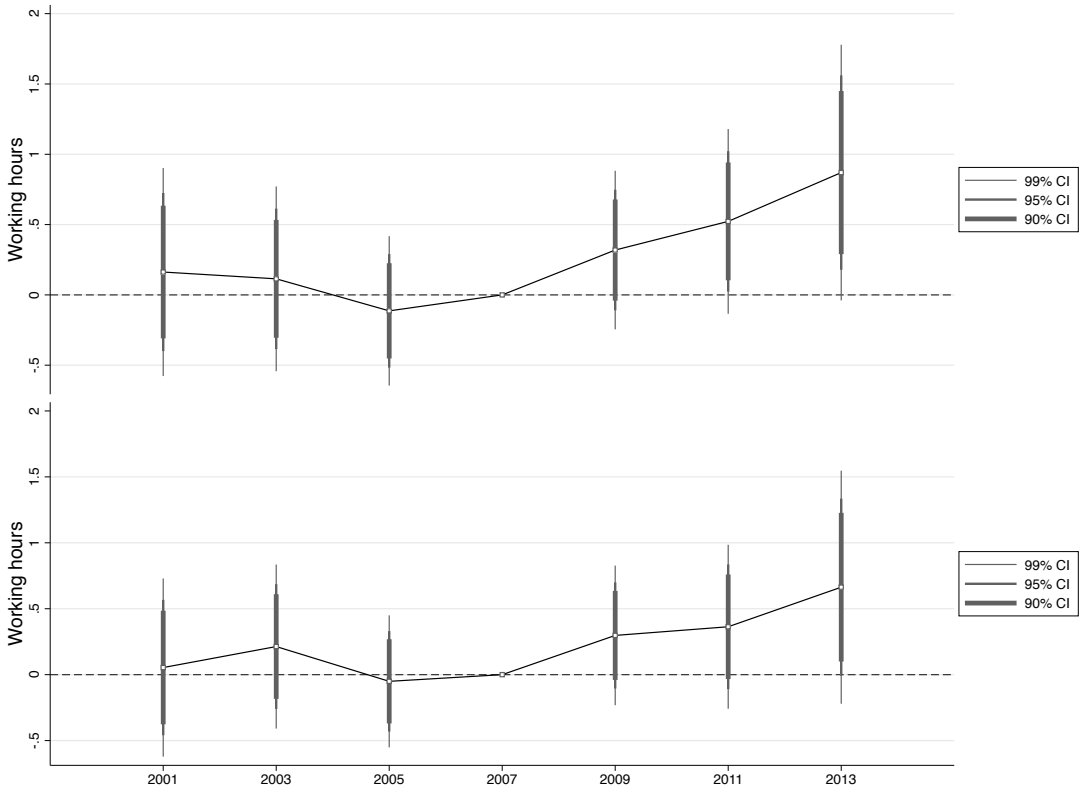
The additional inclusion of indicators for age groups changes the effect size only slightly. Interestingly, the same applies for husband's allowable income. Adding-on another potentially endogenous control variable, work experience as a second order polynomial, and dropping husband's income leads to slightly increased estimates in comparison to those in Columns (2), (4), and (8) of Table 2.2.

The change in working hours stems mainly from work on the weekend (see, e.g., Appendix Figure B.1.9 on page 214). An inspection of daily working hours during a 5-day work week does not show any significant changes. Note, when a reference to a specific result is not included in the text, consult Appendix A.1.2 for additional results concerning wives.

In general, deviations from a common trend between the treatment and control groups in the pre-treatment years would make the validity of the DiD approach questionable (Angrist and Pischke 2009, p. 231). The largest threat to identification would be if wives in the low-intensity treatment group become more eager to expand their labor hours and if it was this eagerness which led to the 2008 reform of alimony. Higher LFP of mothers and an increased number of dual-earner couples were, i.a., given as main reasons for the law change. To assess the validity of the key identifying assumption, I conduct placebo treatment tests in the pre-treatment periods, introducing a pseudo law change in 2004. More precisely, I use 2001/2003 as pre-placebo-treatment period and 2005/2007 as post-placebo-treatment period and analyze whether treatment and control groups follow the same trends during that period. According to my placebo treatment estimates, such reverse causality is not plausible for the low-intensity treatment group. My pseudo treatment estimates for this group of wives turn out to be statistically insignificant, negative and small (between -0.104 and -0.176). This means we do not observe any placebo treatment effects, i.e., wives in the control group and wives in the low-intensity treatment group might follow the same time trends in the years preceding alimony cuts in 2008. The medium- and high-intensity groups, however, follow a divergent pre-treatment trend in comparison to the reference group. Thus, the violation of common trend assumption leads to biased estimation of the average medium- and high-intensity treatment effects.

I also conduct a Granger-type causality test, presented in Equation 2, as a test of the DiD identification strategy. A graphical depiction of the results for the low-intensity treatment group is presented in Figure 2.4. Since 2007 is the baseline year, the difference between treatment and control groups is normalized to zero in 2007. There is no indication of a systematic divergence in the trend before the actual treatment sets in for the low-intensity treatment group: The point estimates are close to zero in 2001 and 2005, and 0.213 in 2003 when additionally controlling for age

as a second order polynomial and the number of minors in the household. Without additional control variables, except for year fixed effects, the estimates are 0.163 for 2001, 0.114 for 2003, and -0.114 for 2005. This lends further support for the validity of the key assumption, i.e., that the difference in differences is not significantly different between the two groups in the pre-treatment period. In the first year after the adoption, working hours increase by about 0.3 working hours, after which this increment increases slightly for 2011 and increases again for 2013.[32]



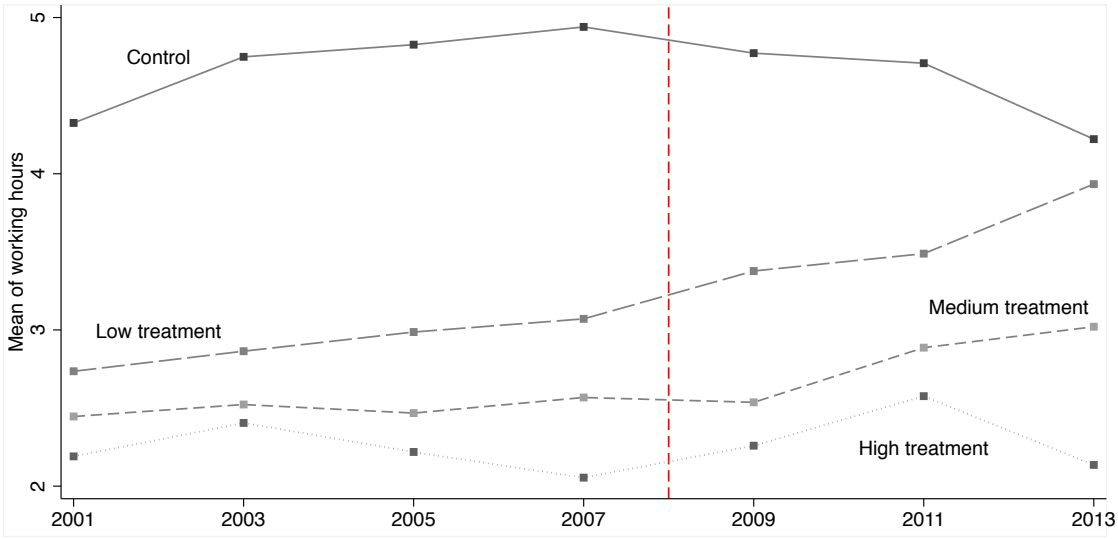
Notes: The figure shows coefficients of the interaction of the low-intensity treatment group dummy and year dummies from FE models presented in Equation 2. In the bottom image I control additionally for wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives living in West Germany.
Data: SOEPlong v30

Figure 2.4: The estimated impact of alimony restriction on low-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008

I observe a strong divergence in the pre-treatment trends for the medium and high-intensity treatment groups when conducting Granger-inspired causality tests. Also, as can be seen in Figure 2.5, the mean working hours for the control group increase faster over the time than the mean working hours for the medium-intensity treatment group prior to the 2008 reform. Thus, using the trend for the control group as a counterfactual for the trend for this treatment group of

32 Note that the 2013 effects depicted in Figure 2.4 do not correspond to the estimates from my DiD model presented in Columns (7) and (8) of Table 2.2. It would correspond to a different DiD model including only 2007 as the baseline year and 2013 as the post-treatment year. Here, in my analysis I have a working sample of 3,514 observations. I present 2007 and 2009 as a starting point (see Columns (1) and (2) of Table 2.2) and increase the sample size by including more years before and after the reform. In the time period between 2001 and 2013, I include all observations. This sample is used for the Granger-type causality test and mean plotting.

wives leads to an underestimation of the reform's impact. That is even more pronounced for the high-intensity treatment group.



Notes: The figure shows mean values for working hours for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs.
Data: SOEPlong v30

Figure 2.5: Mean values of working hours over the years 2001-2013

There is no indication for a pre-treatment dip in the low-intensity treatment group of wives: Figure 2.5 demonstrates that the data is not plagued by a situation of a pre-treatment dip in which there was a shock just before the implementation of the 2008 reform and the change reported in working hours is simply mean reversion.

I also want to know to what extent the average change in working hours might come from changes in the extensive margin. Although I analyze the binary choice of whether or not to participate in the labor force, I run linear probability models. The estimates presented in Table 2.3 give the impression that indeed part of the response might come through changes in the extensive margin.[33] But, a statistically significant effect at the 0.05 level could only be obtained after extending the sample to 2003 and 2013. Although results for pseudo treatment in 2004 give no reason to be concerned, there is an indication for a systematic divergence in the pre-treatment trend for the low-intensity treatment group and the reference group:[34] The Granger-type causality test shows that point estimates are -0.067 for 2001, -0.022 for 2003, and -0.067 for 2005 when including additional control variables.[35] Taken as a whole, the labor supply response to the 2008 reform seems not to be explained in the extensive margin for the low-intensity treatment

33 The probability of being active in the labor market might increase by about 5 percentage points in the low-intensity treatment group as a consequence of deteriorated outside option and thus a weakened bargaining position within the marriage.

34 Placebo treatment tests are presented in Appendix Table A.1.14 on page 154.

35 These control variables include wife's age as a second order polynomial and the number of children in each age group (0-1, ..., 16-18 years old) in the household (Column (2) of Appendix Table A.1.15 on page 155).

group. The high-intensity and the comparison groups have divergent pre-treatment trends in LFP. It seems that the medium-intensity treatment group might follow the same trend as the comparison group in the pre-treatment era in regard to LFP. There is, however, no adjustment in participation attributable to the 2008 alimony reform.

Table 2.3: Fixed effects models, participation in the labor market

	Dependent variable: Wives' participation (0 = zero working hours; 1 = otherwise)							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	0.884		0.875		0.871		0.855	
Post·Treat$_{low}$	0.058	0.049	0.075**	0.055*	0.080***	0.056**	0.080**	0.063**
	(0.041)	(0.038)	(0.031)	(0.030)	(0.030)	(0.027)	(0.031)	(0.028)
Post·Treat$_{med}$	0.014	0.025	0.052	0.038	0.063	0.034	0.058 *	0.026
	(0.046)	(0.042)	(0.036)	(0.032)	(0.034)	(0.031)	(0.035)	(0.031)
Post·Treat$_{high}$	0.036	0.045	0.055	0.050	0.045	0.034	0.027	0.020
	(0.043)	(0.039)	(0.035)	(0.033)	(0.033)	(0.031)	(0.034)	(0.032)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,084	1,084	2,326	2,326	3,057	3,057	3,514	3,514
Obs in Control	276	276	609	609	796	796	913	913
Obs in Treat$_{low}$	276	276	577	577	754	754	877	877
Obs in Treat$_{med}$	254	254	574	574	762	762	884	884
Obs in Treat$_{high}$	278	278	566	566	745	745	840	840
Wives	542	542	733	733	779	779	792	792
Av. obs. per wife	2.0	2.0	3.2	3.2	3.9	3.9	4.4	4.4
Adj. R^2	0.0002	0.1576	0.0118	0.1512	0.0169	0.1545	0.0218	0.1679

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Means in Control refer to the participation in the labor market at baseline. Based on the sample in Column (7), the mean at pre-treatment in Treat$_{low}$ is 0.743, in Treat$_{med}$ 0.642, and in Treat$_{high}$ 0.517. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minors in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Impact on wives' investment in education

The low- and high-intensity treatment groups seem not to change their investment in education as a reaction to the 2008 reform.[36] They might follow a similar pre-treatment path like the comparison group.[37] On the contrary, results for the medium-intensity treatment group reveal a lacking comparability to the control group. Although, when I move a placebo treatment to 2004, I observe no significant estimates and the Granger inspired causality test shows no divergent trend for the medium-intensity treatment group in pre-treatment, there is an issue of a pre-treatment dip compromising the results.[38,39] The mean hours spent on education by the medium-

36 FE models for wives' hours in education and for wives' probability of being in education are presented in Appendix Tables A.1.16 and A.1.17 on pages 155 et seq.

37 Appendix Tables A.1.18-A.1.21 show results for placebo treatment and Granger-causality tests.

38 Mean values of hours spent on education over the years 2001-2013 are depicted in Appendix Figure B.1.10 on page 214.

39 The results for the changes in probability of being in education (i.e. changes in dummy "0" zero hours in education and "1" otherwise) are shown in Appendix Table A.1.17 on page 156. Appendix Figure B.1.11 on page 214 showing means over the years, reveals a pre-treatment dip problem for the medium-intensity treatment group as well. Also, the coefficients of the interaction of medium-intensity treatment group dummy and year dummies from the Granger-type causality test range from 0.025 to 0.043 in pre-treatment years, challenging the parallel trend assumption. Although,

intensity treatment wives drops in 2007 just prior to the treatment. This introduces uncertainty into the analysis as it implies that some part of the observed increase following the reform might simply be a return to a permanent path of invested hours in education. As a consequence, it is not possible to disentangle the effect of the 2008 reform from the effect of this "transitory phenomenon" that caused a pre-treatment dip in education hours. Alternatively, it might be an indication for behavior in anticipation of the change in the law (Ashenfelter 1978, p. 51; Cahuc and Zylberberg 2004, p. 674). Thus, the DiD estimator has no causal interpretation. Whether the group of wives with pre-reform entitlements to alimony below the 25th percentile is a good comparison must be justified in each application. Here, it seems the chosen control group is not appropriate for comparison with the medium-intensity treatment group (Ashenfelter 1978, p. 51; Angrist and Pischke 2009, p. 231).

Impact on wives' hours spent on housework

Estimation results for the high-intensity treatment group show an increase in hours spent on housework, but only after including the years beyond 2007 and 2009 (Columns (3) to (8) of Table 2.4). This sample extension leads to a positive effect of about 0.2 hours a day. However, the fact that the point estimate for $\mathtt{Post}{\cdot}\mathtt{Treat}_{\mathtt{high}}$ is very different in Column (2) from those in Columns (4), (6), and (8) undermines my confidence in the response found for the high-intensity treatment group. Change should be concentrated around the reform in 2008. Moving away from 2008 allows other factors to creep in. Also, controlling additionally for work experience as a second order polynomial leads to statistically insignificant results.[40]

Although not shown here, DiD results of pseudo treatment show no significant outcomes. The graph plotting the mean housework hours for 2001-2013 seems to provide visual evidence for the high-treatment and control groups with a common underlying trend (Appendix Figure B.1.12 on page 215). However, the Granger-type causality test allows me to test for pre-treatment differential trends. The estimates show no effects for 2001 and 2003, the point estimate for 2005 is -0.152, or -0.162 without additional control variables. Also, the low- and medium-intensity groups might follow the same pre-treatment trend as the control group (Appendix Table A.1.23). To sum up, there is no adjustment in hours spent on housework which is attributable to the 2008 reform.

pseudo-law change in 2004 produces no significant results (see Appendix Table A.1.19). In summary, DiD results for the medium-intensity treatment group are biased and, therefore, disputable.

40 Whereas controlling additionally for husband's allowable income, and not for wife's work experience, does not change the results significantly (Columns 13(a)-16(d) versus Columns 9(a)-12(d) of Appendix Table A.1.22 on page 159).

Table 2.4: Fixed effects models, average housework hours per day

	Dependent variable: Wives' housework in hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	2.351		2.378		2.389		2.433	
Post·Treat$_{low}$	-0.078	-0.042	-0.031	0.014	-0.030	0.014	-0.021	0.015
	(0.117)	(0.114)	(0.092)	(0.092)	(0.085)	(0.085)	(0.087)	(0.087)
Post·Treat$_{med}$	0.015	0.005	-0.026	0.006	0.025	0.061	0.020	0.062
	(0.129)	(0.127)	(0.097)	(0.097)	(0.093)	(0.093)	(0.090)	(0.089)
Post·Treat$_{high}$	0.030	0.027	0.176*	0.203**	0.145	0.192*	0.143	0.181*
	(0.126)	(0.128)	(0.105)	(0.102)	(0.101)	(0.099)	(0.101)	(0.098)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,084	1,084	2,326	2,326	3,057	3,057	3,514	3,514
Obs in Control	276	276	609	609	796	796	913	913
Obs in Treat$_{low}$	276	276	577	577	754	754	877	877
Obs in Treat$_{med}$	254	254	574	574	762	762	884	884
Obs in Treat$_{high}$	278	278	566	566	745	745	840	840
Wives	542	542	733	733	779	779	792	792
Av. obs. per wife	2.0	2.0	3.2	3.2	3.9	3.9	4.4	4.4
Adj. R^2	0.0047	0.0197	0.0111	0.0310	0.0177	0.0385	0.0220	0.0484

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Means in Control refer to the housework hours at baseline. Based on the sample used in Column (7), the mean at pre-treatment in Treat$_{low}$ is 2.909, in Treat$_{med}$ 3.017, and in Treat$_{high}$ 3.127. As controls in Columns (2), (4), (6), and (8), I included wife's age as a second order polynomial and the number of minors in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Impact on husbands' labor supply

First I use thresholds from the female alimony distribution to classify husbands into different groups. Classification using quartiles from the male alimony distribution leads, in the end, to the same conclusions. There is no adjustment in working hours considering a 7-day week nor in working hours during a normal working week as a reaction to the 2008 reform in the low- or medium-intensity treatment groups (see Table 2.5). Controlling additionally for age groups and husband's and wife's work experience leads to statistically insignificant result for the high-intensity group.[41,42]

The medium-treatment group follows a clearly divergent pre-treatment path and is, hence, not comparable to the reference group of husbands. The estimates from the Granger causality test, where I control just for year fixed effects, are -0.286 for D_{2001}·Treat$_{low}$, 0.197 for D_{2003}·Treat$_{low}$

41 In Column (3) of Appendix Table A.1.24, I present a FE model including the following controls: Husband's age a second order polynomial, indicators for age groups (< 30, 30-34, ..., 60-64), the number of minor children in each age group (0-1, ..., 16-18 years old) in the household, year fixed effects, husband's and wife's work experience. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Also, the significance of the interaction term for Post·Treat$_{high}$ at 0.05 level in Column (2) of Appendix Table A.1.25 is lost when I additionally control for the husband's work experience and age groups in models with a classification based on the husbands' alimony distribution. Note that work experience is a potentially bad control variable. See Appendix A.1.3 on page 160 et seq. for all results concerning husbands.

42 Unlike for the low-intensity treatment group of wives, change in working hours we see in Columns (1) and (2) of Table 2.5 stems mainly from working hours on a usual workday for the high-intensity group in 2009. Although not shown here, a closer look at working hours during a 5-day week reveals no change due to the reform in 2008.

and close to zero for $D_{2005}{\cdot}Treat_{low}$ (test for joint significance: $F = 1.06$, $p = 0.3639$). They are -0.130 for $D_{2001}{\cdot}Treat_{high}$, 0.297 for 2003, and 0.114 for 2007 ($F = 1.05$, $p = 0.3684$).

Table 2.5: Fixed effects models, husbands' average working hours per day

	Dependent variable: Husbands' working hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	6.937		6.909		6.814		6.870	
Post·Treat$_{low}$	0.143	0.126	0.187	0.142	0.055	-0.013	0.152	0.099
	(0.232)	(0.230)	(0.191)	(0.190)	(0.186)	(0.186)	(0.184)	(0.184)
Post·Treat$_{med}$	0.096	0.113	0.192	0.218	0.061	0.091	0.156	0.182
	(0.229)	(0.229)	(0.170)	(0.171)	(0.171)	(0.172)	(0.169)	(0.169)
Post·Treat$_{high}$	0.438**	0.588***	0.088	0.188	-0.033	0.094	0.036	0.165
	(0.212)	(0.225)	(0.182)	(0.180)	(0.183)	(0.179)	(0.178)	(0.173)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,140	1,140	2,384	2,384	3,148	3,148	3,630	3,630
Obs in Control	292	292	611	611	813	813	940	940
Obs in Treat$_{low}$	286	286	589	589	781	781	910	910
Obs in Treat$_{med}$	274	274	599	599	784	784	908	908
Obs in Treat$_{high}$	288	288	585	585	770	770	872	872
Husbands	570	570	747	747	786	786	794	794
Av. obs. per husband	2.0	2.0	3.2	3.2	4.0	4.0	4.6	4.6
Adj. R^2	0.0446	0.0638	0.0227	0.0395	0.0161	0.0355	0.0183	0.0368

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Means in Control refer to the working hours at baseline. Based on the sample in Column (7), the mean at pre-treatment in Treat$_{low}$ is 7.122, in Treat$_{med}$ 7.155, and in Treat$_{high}$ 7.532. As controls in Columns (2), (4), (6) and (8), I included husband's age as a second order polynomial and the number of minors in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Wives' alimony distribution is used to classify husbands into different groups (see Figure 2.3 on page 36). The sample consists of husbands living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Although the corresponding estimation results are not presented in this thesis, the 2008 alimony reform has no influence on husbands' participation in the labor market.

Impact on spouses' hours taking care of child(ren)

DiD estimators provide unbiased treatment effect estimates when, in the absence of treatment, the average hours for the treated and control groups would have moved parallel over time (Abadie 2005, p. 1). A depiction of the mean hours spent on childcare by wives does not bring clarity in this matter. The precedence test inspired by Granger (1969) reveals divergent pre-treatment trends for all treatment groups of women when additionally controlling for age as a second order polynomial and the number of minor children in different age groups: Statistically significant interaction terms range between 0.491 and 0.623 for the low-intensity treatment group. The point estimate for 2005 is 0.608 and statistically significant at 0.05 level for the high-treatment group. Therefore, I should not over-interpret the DiD results for these two groups.

From the Granger-causality test, we observe for the medium-intensity treatment group an interaction term close to zero in 2005, -0.446 in 2001 and -0.248 in 2003. However, without controlling

for additional variables except for year fixed effects, the estimates for interaction terms are -0.075 for 2001, 0.111 for 2003, and 0.110 for 2005. As with LFP, there is no indication of divergent pre-treatment trends for the control and medium-intensity treatment groups when controlling for year fixed effects alone. The difference is in the pattern of post-treatment effects: Here, we observe a statistically significant coefficient for 2009 at the 0.05 level whereas for LFP there is no apparent effect in 2009.[43] The coefficients from the basic DiD model for childcare in hours are -0.315 for the 2007/2009 sample, -0.729 when including 2005-2011, and -0.890 for the 2003-2013 sample. In conclusion, because of the pre-treatment dip problem in education hours and in the probability of being in education, one could argue there is probably a backlog demand for education in 2009 which leads to a decrease in childcare hours in 2009 and, in the end, to an increase of LFP in 2011. Thus, the DiD estimators have no causal interpretation. Control and medium-intensity treatment group are not comparable in their time allocation.

There is no change in husbands' childcare hours attributable to the 2008 alimony reform. The low-intensity group of husbands seems to follow a divergent trend in pre-treatment. Appendix A.1.4, beginning on page 162, presents all corresponding results for spouses' hours invested in childcare.

2.9 ADDITIONAL ROBUSTNESS CHECKS

2.9.1 Alternative control groups

The validity of the DiD method strongly depends on the control group. So far I compare treated wives to a plausible control group: Wives living in West Germany with an insignificant alimony loss in case of divorce. I experimented with using husbands as an alternative control group for low-, medium-, and high-intensity treatment wives. Specifically, as a robustness check, I perform a DiD analysis, using husbands who would have to pay below €353 monthly in case of divorce, i.e. below the 25th percentile, in the last pre-treatment period (see Figure 2.3 for female alimony distibution). DiD regressions for working hours using this alternative control group yield results which are not similar to the ones from Table 2.2, but which have plausible algebraic signs (Appendix A.1.5 on page 165). But, the pre-treatment trends are rather different

43 There is no indication of the systematic divergence in trends for participation before the actual treatment sets in; indeed, the point estimates are close to zero. More precisely, about 0.009 for 2001, 0.005 for 2003, and 0.001 for 2005. Shortly after the reform there is no effect, i.e. interaction term is about 0.008 for 2009. For 2011 we observe a rise, the point estimate is 0.114 and statistically significant at the 0.05 level. The interaction term is 0.109 for the last year included (see Appendix Figure B.1.13 on page 215).

for treatment and control groups anyway.[44] Thus, this pre-treatment trend difference does not allow me to draw conclusions which are too rigorous from this exercise.

Looking at estimations from the Granger-causality test, we also observe different pre-treatment trends between each treatment group and the alternative control group for participation on the labor market, the probability of being in education, and housework in hours. In regard to childcare, I see the same problem for low- and high-intensity treatment groups: The point estimates for 2001, 2003, and 2005 are far removed from zero in the Granger-causality test.[45] Other potential control groups, like individuals who would have neither received nor paid any alimony in 2007 or East Germans, follow a divergent pre-treatment trend.

2.9.2 Age restriction

I consider a sample of spouses between 30 and 54 years of age in order to better measure individuals' division of time decisions as a result of intra-marital bargaining. Thus, I try to rule out the distorting impact of education-related decisions earlier in life and also part-time retirement decisions of older spouses (see Trampusch et al. 2010 on early retirement arrangements in Germany). Despite this age restriction, the high-intensity treatment group remains older, on average, in comparison to the reference group before treatment. For results not explicitly referred to in the text, including descriptive statistics and results from the balancing tests, consult Appendix A.1.6 starting on page 166.

This age limitation produces reassuringly similar results for working hours of the low-intensity treatment wives presented in Table 2.2: After controlling for individual's age as a second order polynomial and the number of minors by age classes, estimates range between 0.324 and 0.381. Basic DiD estimates are somewhat higher and are between 0.428 and 0.507. Tests for Granger-causality do not reveal a divergent pattern in the pre-treatment period for the low-intensity treatment and control groups. In fact, even without controlling for additional individual control variables, coefficients for interaction terms $D_{year} \cdot Treat_{low}$ in the pre-treatment period are close to zero: 0.042 for 2001, 0.065 for 2003, and 0.124 for 2005. The analysis of the pseudo-law change in 2004 produces the following estimations for $Post_{placebo} \cdot Treat_{low}$: -0.040 (2003/2005) and -0.101 (2001-2007) in models when controlling for year fixed effects, and -0.125 and -0.153 when additionally controlling for wife's age and the number of children in the household. This

44 Results from Granger-causality tests are depicted in Appendix Figures B.1.14-B.1.17 starting on page 216.

45 For the childcare in hours of the medium-intensity treatment group, a Granger-causality test produces the following results: 0.308 for 2001, 0.156 for 2003, and 0.075 for 2005, when additionally controlling for age as a second order polynomial and the number of minor children in different age groups (see Appendix Figure B.1.17 on page 217). The coefficients in the DiD model range from -0.536 to -0.936 (see Appendix Table A.1.32 on page 165). In comparison to previous models, where I use wives as a reference group, these estimates are much larger. There the coefficients range between -0.369 and -0.566 (see Panel B Columns 5(a)-8(d) of Appendix Table A.1.28 on page 163). However, a causal interpretation of the results is still not possible because of the pre-treatment dip in hours invested in education.

strengthens the impression that the common trend assumption might hold, especially in basic DiD models. Results for the LFP in the low-treatment group suggest that the response to the 2008 reform did not come from the extensive margin.

I further explore the robustness of the results for working hours in the low-intensity treatment group in various ways: By controlling for the wife's work experience, age group, husband's allowable income, husband's work experience, husband's childcare hours and/or divorce number. The latter is used to assess the risk of divorce depending on marriage duration.[46] When I include this number, besides age as a second order polynomial and the number of children in different age groups, the estimates are slightly higher in comparison to the initial estimates for the 30-54 year olds. When controlling for age group instead of divorce number, these are slightly lower. Further, the statistical significance of the initial estimates is not lost by including various, presumably problematic, confounders.

Again, pre-treatment trends for the medium-intensity treatment and comparison groups seem not to be divergent in LFP. We no longer observe a dip in relation to the education dummy in 2007. However, there is still a pre-treatment dip problem for hours in education (depicted in Appendix Figure B.1.18 on page 218). This implies that the limitation to 30-54 years old wives is not helpful in ensuring comparability between the medium-intensity treatment and the control groups.

With regard to hours spent on housework, the results seem to be more pronounced for the high-treatment wives than without this age restriction, ranging between 0.227 and 0.303. However, similar to Columns (1) and (2) of Table 2.4, the point estimate for the 2007/2009 sample is close to zero. I.e., a change in housework hours cannot be attributed to the 2008 reform of maintenance.[47] Again, results obtained for childcare hours of treated wives are biased.[48]

Next, I split my initial sample into two groups using 45 as a cutoff age. The medium- and high-intensity treatment groups follow a divergent pre-treatment trend in comparison to the control group in both age groups. For the low-intensity treatment wives above the age 45, there is a small and statistically insignificant response to the new alimony regime. For younger wives, the average low-intensity effect is higher: The coefficient ranges between 0.590-0.614 when including

46 The marriage duration dependent divorce number is calculated in the following way: $\frac{\text{No. of divorces in calendar year y}}{\text{No. of marriages in calendar year y}} \cdot$ 1,000 for different years of marriage duration (Federal Office of Statistics 2015, pp. 5, 36). Results are presented in Appendix Tables A.1.39 and A.1.40 on page 170.

47 This result is shown in Columns (1) and (2) of Appendix Table A.1.42 on page 171. Although not presented here, results from the placebo treatment do not reveal divergent pre-treatment trends. Coefficients from the Granger test are 0.092 for 2001, -0.000 for 2003, and -0.180 for 2005 when including additional controls. When controlling for nothing except year dummies, we observe 0.057 for 2001, 0.002 for 2003, and -0.209 for 2005. F-tests show that the leading coefficients are jointly equal to zero.

48 Results can be obtained from Appendix Table A.1.43 on page 172. Although not presented here, results from the pseudo law change show significant estimations for the low- and medium-intensity treatment groups. Coefficients from the Granger test are also significant in the pre-treatment era for all treatment groups.

additional control variables.[49,50] The Granger causality test suggests that these results are more reliable in comparison to basic DiD estimates (Appendix Figure B.1.19 on page 218). This finding indicates that younger wives might be more responsive to legal changes. This is in line with Stevenson's (2008) study on divorce law changes and women's labor supply. One explanation for this finding are better labor market opportunities for younger women (Stevenson 2008, p. 870). Another reason could be the perceived probability to be affected by divorce and its consequences. Younger wives tend to be married for shorter period of time. The official statistics show a decreasing divorce number following 5-6 years of marriage.[51] Thus, wives older than 45 years of age might face a lower risk of divorce and therefore consider the 2008 reform irrelevant.

2.9.3 Personal and marital assets

Personal and/or marital assets might buffer the effects of alimony reformation. Unlike alimony, the division of marital property does not represent future economic claims on the other, but a lump-sum settlement. Thus, for several reasons, it is probably a weighty factor in the assessment of the consequences of a divorce. First, such a once-off transfer of property/money would be directly available for spending or investment. Second, the risk of non-collection is basically non-existent and, third, inflation is not a consideration. Another outlook on the joint property could be that it reduces the personally perceived probability of divorce (Lafortune and Low 2017). As a result, the perceived risk to be affected by the new alimony regulations might seem to be very low.[52]

It is likely that couples with a higher household income accumulate greater wealth over the years resulting in higher assets at the point of divorce.[53] A balancing test at pre-treatment reveals a significantly higher average household labor income for the high-intensity treatment group of wives in comparison to the control group. The medium-intensity group has a similar household income on average, while the low-intensity group of wives has a lower average income. Thus, the blurring effect of assets might be especially important for the high-intensity treatment group.

49 The estimate for $\mathtt{Post} \cdot \mathtt{Treat}_{low}$ is 0.441 in the 2007-2009 sample. The observation number in $\mathtt{Treat}_{low}$ is, however, 142. For results concerning wives younger than 45 years of age see Panel A of Appendix Table A.1.44 on page 172.

50 Restricting the sample to 30-45 years old wives does not significantly change these results.

51 In 2007, for example, the divorce number in Western states including Berlin is 61.4 for individuals married for 0-4 years, 131.0 for 5-9, 82.3 for 10-14, 62.6 for 15-19, 52.2 for 20-25, and 41.8 for 26-40 years of marriage. The highest divorce number between 2001-2007 is reached at 5 or 6 years of marriage (Gude 2009, p. 1099). In the younger sample at $\mathtt{Post} = 0$ wives in the low-intensity treatment group are married for about 11 years on average. Wives older than 45 years of age in this treatment group are married for about 25 years on average.

52 Although I do not find literature that confirms this conjecture for German couples, about 74% of German wives agree fully that many relationships could be happier and longer lasting if partners could agree on a joint "project" (Wippermann et al. 2014, p. 37). It is not clarified of what kind of project is implied, but joint children or property seem like conceivable options.

53 To properly measure such assets, one needs information regarding the personal possessions, debts etc. before marriage and accrued gain, i.e. properties, ownership, savings, expenditures, debts, etc., for every year during the marriage. Pre-marital assets are especially crucial since they are not divided when a couple divorces.

SOEP contains information on personal tangible assets, financial assets, and ownership of house or apartment and of other property every five years starting in 2002. The 2008 reform might have an impact on savings or the accumulation of assets. That is why I rely only on the information given in pre-treatment years, i.e. 2002 and/or 2007. For the results from this subsection including descriptive statistics on assets, refer to Appendix A.1.7 starting on page 173.

In sum, I want to further extend my analysis by considering the role of the assets, with an argument that wives without any property may be more affected by the new alimony regulations. Or, wives who possess a property may worry less or not at all about the financial consequences of the 2008 reform in case of divorce. To investigate this, I run FE models involving the main effects, two-way interactions, three-way interactions of the treatment status, the pre/post-treatment dummy, and the dummy for house/apartment/property ownership.[54] The dummy for assets, D_{prop}, equals one if a wife reports to hold house/apartment/property, zero otherwise. I do not take into account whether the wife is free of loans or of debt repayments, and what share of the property she owns. If property is burdened with debts, its importance as a "protection" in the case of divorce might increase over time, because the amount of debt will be reduced and its debt-free value will increase. If the three-way interaction turns out to be negative this implies that the size of $Post{\cdot}Treat_j$ (with $j = low, med, high$) interaction is smaller for the group of wives who hold property versus the group without such possessions. This would be an indication for assets' buffering effect on alimony regulations introduced in 2008.

There are no statistically significant three-way interaction terms for the treatment groups of wives in basic models with just year fixed effects. The algebraic signs of all three-way interaction terms are, as expected, negative: -0.619 for $Treat_{high}$, -0.225 for $Treat_{med}$, and -0.253 for $Treat_{low}$, in the 2001-2013 sample. This finding suggests that the buffering effect of assets might be particularly significant for the high-intensity treatment group. This may partly explain the negative average high-intensity treatment effect in the initial analyses presented in Table 2.2.[55]

I dissect the three-way interactions by considering the $Post{\cdot}Treat_j$ with $j = low, med, high$ at each of the two levels of the dummy D_{prop}.[56] For the low-intensity group of wives in basic models $Post{\cdot}Treat_{low}$ is statistically significant for having house/apartment/property (e.g., $F = 5.23$, $p = 0.0225$ for 2005-2011; $F = 4.72$, $p = 0.0301$ for 2003-2013) and also when having no ownership ($F = 2.96$, $p = 0.0856$ including 2005-2011; $F = 4.32$, $p = 0.0380$ for 2003-2013).

Next, I replace the dummy for house/apartment/property ownership with a dummy, $D_{Solprop}$, that equals one if an individual holds the sole ownership of a house/apartment and/or the sole

54 The two-way interactions of the treatment status and the dummy for pre-treatment house/apartment/property ownership, and the main effects for these indicators are, of course, omitted in a FE model.

55 Note, the observation number of the medium-intensity treatment group in $D_{prop} = 0$ is 278. The observation number of the high-intensity treatment group without any property is 128. Results for fixed effects models including three-way interactions and lower order effects are depicted in Appendix Table A.1.47 on page Appendix Table 174.

56 Test results for the partial interaction effects are not displayed in the Appendix. The tests are performed using the contrast command.

ownership of another property which is not being held for the individual's own use, and zero otherwise. Property in sole ownership might be very important in the sense that in the case of divorce, that individual retains the sole-ownership of said property and, thus, it might represent a valuable asset which could function as a form of "insurance". However, this property does probably come with a (remaining) financial burden and might go hand in hand with personal debt. Sole ownership could also mean that spouses manage their assets according to the principle of separation of property in the marriage. That could imply that they do not rely on each other financially. It is also possible that these assets were accumulated before marriage or were given as a personal gift or inheritance at some time and were kept in the individual's own holding.
The estimate for the three-way interaction $D_{Solprop} \cdot Post \cdot Treat_{low}$ is -0.385 in the 2001-2013 sample when controlling for year fixed effects only. However, this result cannot be confirmed for the 30 to 54-year-old wives: Although this limitation leads to a smaller number of observations in $D_{Solprop} = 1$, the estimate for the three-way interaction for the low-intensity treatment group is very small, suggesting the effect of sole ownership might be not important after all.[57]
Further, there is no indication that ownership of apartment/house/property significantly reduces the average low-intensity treatment effect when applying this age restriction (see Table 2.6). Results, however, suggest that possession of property might, indeed, buffer the effect of the 2008 alimony reform for the medium- and high-intensity groups.[58] That might be one of the reasons why we do not observe a strong treatment effect for these two groups in the first place.

2.9.4 Seasonal fluctuations and macro conditions

The individuals included in this analysis are subject to seasonal fluctuations on the labor market and other economic trends. Although not presented here, controlling additionally for seasonal dummies (quarterly or monthly) does not significantly change the results.[59]
In the DiD framework, any changes in macro conditions should influence all groups in the same way (Jurajda 2016, p. 20). Parallel pre-treatment trends in working hours or/and LFP might give the impression that different groups handle or experience economic crises in the similar way. However, different crises might have different implications. In regard to the labor market situation, the time period considered here covers the so-called dotcom crisis (2001-2003), the recovery period (2004-2008), and the time after the financial crisis of 2009 (Mai 2010, p. 11).

57 There are $Post = 0/Post = 1$ 157/91 observations in $Treat_{low}$ overall who hold sole ownership, 164/91 in $Treat_{med}$, and 207/115 in $Treat_{high}$. The estimate for $D_{Solprop} \cdot Post \cdot Treat_{low}$ is -0.084 in the 2001-2013 sample when controlling for year fixed effects and -0.062 when additionally including individual control variables.
58 The possession of financial assets or personal tangible assets does not have the same relevance. That is probably because the value of property is usually much higher than that of savings or tangible assets. Note, results for ownership of financial assets and personal tangible assets are not included in the Appendix.
59 Note, there are no observations in November or December in my sample.

Table 2.6: Fixed effects models, average working hours per day, property ownership, 30-54 years old wives

	Dependent variable: Wives' working hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	4.661	5.124	4.569	5.163	4.653	5.120	4.654	5.033
Post·Treat$_{low}$	0.431	0.461	0.502	0.501**	0.588*	0.475**	0.555*	0.502**
	(0.382)	(0.290)	(0.340)	(0.227)	(0.321)	(0.223)	(0.322)	(0.224)
Post·Treat$_{med}$	0.940*	0.102	0.739*	0.165	0.623	0.252	0.423	0.182
	(0.495)	(0.318)	(0.413)	(0.258)	(0.387)	(0.265)	(0.374)	(0.260)
Post·Treat$_{high}$	0.544	0.472	0.663*	0.310	0.419	0.210	0.520	0.027
	(0.407)	(0.308)	(0.341)	(0.272)	(0.373)	(0.263)	(0.405)	(0.264)
Ownership	no	yes	no	yes	no	yes	no	yes
Obs	266	598	576	1,176	733	1,529	842	1,740
Obs in Control	86	150	181	295	220	375	250	429
Obs in Treat$_{low}$	98	132	195	267	246	347	279	395
Post = 0/Post = 1	49/49	66/66	99/96	138/129	137/109	198/149	169/110	245/150
Obs in Treat$_{med}$	56	154	138	306	184	400	218	458
Post = 0/Post = 1	28/28	77/77	68/70	160/146	100/84	232/168	130/88	289/169
Obs in Treat$_{high}$	26	162	62	308	83	407	95	458
Post = 0/Post = 1	13/13	81/81	33/29	160/148	48/35	232/175	59/36	282/176
Wives	133	299	185	368	193	392	199	395
Av. obs. per wife	2.0	2.0	3.1	3.2	3.8	3.9	4.2	4.4
Adj. R^2	0.0212	0.0282	0.0127	0.0254	0.0188	0.0305	0.0207	0.0285

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. No ownership of property means the wife has no house/apartment/property in pre-treatment. Means in Control refer to the working hours at baseline. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Year fixed effects are always controlled for. No additional control variables are included. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

The breakdown of the so-called new economy led to a reduction of the labor force, especially in full-time employment. In 2003, there were 717,000 less people in the German labor force when compared to 2000 (Mai and Schwahn 2017, pp. 11 et seq.). The so-called Hartz labor-market reforms took place between 2003 and 2005 with the objective of increasing the flexibility of the labor market (Klinger et al. 2013, p. 2). Since 2006, a steadily increase in the labor force can be observed. The 2009 crisis curbed this development, but did not interfere in a significant way. The total number of employed persons increased slightly in 2009 (+0.1% compared to 2008) and 2010 (+0.3% compared to 2009). In sum, the implications of this crisis on the labor market were moderate (Mai and Schwahn 2017, pp. 11, 13).

On a temporary basis, some businesses reacted to the 2009 crisis by adjusting employees' working time i.a. by cutting working-time accounts or by introducing short-time work (Mai and Schwahn 2017, p. 17). These measures, however, affected at most 5.2% of all employees (peak in May, 2009; regulations for short-time work exist since 1957; Federal Employment Agency 2014, p. 3). Industries which were particularly impacted were the metal industry, machine construction, automobile industry, manufacture of computer, electronic and optical products, and rubber industry

(Mai 2010, p. 244, Federal Employment Agency 2014, p. 4).[60] Spill-over effects on other, i.e. non-export, industries were limited (Brenke et al. 2013, p. 287). At the same time, i.e. in 2009, the number of employees increased in the services sector, construction industry, agriculture and forestry, compensating in part for job losses in the production industry (production industry excluding construction industry; Mai 2010, p. 244). The volume of work and gross domestic product recovered in 2010 (Mai and Schwahn 2017, p. 5, 16), while the number of short-timers due to the cyclical downturn returned to a completely normal level in 2012 (Federal Employment Agency 2014, p. 3). By the beginning of 2011, production volume had returned to its pre-crisis levels (Brenke et al. 2013, p. 288).

Note that also in the first recession period, i.e. between 2001 and 2003, workforces in the services sector were built. But, short-time was less common. In 2002, for example, 210,000 people on average worked short-time, that is about 1/5 in comparison to 2009. It seems that employers used different strategies to react to the 2009 crisis than were used in the previous recession period (Gartner and Klinger 2010, pp. 730 et seqq.).

As an additional exercise, I exclude individuals who reported working short-time for at least one month because of the 2009 crisis.[61] This inspection is one-sided, since I focus on the implications of the second recession period and not on the first, although the breakdown of the so-called new economy had more negative consequences on the German labor market. The results for the low-intensity treatment wives are slightly higher in regard to working hours to those presented in Table 2.2. Including additional individual control variables, estimates range now between 0.337 and 0.374. For 30-54 years old wives estimates are also similar to the initial results and range between 0.339 and 0.401.[62,63] Now, there is no statistically significant result at the 0.05 level in the probability of being in education for 30-54-year-old medium-intensity group anymore. However, the problem of a pre-treatment dip remains in hours spent in education in this group, i.e. it is still not comparable to the reference group. Note, tables of results not provided in the main text are in Appendix A.1.8 starting on page 175.

Next, I additionally exclude wives whose husbands work in an environment that reacts to changes in the economic cycle by introducing short-time work. Although not shown here, es-

60 In December 2009, 7.4% of all employees in the production industry were effected by short-time arrangements, 1.5% in the construction industry, and 0.9% in the services sector.

61 There is not necessarily an overlay with the time when they give information on their time allocation. A short-timer is a employee (paying social insurance) whose temporary working time reduction is higher than 10% in comparison to the usual operating working hours at the company and who is entitled to short-time allowance. The minimum requirement for a firm to apply is that a least one in three of its employees is affected by a greater than 10% reduction in working time (Federal Employment Agency 2014, p. 13). Cause for short-time allowance can be a general business recession or slow-down, corporate restructuring, seasonal fluctuations in the construction industry (Federal Employment Agency 2009, p. 4). Here, short-time work is driven by recessionary conditions.

62 Without this sample restriction, results for 30-54 years old wives range between 0.324 and 0.387 (see Appendix Table A.1.35 on page 168).

63 In basic DiD models coefficients for $\mathtt{Post} \cdot \mathtt{Treat}_{low}$ range between 0.441 and 0.526 (see Columns 1(a)-4(d) of Appendix Table A.1.48). Without this sample restriction estimations range between 0.428 and 0.507. Although not shown here, there is no indication for a systematic diverge in the trends before the actual treatment sets in.

timates for the 30-54 years old low-intensity group range between 0.351 and 0.427 (when controlling for wife's age as a second order polynomial, the number of minor children in the household, and year fixed effects). It seems that LFP might now increase by about 7 percentage points for this group of women. A pre-treatment dip problem still exists for the medium-intensity treatment group.

Besides the introduction of short-work in 2009, businesses reacted by reducing the overtime and working hours of their core workers. That is why in the next step I also exclude individuals who worked in an industry that was moderately to severely affected by the 2009 crisis.[64] As a consequence, 126 30-54-year-old wives ($\approx$ 20.59%) are eliminated from the initial analysis sample. The results for the low-intensity treatment group are now only slightly stronger: Basic DiD estimates for working hours differ in the second or third decimal place (Columns 1(a)-4(d) of Appendix Table A.1.49), in models with individual control variables estimates are higher by about 0.060-0.078. They range between 0.387 and 0.422 (Columns 5(a)-8(d)). There is no indication of a change in the LFP as a result of the 2008 reform. The low-intensity treatment group and the reference group might follow the same pre-treatment trend in regard to working hours and participation on the labor market. Although not presented in their entirety here, including additional, presumably bad, controls such as household's net labor income, husband's allowable income, husband's working hours and/or husband's childcare hours does not significantly change the magnitude of the results in these models.[65,66]

Overall, it seems that my previous conclusions are not driven by the fact that I included wives who worked or work in a field that was influenced by the second recession period including those who experienced short-time work arrangements driven by the same recessionary conditions. Yet, intra-marital spill-over effects are possible. Therefore, I exclude couples when either of the partners has experience working in a field that was moderately to severely affected by the 2009 crisis.[67] This strongly reduces the sample size, for example, only 120 observations exist at post-

64 I exclude individuals who between 2001 and 2013 worked in the manufacturing of (1.) wood products (except for furniture), (2.) pulp, paper and paper products, (3.) chemicals and chemical products, (4.) rubber and plastic products, (5.) other non-metallic mineral products, (6.) publishing, printing, and reproduction of recorded media, (7.) basic metals, (8.) metal products (except for machinery and equipment), (9.) machinery and equipment NEC, (10.) office machinery, (11.) electrical machinery and apparatus NEC, (12.) radio, television, and communication equipment, (13.) medical, precision and optical instruments, (14.) motor vehicles, trailers and semi-trailers, (15.) other transport equipment, (16.) furniture; manufacturing NEC (17.) textiles, (18.) tobacco products, (19.) wearing apparel, (20.) tanning, dressing of leather products, (21.) food products and beverages, and (22) manufacturing and industry - NEC (Heckmann et al. 2009, pp. 2 et seq.).

65 E.g., in models with year fixed effects, wife's age as a second order polynomial, indicators for wife's age group, number of children in different age groups, and husband's working hours, the estimate for average low-intensity effect is 0.320 (robust std. err. 0.231) in the 2007-2009 sample, 0.442 (0.213) in the 2005-2011 sample, 0.410 (0.204) in the 2003-2013 sample, and 0.443 (0.206) in the 2001-2013 sample (compare to Columns 9(a)-12(d) of Appendix Table A.1.49). When adding to these models both spouses' work experience as a second order polynomial the estimates are 0.386 (0.234) in the 2007-2009 sample, 0.498 (0.217) in the 2005-2011 sample, 0.397 (0.207) in the 2003-2013 sample, and 0.366 (0.205) in the 2001-2013 sample (compare to Columns 17(a)-20(d) of Appendix Table A.1.49). These are 0.398 (0.234) in the 2007-2009 sample, 0.491 (0.216) in the 2005-2011 sample, 0.389 (0.206) in the 2003-2013 sample, and 0.360 (0.204) in the 2001-2013 sample when additionally controlling in these models for husband's childcare hours.

66 This also holds when I exclude additionally wives whose husbands have experience with short-time work and control for husbands' working hours and other presumably endogenous controls.

67 For this result see Appendix Table A.1.51 on page 178. Note, when excluding couples when either of the spouses has experience working in an affected field short-time workers are automatically excluded.

treatment (Post = 1) in $Treat_{low}$ overall. In total, 303 wives between age 30-54, ≈ 49.51%, remain in the sample. In basic DiD models for working hours in $Treat_{low}$, estimates now range between 0.385 and 0.562. The estimate for the 2001-2013 sample is 0.490. Initial results for 30-54 years old wives in the low-intensity group are between 0.428 and 0.507, and 0.482 for the 2001-2013 sample. A Granger-causality test for a model with just year fixed effects produces -0.193 for D_{2001}·$Treat_{low}$, 0.372 for 2003, and -0.035 for 2005 (test for joint significance F = 0.69, p = 0.5598), suggesting that the low-intensity treatment group and the reference group might follow the same pre-treatment path. In models with additional control variables, however, they obviously follow a divergent trend at pre-treatment.[68] Thus, results from basic DiD models seem to be more reliable.

Table 2.7: Fixed effects models, average working hours per day, 30-54 years old wives, 2001-2013

	Dependent variable: Wives' working hours per day									
Sample restriction			Without short-time workers:				Without workers in affected industries:			
			Wife		Wife or husband		Wife		Wife or husband	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Mean in Control	4.897		4.875		4.962		4.682		4.874	
Post·$Treat_{low}$	0.482**	0.344**	0.499***	0.366**	0.517**	0.354*	0.486**	0.422**	0.490*	0.356
	(0.185)	(0.172)	(0.189)	(0.175)	(0.200)	(0.185)	(0.212)	(0.195)	(0.284)	(0.261)
Post·$Treat_{med}$	0.282	0.094	0.266	0.076	0.222	0.005	0.369	0.219	0.445	0.126
	(0.210)	(0.188)	(0.213)	(0.192)	(0.218)	(0.194)	(0.236)	(0.209)	(0.316)	(0.272)
Post·$Treat_{high}$	0.139	-0.017	0.129	-0.023	0.130	-0.042	0.115	0.039	0.121	0.034
	(0.218)	(0.196)	(0.221)	(0.199)	(0.229)	(0.204)	(0.244)	(0.218)	(0.323)	(0.279)
Ind. control var.	no	yes	no	yes	no	yes	no	yes	no	yes
Obs	2,636	2,636	2,572	2,572	2,412	2,412	2,079	2,079	1,279	1,279
Obs in Control	684	684	672	672	618	618	502	502	312	312
Obs in $Treat_{low}$	694	694	679	679	617	617	535	535	309	309
Obs in $Treat_{med}$	694	694	666	666	633	633	555	555	337	337
Obs in $Treat_{high}$	564	564	555	555	544	544	487	487	321	321
Wives	612	612	597	597	562	562	486	486	303	303
Av. obs. per wife	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.2
Adj. R^2	0.0271	0.1929	0.0267	0.1900	0.0266	0.2019	0.0242	0.1951	0.0096	0.2277

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. Means in Control refer to the working hours at baseline. As controls in Columns (2), (4), (6), (8), and (10), I included wife's age as a second order polynomial and the number of minors in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Taken as a whole, the estimates in this subsection do not suggest that my previous results are driven by the 2009 crisis (see, e.g., Table 2.7 for 30-54 years old wives, including the 2001-2013-sample). Despite the loss of sample size, and hence power, the results here are similar in sign and magnitude to initial estimates for the low-intensity group of wives.[69]

68 These results are depicted in Columns (2)-(4) of Appendix Table A.1.52 on page 179.

69 In contrast, results found for high-intensity-treatment husbands can be probably explained by the 2009 crisis. The estimates are very different in magnitude for $Post \cdot Treat_{high}$ from the initial results when excluding couples who were affected by this recession period. Classifying husbands according to the quartiles from the male alimony distribution leads to the same conclusion.

2.10 INTERNAL AND EXTERNAL VALIDITY

Internal validity

Can the inference be drawn that the differences in the outcome variables are indeed caused by the considered law change?[70] Did events other than the 2008 reform occur which provide alternative explanations for the results? First, I did not find any other important national reforms that were correlated in terms of the timing of the 2008 law change. On July 30, 2008, the Federal Court of Justice for the first time took into consideration a maintenance obligation to a present spouse when calculating the former, divorced spouse's alimony (the so-called division-by-three method). In a resolution published on January 25, 2011, the Federal Constitutional Court found this method to be unconstitutional (Federal Constitutional Court 2011, accessed on 10.13.2012). These events are not important in this analysis, since I exclude individuals who divorced before.

In September 2009, the law of equal distribution of surplus was amended without changing the basic concept of the equalization of accrued gain during the marriage. In the context of this study, the 2009 amendment would only matter for couples in which one of the spouses was encumbered with debt at the beginning of the marriage and one of the spouses would claim prematurely a share of gains acquired during the marriage (ASP Rechtsanwälte Krefeld n.d., accessed on 13.06.2017). Since I consider only "intact" marriages, I do not think this reform is particularly relevant. Also, at the beginning of 2010, only 40% of married individuals have heard of, and are believed to understand the exact meaning of, the terms "equalization of accrued gains" or "original assets" (Wippermann et al. 2014, p. 42). There is also no special web search interest in this minor law modification around this time (Appendix Figure B.1.20 on page 218). Thus, it seems appropriate to ascribe no importance to it.

Phipps and Burton (1995) demonstrated that, e.g., social transfers to single parents may influence the LFP of married women, ceteris paribus. When we look at the state's per capita expenditures on social protection of families and children over time we do not observe substantial changes at the time of treatment (Appendix Figure B.1.21 on page 219). Parental wealth may also function as a social safety net too. It might weaken spouses' concerns about their own welfare due to the 2008 reform and act as a social protection in the case of divorce. Also, an inheritance or even the prospect of receiving an inheritance some day, like personal or marital assets, might buffer the effect of alimony reformation.

70 See Jurajda 2007, pp. 17 et seqq. for a full list of threats to internal and external validity in quasi-experiments. Also, Ryan et al. (2015) propose a checklist of requirements for the DiD approach which must be met in order to be able to make valid inferences.

Although pre- and post-nuptial agreements could have dampened the impact of the 2008 reform, I argue that such legal agreements were of minor significance. Even two years after the 2008 reform, 93% of married couples still had no marriage contracts (Wippermann et al. 2014, p. 13).[71] In general, matrimonial property, pension provisions, and maintenance are three separate issues that can be component parts of a marriage contract. In regard to post-marital maintenance, partners do have the right to stipulate their own terms but only in line with the German Civil Code (Martens 2008, pp. 3, 9).[72]

The low percentage of married couples who have prenuptial agreements could also reflect a lack of knowledge of the divorce regulations. On the other hand, individuals who are married or who intend to marry may consider these laws personally irrelevant until they begin to have marital difficulties. Backer and Emery (1993), e.g., demonstrate that although individuals who applied for a marriage license might have relatively accurate perceptions of the likelihood of divorce and its effects in the population at large, they nevertheless express unrealistic expectations concerning their own marriages. Even law students who completed a course in family law consider themselves to be unrepresentative of the married population and feel that divorce and its consequences will not apply to them personally in the future when married. According to the authors, this discrepancy can be seen as an example of a representativeness bias (Backer and Emery 1993, pp. 445 et seq.). It is unclear whether the same problem applies to marriages in my sample. They are married for a long time, on average, and have probably already faced some sort of marital conflict. Nevertheless, that is an issue that I cannot simply rule out. I do not have information on spouses' changing perceptions of the probability of their own divorce and, thus, of laws governing divorce. In regard to married individuals' knowledge of divorce statutes, Wippermann et al. (2014) fail to depict the state of knowledge of alimony regulations due to methodological difficulties.

Another important question is whether there are underlying processes producing changes in time allocation as a function of time itself such as ageing (Jurajda 2007, p. 18). I control for age as a second order polynomial, additionally including indicators for age groups and the number of minor children in different age groups (Appendices A.1.2-A.1.4). Further, I restrict the sample to 30-54 years old individuals. In addition, I split the sample into two groups using age 45 as a cutoff point.

A closely related question is whether it is appropriate to compare the low-intensity treatment with the reference group – two groups of wives whose pre-treatment average hours spent on

71 In contrast, 37% of women and 23% of men who planned to marry within the next two years were thinking about prenuptials (Wippermann et al. 2014, p. 32).

72 Since 2001, German courts can intervene in a corrective manner in certain circumstances: In an unequal negotiation situation and in a one-sided imposition of contractual burdens. Naturally, matrimonial contracts are not allowed to violate public order (Martens 2008, pp. 1, 5).

housework and childcare are not parallel. I argue that outside of the workplace, the two groups of women can allocate their time in a completely different way.

Attrition and nonresponse can be a problem if they are correlated with treatment (Jurajda 2007, p. 19; Ryan et al. 2015, pp. 1229 et seq.). These issues can lead to selection bias (Hausman and Wise 1979, p. 456). Here, the sample comprises individuals that respond within the considered time period at least once before 2008 and at least once after. There is no indication for these problems in this study (see Appendix Table A.1.53 on page 179 for post-treatment response difference). The number of observations over time for each group of wives is presented in Appendix Figure B.1.7 on page 213.

Overall, this study seems to show a good degree of internal validity resulting in rather strong evidence of causality, although the inheritance of parental assets or representative bias remain valid concerns.

External validity

> "Perhaps it's worth []stating an obvious point. Empirical evidence on any given causal effect is always local, derived from a particular time, place, and research design" (Angrist and Pischke 2010, p. 23).

Therefore, the relevance of the empirical results is always an open question (Angrist 2004, p. C52). Can estimates in this study provide useful information about the likely effects of similar policy measures in the future? Generally, the DiD approach estimates the average treatment effect on the treated (Ryan et al. 2015, p. 1216; Callaway and Li 2015, p. 6). Here, I do not find an effect on labor supply for all groups with different treatment intensity, but do find an effect for a particular group of wives that was treated. Obviously, the results found here cannot simply be extrapolated to a larger German population of married individuals.[73] However, do they apply to the subgroup of the population that is treated, i.e. to all treated wives? In regard to labor supply, all groups which were considered as a potential control group follow a divergent pre-treatment path to the medium- or high-intensity treatment groups. Thus, at this point, I cannot draw reliable conclusions for these women. That is, the results for these two treatment groups – presented in Section 2.8 – are biased, underestimating the effect on working hours from the 2008 reform. Furthermore, marital assets might buffer the effects of alimony reformation for the medium- and high-intensity groups: When I split my sample into two – women who own property and those who do not – the number of observations becomes too small for the purpose of reliable analysis,

73 It is also important to keep in mind who is not included in this analysis in general: E.g., individuals living in East Germany, married individuals with pre-treatment incomes equal to that of their spouses (although this combination is rare) and low-income households - those married couples where the breadwinner has an allowable income below the personal need level (see Section 2.4.4). Short marriages are also excluded (see Section 2.6).

however, the estimates are very different for the two groups. The effect of the 2008 reform seems to be weaker for wives with marital property.

Here, we have learned something about a very specific context. The effects of such a change in the law could be very different in another institutional or geographic setting. Especially in countries with different maintenance obligations or marital property arrangements, alimony reducing or eliminating laws might have stronger or weaker effects on intra-family bargaining. The underlying legal framework constitutes a setting that interacts with such policy measures. Moreover, considering a different time span may provide evidence of a different response on the part of spouses in West Germany. For example, until 1977 husbands could simply prohibit their wives from going to work. Also, until 1962 married women needed their husband's permission to open a bank account. Not until 1969 were married women accepted as legally competent. Since 1976, divorce law in Germany is based on the principle of broken marriage and no longer on the concept of fault (Martiny and Schwab 2002, pp. 2 et seq.). The sociopolitical or historical context embeds, e.g., gender relations and defines the bounds of possible responses (Cooke 2006, p. 442).

2.11 CONCLUSIONS AND DISCUSSION

Alimony regulations like marital property, pension provisions, and child-support issues are all problems of money. However, the specific function of alimony is to satisfy the need of a spouse after a finalized divorce (Martiny and Schwab 2002, p. 24). Individuals who are included in my study married during an era of strong post-marital solidarity. Change came suddenly in 2008 putting the law on maintenance on a new footing, i.e., enforcing the principle of personal responsibility after divorce, thus, demanding post-marital self-sufficiency. From the perspective of spouses who were second earners at that time, this change in the law had an adverse effect on their bargaining situation. In contrast, it had a positive impact on the bargaining position of the first earner.

In this study, I look at the response of disadvantaged wives in "intact" marriages allowing for different treatment intensity. The core question is whether they take action to improve their relative bargaining power and if they do, to what extent. It seems that wives in the low-intensity treatment group might indeed have increased their total working hours as a reaction to the 2008 reform, thus confirming Hypothesis 1. As expected, the number of hours invested in education did not changed due to new alimony regime, which is plausible since in the majority of marriages the wives seem to be educated to a level which is at least equal to that of their husbands, if not higher – particularly in the control and low-intensity treatment groups. Note, this conclusion is

drawn from the low- and high-intensity groups of wives. In regard to housework, i.e., Hypothesis 2, there is no response attributable to the 2008 alimony reform. Thus, treated wives do not seem to change the number of hours spent on housework due to legal changes in 2008.

Husbands in the low- and medium-intensity treatment groups do not respond to the reform by changing their labor supply rebutting Hypotheses 3a and 3b. They also do not cut back the number of hours they spent on childcare because of their improved relative bargaining position, rejecting Hypothesis 4. Note, the low-intensity treatment group of husbands follows a divergent path in pre-treatment in comparison to the control group. I fail to verify this proposition for wives.

To the best of my knowledge, this study is the first attempt to identify the impact of the *2008 Reform of the German Maintenance Law* on the behavior of individuals in longer marriages. Although my investigation has some shortcomings, it also has several advantages. First, I do not rely on the premise that a group of individuals is generally dis(advantaged) by a policy change based on gender. Court records on alimony entitlements demonstrate that it would be negligent to assume that since husbands can also be in the position of receiving alimony. Second, I do not ignore the fact that treatment is heterogeneous. Thus, I take into account different treatment intensity based on alimony amounts in the last pre-treatment year. Third, my analysis includes a full 7-day week and, thus, provides a more complete picture of time activities. Fourth, since I run FE models, unobservable and observable time-invariant individual characteristics are omitted as a source of bias.

My findings in regard to labor supply are in line with the bargaining models, i.e., with non-unitary household models, and strand of literature presented in Section 2.3 in support of the notion that an intra-household balance of power does exist. Also, the size of the response in working hours for the low-intensity treatment group of wives is comparable to the findings in a couple of other studies in which "intact" households are considered.[74]

Findings presented in this chapter suggest that maintenance laws targeting marriages after dissolution may, indeed, affect some individuals in "intact" marriages in a significant way. For some marriages, it seems also that ownership of marital property might buffer the impact of alimony laws. Policymakers are advised to think about all potential incentives for different groups of individuals irrespective of whether they are a part of a "target group" or not. The fiscal effects on public finances and an estimation of other costs are, for example, natural components of draft

74 Brassiolo (2013) finds a reduction in wives' labor supply of between 0.6 and 2.5 hours per week in response to their improved intra-marital bargaining position in Spain (Brassiolo 2013, p. 26). Kapan (2008) shows that British wives reduced their work hours by around 2-3 hours per week due to a law change that benefited them (Kapan 2008, p. 29). Both papers study rule changes in the division of marital property in the case of divorce. Studies that look into the extension of alimony rights to cohabiting couples do not report changes in working hours (Rangel 2006; Lafortune et al. 2012). Bredtmann and Vonnahme (2017) who study the same change in the German law do not find a labor-supply reaction of women and men. They argue that these effects can be interpreted as a lower bound to the overall effects (Bredtmann and Vonnahme 2017, p. 3; see additional remarks in the appendix on pages 228 et seq.).

laws. The addition of a section that discusses the potential behavioral modifications that can be expected would stand for considerable progress. Whether an increase of the labor supply of a certain group of wives is not just a 2008 reform's unintended side effect, but also an undesirable is a different question and is not a part of my analysis.

From a policy perspective, it might also be important not just to provide information about new legal regulations concerning marriage and divorce to the public, but to quantify representative bias (if it exists) and present strategies aimed at how it could be reduced.[75] Unrealistic optimism in regard to personal divorce risk, including the financial consequences of divorce, might affect choices made before or during the marriage. Such decisions include whether to have children and if so, how many, whether or not to be a stay-at-home parent or have a career, and so on (Backer and Emery 1993, p. 448). How should society and lawmakers respond if people do indeed disregard crucial information that concerns them because of idealistic expectations? Of course, levying a heavy tax on Hollywood romantic comedies is not a serious solution, but some kind of required consent to family law applicable at marriage, or at least a notice/information pack, might be worthy of consideration. Although marriage contracts are not popular (Wippermann et al. 2014, pp. 13, 31), individuals may benefit from examining the statutory laws governing divorce before entering into a marriage. It is worth considering the pros and cons of mandatory prenuptial agreements or standard contracts that simply cover the legal regulations that apply at the time of the marriage. Entering such a contract might indeed increase the awareness of the parties regarding legal changes and may help them develop a more realistic appreciation of the risks.

Future research should look at the extent to which couples in anticipation of marriage change their investments in marriage-specific human capital in relation to market human capital as a result of the 2008 reform. As stated by family law expert Breithaupt at the public hearing in 2006:

> "For the existing marriages this [planned reform] is really bad. But apart from that, this is my opinion: If women know that they should only enter a marriage highly qualified or not at all and instead invest in themselves and not in a man, then this planned law is not bad at all. In my opinion this [reform] has a deterrent effect [...]" (German Bundestag 2006c, p. 65).

Researchers should continue to explore whether parents disadvantaged by the new alimony law spend less time on parenting. Do they rely more on external childcare services? Do they send their children to childcare facilities at a younger age? How do investments in children change as

75 The term "representative bias" was introduced in Subsection 2.10. Individuals consider themselves to be unrepresentative of the married population and feel that divorce and its consequences will not apply to them (Backer and Emery 1993, pp. 445 et. seq.)

a result of the 2008 reform? Note that considering ownership of marital property is crucial when investigating changes in the alimony regulations.

Marriage markets are another interesting field of study, as are fertility decisions (see Fahn et al. 2016 for an empirical investigation of in-wedlock fertility). Other outcomes could be a rise in the incidence of marital dissolution and of marriages. On one hand, low barriers to divorce can result in higher divorce rates. On the other hand, the 2008 reform may even increase the incidence of marriage, by reducing the financial consequences of exiting that marriage. That is, individuals who abstain from entering a marriage in a regime where there are substantial post-marital maintenance claims may be more willing to enter into marriage when they have the "security" of exiting said marriage without dramatic financial consequences. In 2010, about 63% of German men stated that their reason for not marrying is the financial risk associated with marriage breakdown (Wippermann et al. 2014, p. 15). The 2008 reform may thereby clear this hurdle to enter marriage, especially for men. In theory, similar to redistributive income taxation, the 2008 maintenance reform might even have an easing effect on the degree of homogamy in German society (see the theoretical model developed by Konrad and Lommerud 2008). Ignoring the possibility of concluding a marriage contract, a high-income earner might now be less hesitant to marry an individual with low income even though they would be a good match in terms of emotions and their preferences (Konrad and Lommerud 2008, p. iii).

Especially interesting are the reverse incentives of the joint taxation system and of the 2008 alimony reform on married individuals. Joint assessment of married couples for tax purposes encourages intra-household specialization. Since 2008, however, the alimony regulations "punish" individuals specialized in household production. As Wrede (2003) demonstrates in his model, there is a surplus resulting from the income splitting method and labor specialization that is subjected for bargaining. Maintenance laws directly influence intra-household transfers and, thus, utility, even when both spouses start to work fully after a child-rearing time period. Specifically, the higher the husband's relative net income and the lower the post-marriage alimony payments, the higher the husband's relative income share (Wrede 2003, pp. 205 et seqq.). Therefore, there are possible effects on intra-marriage consumption resulting from the 2008 alimony reform.

Aside from my findings, I also support the recommendation made by Justice Minister Zypries at that time to women, which I would expand to all second earners, to make their own binding arrangements concerning alimony (RP Online 2008, accessed on 01.09.2016). Such contracts can be adjusted at any given time to reflect changed life situations, for example the arrival of a child. This aspect is particularly important since it appears to be difficult for couples to put a balanced intra-marital allocation of childcare and housework responsibilities into practice during the transition to parenthood (Apps and Rees 2009, p. 11).

3 BEHAVIORAL RESPONSE OF NON-RESIDENT PARENTS TO CHILD SUPPORT OBLIGATIONS: EVIDENCE FROM SOEP

"About 35% of males in western societies will encounter Child Support [] obligations at least once in their lives. [...] [T]his is an inherently contentious ideological and political topic often fraught with accusations of unfairness, draconian enforcement, fraud, and general avoidance."

Georg Piskor, at 2nd Male Studies Conference (Piskor 2011, accessed on 02.13.2018)

I am grateful to the participants at the internal workshop at the Chair of Health Economics and Management that took place between 2015-2016 for valuable comments and suggestions.

3.1 ABSTRACT

The present chapter investigates how parents responsible for child maintenance payments have responded to changes in the amount of the obligations. The potential endogeneity of child support obligations is addressed by using SOEP panel data from 1985-2013 and applying individual FE-IV models. Results for parents younger than 50 years old show that a €10 increase in monthly child support obligations decreases the likelihood of having an additional child by about 0.39 percentage points (about 3% at the sample mean). Furthermore, an increase in financial obligations does not have an impact on the likelihood of cohabiting with a new partner or on hours spent with children entitled to child support. There is only weak evidence of a positive (re)marriage incentive. There seems to be no adjustment in the parent's labor supply. To my knowledge, the present investigation is the first causal analysis of the behavioral response of non-resident parents to child support obligations in Germany.

3.2 INTRODUCTION

The question of the "proper" determination of child maintenance concerns the liable parent, the dependent children, the parent living with the entitled child, and the taxpayer. As pointed out by Altman (2003, pp. 173 et seq.), child support is a distributional issue that leads to ongoing social and political disputes. Only last year, the lobbying associations for single parents welcomed the extension of the advance on maintenance[1] (e.g., VAMV 2017, accessed on 08.25.2017). On the other hand, associations such as *Separated Fathers* appreciate proposals that offer some financial relief for liable parents.[2] Depending on the interests involved, it is claimed that the level of maintenance is either too high or too low. On the one hand, it is argued that low maintenance leads to child poverty (Breithaupt 2012). On the other hand, it is alleged that the payment financially overburdens liable parents. Yet, the function of child support seems to be straightforward: It should meet the best interests of the child without burdening the taxpayer and distribute the child-rearing costs among parents fairly (Altman 2003, p. 174).[3,4]

1 The maintenance advance is paid to single parents who do not receive full child support obligations from the other parent (Federal Ministry for Family Affairs, Senior Citizens, Women and Youth 2018, accessed on 02.03.2018).

2 Barley (2017), the Federal Minister for Families, suggested that some of the payments for non-resident children might become tax-deductible (Seith 2017; Trennnungsväter e. V. 2017, accessed on 02.19.2018).

3 In the case of separation or divorce, there are two kinds of maintenance regarding (minor) children: One parent provides maintenance in the form of food, provision of housing, etc. (§1606 (3) Civil Code), the other parent compensates in the form of monthly payments (§1612 (1) Civil Code).

4 A look at the system of child support in Germany reveals that none of the involved parties is or can be satisfied. A high proportion of maintenance-receiving parents claim to receive inadequate child support or to receive no financial support from the other parent (see, e.g., forsa 2002, pp. 22, 109 et seq.). In the case of missing or insufficient maintenance, the taxpayer steps in and provides advance payments. In 2014, €283 million was spent at the federal layer on the maintenance advance, while the individual states spent an additional €566 million (German Bundestag 2016, p. 3). The

To date, researchers have made little effort to understand the behavior of German parents liable for child support payments. The vast majority of studies in the German context focus on the problems of child support payments, usually from the perspective of single mothers residing with their children (see, e.g., Federal Ministry for Youth, Family, Women, and Health 1977; Napp-Peters 1985; Postler et al. 1988; Vaskovics et al. 1994; Großmann 1996; Proksch 2001; forsa 2002; Allensbach Institute 2008; Hartmann 2014). The present study tries to fill this research gap by empirically investigating if changes in child support obligations have an impact on the behavior of parents liable for child support. To this end, I look at three different aspects of post-separation life: Labor market behavior (including working hours and the likelihood of working full time or belonging to the labor force), time spent on childcare, and family formation. The latter aspect is captured by examining the likelihood of (re)marrying or cohabiting with a new partner, and of having subsequent children.

Since the amount of obligations in Germany is determined by the Higher Regional Courts (Klingelhöffer 1994), which do not focus on the incentive effect of child support on the labor supply[5] or on other aspects of life of the obligated parents, an empirical investigation of the incentive effects is overdue.

The present study only investigates the behavioral response to changing child maintenance and does not provide a holistic approach. However, the question of whether child support affects the labor supply of liable parents is a very important one. If liable parents respond to higher maintenance with a decline in their labor supply, this might lead to lower tax revenue and ultimately to higher expenses for the taxpayer and vice versa. Another policy-relevant question is whether increased child support obligations reduce parents' time spent with their non-resident children. If so, this might have a harmful effect on children's development (see, e.g., Suh et al. 2016; Ibrahim et al. 2017). Whether a change in fertility decisions is a desirable side effect, is open to debate. It was never a declared policy goal or an explicit function of child support regulations. The same applies to other family formation decisions, namely (re)marriage and cohabitation. In the face of an increasing share of parents living apart from their children,[6] the issues surrounding child support will remain relevant in the future.

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recourse rates, i.e. the ratio of total government expenditure to the repayments of maintenance debtors, averaged between 11.0% and 31.4% for 2004-2014, depending on the state (Audit Office Baden-Wuerttemberg 2016, p. 161). This means that the taxpayer is financially burdened by maintenance advances and the costs of recourse. If one believes the self-reports of the parents living with the children, the needs of the children are not covered by the amount of child support actually paid. However, the absolute majority of liable parents indicate that they pay enough and have never failed to pay on time. The divergence in reporting regarding the amount of child support is also well documented for German parents (see, e.g., Großmann 1996; forsa 2002, pp. 23, 103).

5 Obviously, the competent courts consider different minimum personal needs for employed and non-employed liable parents as sufficient work incentives.

6 Last year, about 17% of German children who are younger than 18 years of age lived with only one parent. Without this age restriction, the rate is about 22%. Twenty years ago the percentage was already significant, but lower – at just 12% (Federal Office of Statistics 2018a, pp. 7 et seq.).

In general, establishing a causal impact of child support obligations on liable parents' behavior is challenging. This is in part due to problems of unobservable individual heterogeneity correlated with both obligations and behavior after separation. Another concern is reverse causality, i.e., whether child support obligations affect post-separation labor supply or vice versa. Note that Higher Regional Courts establish the level of obligations in child support tables and adjust them over time. This means the variation of maintenance obligations is driven by factors beyond the control of parents liable for child support, with two exceptions: The parent can only change the amount due by adjusting his/her own income and changing his/her own employment situation. Therefore, this study employs a FE-IV model, which is identified by the time-variant source of arguably exogenous variations in child support obligations to estimate a causal impact of obligations on non-resident parents' behavior. I apply the FE-IV approach to simultaneously address the issues of unobserved heterogeneity, measurement errors, and reserve causality. In particular, I use changes in the maintenance laws, varying tables/guidelines issued by the Higher Regional Courts, children's age, and parents' *pre-separation* employment status and income to simulate a time-varying IV. Thus, I exploit the exogenous variation in child support obligations but do not incorporate the change in liable parents' labor market behavior after the separation from the family. This approach is borrowed from Rossin-Slater and Wüst (2017).

Employing the SOEP data and applying an FE-IV approach, I find only weak evidence for positive marriage incentives since the coefficient of interest is only statistically significant in some specifications. Further, my results for parents at age 50 and younger suggest that an increase in child support obligations might have negative fertility incentives: A €10 increase in a parent's monthly child support obligation might reduce her/his likelihood of having an additional child by about 0.39 percentage points (about 3% at the sample mean). An increase in obligation does not affect time spent on childcare. Furthermore, obligations have no impact on parents' labor supply, i.e., on working hours or the probability to work full-time or belonging to the labor force. To my knowledge, this study is the first attempt to capture a causal effect of child support obligations on the post-separation behavior of German parents. It complements the research into child maintenance by exploiting exogenous variation in obligations and studying the reduced-form impacts of these mandated payments on the behavior of liable parents.

This study is structured as follows. Section 3.3 briefly introduces related literature on this topic. Section 3.4 explains the German child support system, while hypotheses are stated in Section 3.5. Section 3.6 describes the data. The econometric specification is introduced in Section 3.7. The empirical results and additional robustness checks are presented in Section 3.8. Section 3.9 revisits the stated hypotheses and finally concludes.

3.3 RELATED LITERATURE

Empirical papers studying the improvements in enforcement of child support in the U.S. find a reduced non-marital fertility among women (see, e.g., Case 1998; Huang 2002; Plotnick et al. 2004). The main purpose of enforcing child support is to improve its collection from liable parents, which in turn increases the cost of having a non-resident child for some parents (Tannenbaum 2015, p. 2). The mechanisms through which the relation between child support enforcement and fertility is established are not explored. However, the authors explain their results by enforcement's deterrent effect on men's fertility that is probably stronger than the potentially positive effect on the fertility of women (see, e.g., Huang 2002, p. 639). Thus, a changing contraceptive behavior or strategy chosen by men is presented as a plausible explanation (Case 1998, pp. 192 et seqq. Huang 2002, p. 295).

Furthermore, Plotnick et al. (2006) demonstrate that more stringent child support enforcement is associated with lower non-marital childbearing among young women, but not among women older than 25 years of age. Aizer and McLanahan (2006) find that stronger enforcement leads to fewer births among less educated single women. Again, the authors explain this finding by men's decision to have fewer non-marital children. Those who do become fathers tend to have more educated partners.

Bloom et al. (1996), who consider remarried men with non-marital children entitled to child support, find no effect of stronger child support enforcement on marital fertility in the U.S. In Denmark, where liable parents can reduce their obligations for children outside the household by having more biological children, child support obligations increase the fertility among remarried fathers but not among non-remarried (Rossin-Slater and Wüst 2017, pp. 20 et seq.).

Overall, fathers seem to respond to maintenance regulations or enforcement by adjusting their non-marital fertility. Further, some age and educational groups of women, and therefore possibly men, seem to be more affected by child support (enforcement) than others (Plotnick et al. 2006; Aizer and McLanahan 2006). As for marital fertility, the evidence is scarce and ambiguous.

When considering outcomes like post-separation cohabitation or remarriage, the non-resident parents are usually not the focal point of analysis (e.g., Cancian and Meyer 2014; Kim et al. 2017). There is, however, some evidence for the impact of child support regulations on marital formation or selection into marriage.[7] Bloom et al. (1996), for example, find that stricter child support enforcement impedes remarriage among low-income fathers liable for child support in

7 Tannenberg (2015) finds that "shotgun" marriages following an unplanned pregnancy are less likely under stricter child support laws in the U.S. He argues that these laws force commitment and legal responsibility from men who father a child out of wedlock, that existed prior to the child-support era only in case of a marriage (Tannenbaum 2015, pp. 3, 45; Rossin-Slater 2017). In a recent paper Rossin-Slater (2017) demonstrates that the implementation of the in-hospital voluntary paternity establishment programs in the U.S. reduces parental marriage rates. Providing non-resident parents with legal rights and obligations functions as an alternative legal contract option to marriage (Rossin-Slater 2017, p. 127).

the U.S. Further, there is no evidence for an impact on the quality of marital matches (using the age, education, and income of the new spouse) in the remarriage market (Bloom et al. 1996, pp. 24 et seq.). Rossin-Slater and Wüst (2017), who study the behavior of Danish fathers after the separation from the family, on the other hand, do not find significant effects of child support obligations on subsequent re-partnering or remarriage.

Findings in regard to child support payments and father-child contact for the U.S. are inconclusive. Some studies show a positive relationship between child support payments and visitation by an absent father (see, e.g., Chambers 1979; Furstenberg et al. 1983; Seltzer et al. 1989; Seltzer 1991). Also, Peters et al. (2004) find that government policies aimed at child support collection increase visitation and contact between children and their non-resident fathers.[8] In contrast, Veum (1993) finds that changes in child support have no impact on changes in visitation, and vice versa. He argues that the observed positive correlation in other studies is due to unmeasured characteristics of the parents.[9] Also, Nepomnyaschy (2007) finds no significant relationship of father-child contact two years ago on current formal payment and a minor effect of paying two years ago on the likelihood of current contact at 0.10 level.[10] There is also empirical evidence for a negative relationship between payments and father-child contact in the U.S.: Del Boca and Ribero (2001) show that mandatory child support transfers from the non-resident father result in the large reduction in time spent with his child.[11]

Rossin-Slater and Wüst (2017) find that Danish fathers reduce the contact with their children as a result of increased child support obligations. However, having father-child contact is defined as living with the oldest child at least one year after parental separation (Rossin-Slater and Wüst 2017, pp. 4, 19).

The existing evidence on the labor supply of the fathers is also mainly limited to the U.S. setting (see Appendix Table A.2.1 on page 180). The only exception is the recent study of Rossin-Slater and Wüst (2017), who are investigating child maintenance in Denmark. The results are mixed: Klawitter (1994) finds no significant effects of child support on the earnings of divorced noncustodial fathers in the first few years following the award of child support in Wisconsin. Freeman and Waldfogel (1998) present few statistically significant results for child support enforcement on

8 However, the sample used is restricted to never-married parents. The authors use data from the Survey of Income and Program Participation 1985-1997. About 55% of the sample is composed of African-American or Hispanic children, and about 28% of children were born to teenage mothers (Peters et al. 2004, p. 258).

9 As Veum (1993) points out, Chambers (1979), Pearson and Thoennes (1988), Seltzer et al. (1989) rely on data that is not nationally representative and cross-sectional. The samples tend to be small. Seltzer (1991) uses larger samples but also cross-sectional.

10 Nepomnyaschy (2007) uses the Fragile Families and Child Wellbeing study and estimates "cross-lagged effects models to identify the direction of causality between payments and contact". The sample consists of never-married parents with young children (three years old). The author distinguishes between payments through the formal child support system and payments contributed voluntarily (Nepomnyaschy 2007, pp. 93, 108).

11 Del Boca and Ribero (2001) investigate the impact of ordering fathers to tranfer 17% of their income to their ex-wives. The authors assume a perfect compliance. They restrict their sample to once legally married parents with one child and with positive amounts of visitation time, noncustodial parent incomes, and child support transfers. Del Boca and Ribero (2001) do not observe the actual visitation time. Therefore, they use the visitation schedule set in the final divorce stipulation (Del Boca and Ribero 2001, pp. 132 et seq.).

fathers' LFP and working hours. In an unpublished manuscript, Bitler (1998) finds that stronger child support enforcement may lead to an increase of noncustodial parents' working hours. However, the results were sensitive to model specification. Rossin-Slater and Wüst (2017) also find no significant effects of child support obligations on non-resident fathers' labor market outcomes. In contrast, Holzer et al. (2005) and Cancian et al. (2013) show a negative impact of child support mandates on fathers' labor supply. However, Holzer et al. (2005) focus on 16-34 year old black men with high school education or less and Cancian et al. (2013) on low-income fathers in Wisconsin. Rich et al. (2007) show that stricter child support enforcement is associated with fewer hours of informal employment among fathers combining work in the formal and informal sectors. The authors find little evidence that stronger enforcement is more generally associated with employment or hours in the regular sector.

I contribute to this strand of literature while focusing on German non-resident parents. I employ both individual FE and IV approaches in a unified framework to provide robust estimates of a causal relationship between child support obligations and parental post-separation behavior.

3.4 THE GERMAN CHILD SUPPORT SYSTEM

In general, maintenance obligations start from the birth of a child (VAMV 2012, p. 120). The obligation to maintain is independent of child custody (Drewes and Hollender 1985, p. 205; Borth 2011, p. 489).[12]

The child maintenance formula

Before going into details, it should first be noted that the amount of child support obligations faced by a non-resident parent depends on the following factors:

- his/her allowable net income (monthly average of the last 12 months[13]),
- his/her employment status,
- the number of the children entitled to maintenance,
- the age of these children,

12 For children whose parents are not married, the paternity must be established or recognized in order to claim maintenance. Upon request, the minimum maintenance for a child can be set at the same time in the case of a claim for paternity (VAMV 2012, p. 120).

13 For self-employed individuals, the income of the last three years is necessary.

- the regulations established by the courts in the child support table/guideline at the time t, and
- the amount of child benefit at the time t.

§1612a of the Civil Code regulates the minimum maintenance of minor children by classifying children into three age brackets: 0-5, 6-11 and 12-17. Furthermore, unmarried children of full age are equivalent to the minor unmarried children, until they reach the age of 21, as long as they live in the parental household and are in general education (§1603 (2) sentence 2).[14] The child support tables incorporate these four age groups (see, e.g., Table 3.1).

As a general rule, payments of alimony are tax-deductible (for example, as a special tax item) whereas child support payments are not. Further, the child participates in the rising standard of living of the parent liable for payments of child support. Conversely, the child participates in the income deterioration. Alimony, on the other hand, is determined by "marital living conditions" that are shaped before divorce (Krause 2008, pp. 8 et seq.). Unlike in Denmark, new biological children who live in the same household are not included in the child support formula (Rossin-Slater and Wüst 2017, p. 5).[15]

Child support payments laid down by the Higher Regional Courts

To achieve a consistent interpretation of the maintenance law the appellate courts started to issue so-called Düsseldorf Tables and corresponding guidelines in 1962. Since then, these publicly available documents provide information regarding the rules and calculations used to determine the amount of alimony and child support (Drewes and Hollender 1985, p. 207; Martiny and Schwab 2002, p. 21). Specifically, these tables and guidelines include information on the minimum personal need of a person liable for maintenance (different for employed and unemployed),[16] the definition of the allowable net incomes, how child benefit should be taken into account when calculating child support. Further, they establish income groups that are relevant for determination

14 For other children of full age, more severe requirements apply. Here, I assume that children aged 21 and over are financially self-sufficient and are not entitled to maintenance.

15 The lack of consideration of "second families" was criticized, for example, in the wake of the 2008 law (German Bundestag 2006b, p. 12). On July 30, 2008, the Federal Court of Justice for the first time took into account the needs of a new spouse when determining maintenance. However, the Federal Constitutional Court declared this practice to be unconstitutional on January 25, 2011.

16 It is important to note that being financially able to pay maintenance is a precondition for the obligation to maintain (see §1603 (1) Civil Code). Also, the debtor does not have to dispose of his/her property if that would be uneconomic in order to meet his maintenance obligation (Drewes and Hollender 1985, p. 202).

of child support.[17] These tables also include the minimum standards for different age groups of children entitled to child support, etc.

Table 3.1: Extract from the 2009 Düsseldorf Table

		Age groups (age in years)				
	Allowable net income	0 – 5	6 – 11	12 – 17	⩾ 18	**Percentage**
1.	< 1,500	281	322	377	432	100
2.	1,501 – 1,900	296	339	396	454	105
3.	1,901 – 2,300	310	355	415	476	110
4.	2,301 – 2,700	324	371	434	497	115
5.	2,701 – 3,100	338	387	453	519	120
6.	3,101 – 3,500	360	413	483	553	128
7.	3,501 – 3,900	383	438	513	588	136
8.	3,901 – 4,300	405	464	543	623	144
9.	4,301 – 4,700	428	490	574	657	152
10.	4,701 – 5,100	450	516	604	692	160
	⩾ 5,100	according to the circumstances of the case				

Notes: Two children are entitled to maintenance. Child benefit is not taken into account (€82 per minor child and €164 per adult child). Minimum standards (or standard rates) for children are shown in the 1. income group (or at 100%). All values of money are given in €.
Source: Higher Regional Court Düsseldorf 2009, p. 1

Note, after the reunification, the courts in East Germany did not use the Düsseldorf Tables but instead so-called Berlin Tables until January 1, 2008 (Vossenkämper 2007). In West Germany, the realization of maintenance in the legal reality was and is usually done according to the Düsseldorf Tables (Blaese 2000, p. 250; Breithaupt 2012, p. 27). In other words, the Düsseldorf Table was established as the standard in the legal practice (Brühl 1987, pp. 366 et seq. forsa 2002, p. 6). That is why legal scholars refer to it sometimes as a pseudo-law (see, e.g., Breithaupt 2012, p. 27). There are indications that parents with informal child support agreements in Germany rely on the Düsseldorf Table as well (see, e.g., forsa 2002, p. 90). Since July 1, 1992, the Berlin Table has been used as an antecedent to the Düsseldorf Table. The Berlin Table took over the system of the Düsseldorf Table, however on the basis of lower minimum standards for children with the consequence of entrance groups with lower income for parents (Breithaupt 2012, p. 162). This means that the Berlin Table has taken into account the peculiarities of the income structure of the new federal states (Blaese 2000, p. 250). The minimum personal needs in the Berlin Tables were lower until July 1, 2007. In the following, I will not explicitly mention the Berlin Table. The described changes usually affect the Berlin table as a preceding table for the Düsseldorf Table as well.

17 The course of the child support payments curve in a certain age group and in the given year t is very reminiscent of the income tax rate in Germany. This is also composed of different zones. The "marginal tax rate" of the maintenance curve is zero if the net income of the paying parent is below the minimum personal need. If the income exceeds the minimum personal need, any additional euro earned is "taxed" one hundred percent or taken away until the first relevant payment amount is reached. Before 2001 and after 2008 it is the payment amount of the first income group. Between 2001 and 2008 the first relevant amount is those of the sixth income group in the Düsseldorf Table (or 135% in general). Thereafter, "taxation" is gradual. Accordingly, the minimum personal need corresponds to the basic tax exemption of the income tax rate. However, there is only a short linear-progressive zone when the minimum personal need is exceeded and many proportional zones with a constant "marginal tax rate". In the 2013 Düsseldorf Table, for example, 10 proportional zones or income groups are included.

Parents' living conditions

The first Düsseldorf Table of 1962 claims to cover the "normal case" of all parents' and children's living conditions.[18] Thus, the first child support tables contain not only income groups relevant for the liable parents, but also information on significant living conditions. For example, in the second income group (DM 750-1100), the 1969 table contains the following description: Tradespersons without special training, farmers, lower civil servants, white-collar workers, mechanic and pharmacy assistants, liberal professions with similar income (Breithaupt 2012, p. 68). This means that the Düsseldorf Tables are constructed in such a way that the income groups strongly correlate with the educational qualification and the professional status of the liable parent. Since 1973, it has been refrained from explicitly including in the Düsseldorf Tables the information on the profession, and thus on the social status, of the debtor. The income groups in the Düsseldorf Tables, i.e. the net income margins, are considered indicative of significant living conditions or the living status of the paying parent (Breithaupt 2012, p. 87).

I.e., the establishment of the amount of child support obligations at separation is not random. A cross-sectional analysis, i.e., a comparison across parents, of the impact of child support obligations on post-separation outcomes is likely to produce unreliable results. It is difficult to control for all main differences between parents liable for child support in order to make them comparable. Even including all the relevant information on a parent's living conditions might not be enough. For example, there might be some personality traits that explain a parent's educational attainment,[19] hence his/her income level and, as a result, the amount of child support he/she is obligated to pay, and his/her post-separation labor supply and other outcomes.

Quasi-random variation in child support obligations over time

As can be seen from Table 3.2, the child maintenance formula was changed nearly annually, i.e., the Düsseldorf Table was changed, maintenance laws were passed, and child benefits were adjusted.[20] However, this does not mean that payments are adjusted at the individual level every

18 This assertion is supported by Göhring (1969): The table amounts are based not on judicial intuition or equitable considerations, but on statistical information of the federation and the federal states as well as information of the responsible ministries, the Federal Committee for Economic Education, the German Society for Nutrition, the Central Office for Rational Households as well publications of numerous institutions. These publications include in particular shopping cart reviews. Information from youth welfare offices, social courts, and courts outside the state of North Rhine-Westphalia are also taken into account (Göhring 1969, p. 514; Breithaupt 2012, p. 44). The table claims that all amounts are appropriate to the normal needs of the respective living conditions (Breithaupt 2012, p. 47). However, Breithaupt (2012), for example, points out that also in 1962 the needs of children were disconnected from non-resident parents' own position in life. A minimum standard per age group is simply assumed by the courts and is increased in stages (Breithaupt 2012, p. 45).

19 See, e.g., Sorić's and colleagues' (2017) study on the relationship of personality traits and academic achievement. They find that conscientiousness and extraversion predict academic achievement.

20 In general, the following justifications for adjustments in the Düsseldorf Table were presented beside some of the laws included in Table 3.2: (1) Increase in the cost of living of a child with simple living (Federal Constitutional Court 1982, p. 94; Breithaupt 2012, p. 134); (2) new regulation on the increase of the maintenance pensions for minors (e.g., Federal

year. This is left to chance from the perspective of a non-resident parent. For instance, the change in the minimum personal need does not affect individuals in higher income groups. Even if income groups are redefined, it is a matter of chance to end up in a higher or lower income group with a given income. In addition, changes occur because children age and move from one age group to another in the Düsseldorf Table. Thus, the variation of child support obligations depends also on the age of children at separation (as demonstrated in Figure 3.1).

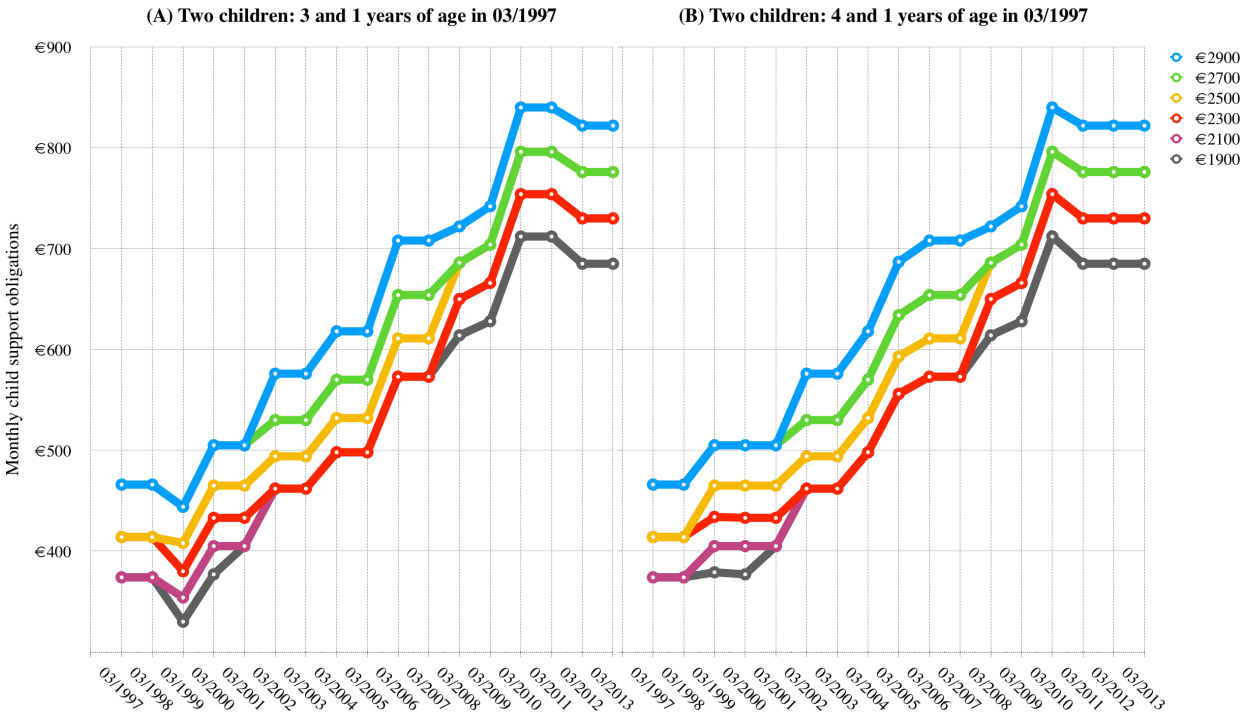
Table 3.2: Changes in the Düsseldorf Tables and Guidelines from 1985-2013

	Child benefit: 1. child/2. child	**Minimum standard (100% in the Düsseldorf Table)**	**Minimum personal need of the liable parent: Employed/ unemployed**	**Income groups thresholds**	**Number of income groups**	**Occupational expenditures: Minimum‡/ maximum**
01/1985	DM 25/50	change	DM 990/910	change	9	DM 80/240
04/1986	Law Amending Maintenance of Legal, Procedural, and other Rules					
01/1989	DM 25/50	change	DM 1,100/1,000	change†	8	DM 90/260
07/1990	DM 25/65		DM 1,100/1,000		8	DM 90/260
01/1992	DM 35/65		DM 1,100/1,000		8	DM 90/260
07/1992	DM 35/65	change	DM 1,300/1,150	change	9	DM 90/260
01/1996	DM 100/100	change	DM 1,500/1,300	change	9	DM 90/260
01/1997	DM 110/110		DM 1,500/1,300		9	DM 90/260
07/1998	Child Maintenance Act (the abolishment of differences between non-marital and marital children)					
	DM 110/110	change	DM 1,500/1,300	change	12	DM 90/260
01/1999	DM 125/125		DM 1,500/1,300		12	DM 90/260
07/1999	DM 125/125	change	DM 1,500/1,300		12	DM 90/260
01/2000	DM 135/135		DM 1,500/1,300		12	DM 90/260
01/2001	Law on the Proscription of Violence in Upbringing and Modification of Child Support					
	DM 135/135		DM 1,500/1,300		12	DM 90/260
07/2001	DM 135/135	change	DM1,640/1,425	change	13	DM 100/290
01/2002	€ 77/77	change	€ 840/730	change	13	€ 50/150
07/2003	€ 77/77	change	€ 840/730		13	€ 50/150
07/2005	€ 77/77	change	€ 890/770		13	€ 50/150
07/2007	€ 77/77 € 154/154*	change	€ 900/770		13	€ 50/150
01/2008	Law to Modify Alimony Regulations					
	€ 77/77 € 154/154*	change	€ 900/770	change	10	€ 50/150
01/2009	€ 82 /82 € 164/164*		€ 900/770		10	€ 50/150
01/2010	€ 92 /92 € 184/184*	change	€ 900/770		10	€ 50/150
01/2011	€ 92 /92 € 184/184*		€ 950/770		10	€ 50/150
01/2013	€ 92 /92 € 184/184*		€ 1,000/800		10	€ 50/150
03/2013	Reform of alimony law (concerning long marriages)					

Notes: * if older than 17 years of age (age group 4 in the Düsseldorf Tables); ‡ if part-time employed also less; † The first two income groups were merged. The number of income groups does not include the last group with the highest incomes. The Düsseldorf Table 1998 is the first table without reference to "illegitimate children". This is due to the improved legal equality of non-marital and marital children (Brühl 1987, p. 367; Breithaupt 2012, pp. 112, 195). The Düsseldorf Tables and comments are based on the coordination agreement between the judges of the Family Senate of the Higher Regional Courts of Düsseldorf, Cologne, and Hamm, and the maintenance commission of the German Family Court Day e.V. Additionally, the results of the survey of all Higher Regional Courts are taken into account (Breithaupt 2012, p. 162).
Source: Drewes and Hollender 1985, pp. 207 et seq., 223, 239; Eschenbruch 1990, p. 269; Gnann 1995, p. 64; Suhrkamp Verlag 1998, pp. 257-260; Suhrkamp Verlag 1999, p. 284; Wörz 2011, pp. 24 et seq. Breithaupt 2012

Government 1984, p. 1035; Federal Government 1992, p. 535); (3) change in the regular need for non-marital children (Breithaupt 2012, p. 151).

Most importantly, changes presented in Table 3.2 are independent of the observed labor supply or other behavior of liable parents. All of the adjustments in the maintenance tables are based on legislative variation or decisions by legal authorities (Breithaupt 2012, p. 421). Thus, these changes are exogenous to debtors or receivers of the maintenance.



Notes: (A) The first child is three years old in 03/1997 and the second child one year old. In 03/2013 the first child is 19 years, the younger child 17 years of age. For a separate listing of maintenance obligations per child, see Appendix Table A.2.2 on page 181. (B) The first child is four years old in 03/1997 and the second child one year old. In 03/2013 the first child is 20 years, the younger child 17 years of age.
Allowable net income that is held constant is the average monthly income. Here, it ranges from €1,900 to €2,900. Child support obligations are monthly payments, after deduction of the corresponding share of the child benefit. The presented values are not adjusted for inflation and rounded to full amounts.
Source: Gnann 1995, p. 64; Suhrkamp Verlag 1998, pp. 257-260; Higher Regional Court Düsseldorf 1999a, p. 1; Higher Regional Court Düsseldorf 2002, p. 1; Higher Regional Court Düsseldorf 2003a, p. 1; Higher Regional Court Düsseldorf 2005a, p. 1; Higher Regional Court Düsseldorf 2007a, p. 1; Higher Regional Court Düsseldorf 2008a, p. 1; Higher Regional Court Düsseldorf 2009, p. 1; Higher Regional Court Düsseldorf 2010a, p. 1; Higher Regional Court Düsseldorf 2011, p. 1; Higher Regional Court Düsseldorf 2013, p. 1

Figure 3.1: Examples of variation in monthly child support obligations for two children

Another argument for the above-mentioned exogeneity is the inconsistent nature of these changes that cause them to be unintuitive and unpredictable. For example, the increase in the minimum personal need of the employed individuals in 2007 was justified by price increases. However, such price increases have not led to an increase in the minimum personal need of the non-employed (Breithaupt 2012, pp. 267 et seq.). Another example is the 1989 change of the Düsseldorf Table: An increase in child support obligations in the first three income groups, but not for the children of parents with higher income (Breithaupt 2012, p. 152).

Serious modifications in how maintenance is calculated took place in 2001 and 2008. A new law governing child support came into force on January 1, 2001 (German Bundestag 2000b). It affected parents in some income groups who were liable to pay support to their children. Now, if the allowable income of those parents exceeds a certain threshold (135% of minimum standards), then half of the child benefit is deducted from child support payments. Before 2001, the full deduction, i.e., half of child benefit, was (partly) refused to parents paying child support whose income was lower, or more specifically, below minimum standards, i.e., below 100% (Böttner 2001, p. 170; Landtag von Baden-Württemberg 2001, p. 6). This way of child benefit deduction changed again in 2008 (see Chapter 2 for full explanation of the 2008 reform). Again, these law changes are not related to the behavior of parents liable for child support.

3.5 HYPOTHESES

Based on the empirical evidence presented in Section 3.3 and the nature of the German child maintenance system, I form the following hypotheses:

Hypothesis 1a: Non-resident parents' likelihood of (re)marrying increases as a result of increased child support obligations.

Hypothesis 1b: Parents' likelihood of cohabiting with a new partner increases as a result of increased child support obligations.

Some non-resident parents may have a positive incentive to (re)marry or to cohabit with a new partner when the child support obligation is increased. Since the children from previous relationship are not resident in the household,[21] the probability of remarriage or cohabitation is likely to be affected through financial channels (Bloom et al. 1996, p. 5). Increasing child support obligations reduce the disposable income of the parent liable for child support. Contrary to single households, two individuals who share a household have the possibility to exploit economies of scale in consumption and in household production (Chiappori and Mazzocco 2015, p. 59). A marriage can additionally provide tax benefits. Note, there is no theory demonstrating a clear effect (positive or negative) of child support obligations on (re)marriage (Bloom et al. 1996, p. 5).

Hypothesis 2: Parents' fertility decreases as a result of an increase in the amount of child support obligations.

21 Ivanova et al. (2013) demonstrate that the presence of children provides an important explanation for the gender gap in re-partnering following a first marriage dissolution. Women are less likely to re-partner after separation than men. German men's likelihood of re-partnering is not significantly influenced by fatherhood. The authors argue that resident children can be obstructive to parent's re-partnering (Ivanova et al. 2013, pp. 421, 439).

The existing evidence for the U.S. suggests that the improvements in child support enforcement – which in turn increase the cost of having a non-resident child – can lead to a decreased likelihood of having additional children.[22]

Findings regarding child support payments and time invested in children are ambiguous. Here, I propose that an increase in financial obligation functions as a substitute for time spent on childcare:

Hypothesis 3: Parents' hours spent on childcare decrease as a result of increased child support obligations.

A change in involvement can probably only happen at weekends since the child lives in the household of the other parent and it is likely that visitation occurs primarily on the weekends.

Previous research on child support enforcement/obligations and parents' labor supply produced inconclusive results. A non-resident parent could respond to an increase in child support obligations in two different ways: By increasing his/her effort to compensate for his/her loss of net income (dominating "income effect") or by decreasing his/her engagement on the labor market (dominating "substitution effect"). I expect to see a lower engagement on the labor market as a reaction to increased obligations. Therefore, I form the following proposition:

Hypothesis 4: Parents reduce their labor supply as a response to increased obligations.

There is always the possibility that child support is not perceived as a tax on income by the non-resident parents (Klawitter 1994, p. 353). After all, the maintenance recipient is not a stranger to the non-resident parent, but his/her own child. A non-resident parent might even increase his/her labor supply to be able to pay a higher amount of child support (Rossin-Slater and Wüst 2017, p. 21). Also, the existence of informal working arrangements complicates conventional taxation theory (Rich et al. 2007, p. 793). Allowing the possibility of undeclared work, the liable parent can divide his time between informal labor, formal work, and non-work.

Here, it is impossible to detect an individual's decision regarding whether or not to avoid or evade child support liability. And if so, to what extent. In general, there are different possibilities of child support evasion: Evasion by leaving the country or moving without informing the authorities/payee, by underreporting earnings, or by going into debt intentionally. In the case of arrears or debt due to child support, transferring ownership of assets to a family member or a new partner is one of the ways to avoid payments of child support debt. However, it seems very unlikely that survey participants practice illegal methods of maintenance evasion. Since I include only non-resident parents who are observed at least two years post-separation and who voluntarily share private information on income etc, such problems of avoidance or evasion seem

22 Unlike in Denmark, German and U.S. parents do not face a financial incentive to have more biological children in order to reduce their child support obligation for children outside their household.

not very likely. On the other hand, parents who take part in surveys and, especially, remain in the survey after the separation are unlikely to be representative of the population of non-resident parents. It is also conceivable that participating in the study in itself increases their compliance. If one wants to make statements about all liable parents, administrative data without drop-outs seems to be more appropriate. In sum, it cannot be ruled out that some of the liable parents have made informal arrangements with their employers to avoid or reduce child maintenance. In the end, I rely on self-reported incomes, time allocation etc.

3.6 DATA

Data source and restrictions

I use the German Socio-Economic Panel study *SOEP* (1984-2013) – a representative longitudinal study providing information on all household members.[23] I restrict the sample in several ways: Former cohabiting partners with children are included since July 1, 1998 (see Table 3.2), East Germans since July 1, 1992. For the sake of convenience, I include only individuals who have one or two biological children at time of separation. Further, I exclude couples when the resident parent's income is higher than that of the non-resident parent at divorce. In such cases, the calculation of child support is more complicated. I also exclude couples when both former partners report to be single parents at the same time. Thus, I exclude parents with joint physical care.

Dependent variables

The present study includes three different aspects of parental behavioral responses to changing child support obligations: Family formation, childcare hours, and labor supply.

Family formation

I investigate post-separation family formation by looking at the likelihood of (re)marrying, cohabiting with a new partner, and of having new biological children. Therefore, I construct dummies that equal one if this is the case, and zero otherwise.

Hours invested in childcare

After divorce, the variables that link the non-resident parent to the child are child support pay-

23 For more information see Wagner et al. 2007.

ments, in-kind financial support, and visitations (Garasky et al. 2010, p. 363). Visitation or parent-child contact can be depicted by the question "What is a typical weekday like for you? How many hours per normal workday do you spend on the following activities?" and the same question for Saturday and Sunday. Possible answers include childcare. It is important to include both a weekday and a weekend report because a non-resident parent's involvement with his/her children might be primarily on the weekend.

Labor supply

The dependent variables should reflect the behavioral response of liable parents in the labor market to the child support obligation. Therefore, participation in the labor force and being full-time employed are constructed as dummies that equal one if this is the case, and zero otherwise. Further, working hours on an average workday are included as an outcome.

Self-reported amount of child support

The SOEP asks if payments or financial support were made by the respondent to their own children (including son-in-law or daughter-in-law) outside the household in the previous year. The respondent can indicate the amount paid. The question in 2013, for example, is, "What was approximately the total amount in 2012?".[24] I.e., it cannot be distinguished whether the money was paid voluntarily or as consequence of child support obligation. I include self-reported payments as an outcome variable anyway.

The second problem with this survey question is that the respondent is asked to provide an amount that relates to the whole year. This is unfortunate as liable parents pay an amount for child maintenance on a monthly basis. That is, the respondent first has to extrapolate this monthly amount to the whole year. Accordingly, erroneous amounts are likely to be reported. It would be better to ask how many months of child support were provided last year. In addition, the monthly amount should be queried.

The discrepancy between the amounts I have determined and the self-reported data could be the result of the following factors: Recall bias, errors in extrapolation of monthly amounts, rounding errors while calculating, response bias like socially desirable answers[25], erroneous statements of own income, income from undeclared work, etc. It would be negligent to interpret the discrepancy as simply reflecting an over- or underpayment. Of course, there are also cases with obvious contradictory information. For example, one father states that he has not worked since 2010 and does not have any other income (for example unemployment benefit II). At the same time, this

24 I use the variable "plj0136" from SOEPlong v30.

25 Bröckel and Andreß, who also use the SOEP in their analysis, point to the discrepancy in the given information on child support amount by non-resident and resident parent. They also argue, that self-reported payments might be exaggerated by the liable parent in order to be perceived as a generous and responsible parent by the interviewer (Bröckel and Andreß 2015, p. 290).

parent states in 2012 that in the previous year he had paid €15,000 to his own children. In such cases, it is unclear whether the income or the amount of child support is reported incorrectly. It is also possible that this person works in the informal sector and reports his "official" income, but not his undeclared work (including income and working hours).

Separation and income

I observe existing couples with joint children who separate over time. For this analysis, I need first (marital) breakups with children involved. The year of separation is defined as the first year in which individuals are no longer observed to live in the same household and the non-resident parent is liable to pay child support. Note, that this is not the same as the year of separation in legal terms. Instead, it is the first year of obligation to pay child support. The last year when the couple lived with their children in the same household is called the year before separation or *bsepy*.

There are many arguments to use the net income from the last calendar year before the separation. First, this income is not burdened by a maintenance order. Second, it is highly unlikely that a parent will reduce his/her income in anticipation of a future maintenance obligation. Voluntary income reduction would be unlawful (von Heintschel-Heinegg and Gerhardt 1990, p. 51) and easier to detect when parents live together. Even if the first earner intentionally reduces his/her income during the separation period, a fictitious income is assumed, based on which the maintenance amount is calculated (Wendl and Staudigl 1995). Third, income and church taxes are only taken into account in actual amounts, even in the event of a change in tax class, e.g. from class III before the divorce to class I after the divorce has taken place (von Heintschel-Heinegg and Gerhardt 1990, p. 31). Therefore, the parties can assert the income reduction resulting after the divorce by changing the tax category only by means of a petition to modify a judgment according to §323 of the Civil Process Order. This is a significant obstacle for those affected.

Children entitled to child support

I rely on the assumption that children born in an existing relationship are the biological children of both partners. Thus, I exclude the possibility of, for example, infidelity leading to the birth of a child. One of the challenges is to link biological children to the non-resident parent because of multiple fertilities and different living arrangements.

I exclude couples for whom I cannot determine beyond doubt whether the child living in their household was born during their relationship. For example, a couple having an 11 year old child

in the household is not married at separation and can only be observed for two years prior to the breakup. Further, information on received child allowance and other information that is helpful in understanding whether it is a joint child is missing. In such a case, it is not clear that the child is indeed the biological child of both partners. Therefore, such individuals are excluded.
Furthermore, I consider children between 18-20 years of age to be entitled to child support as well (see Düsseldorf Table age group 4). I assume that the entitlement to receive child support expires when the child turns 21.

Alimony

Unlike child support, the level of spousal support is determined by the so-called "marital living conditions". Only those incomes that have shaped the marital living conditions, should be used for the maintenance calculation in spousal maintenance (Borth 2011, p. 142). Therefore, in principle, changes in income after divorce can no longer affect marital relationships (von Heintschel-Heinegg and Gerhardt 1990, p. 66; Borth 2011, pp. 13 et seq.). In the case of child support, on the other hand, it is necessary to constantly recheck whether changes in the income situation also affect maintenance (Finanztip 2012, accessed on 05.29.2018). The child has, unlike the former spouse, no standard of living guarantee. The child participates in the rising standard of living of the parent responsible for the child support payment as during his/her parents' existing marital relationship. Conversely, the child also participates in the income deterioration (Krause 2008, pp. 8 et seq.). Therefore, alimony established at divorce can be considered time-invariant, whereas child maintenance is not. Only in so-called cases of shortfall, alimony directly interferes with the amount of child support.

Amount of child support obligations

The so-called adjusted net income is decisive for the calculation of child support. This is formed by deducting from the gross income the relevant amounts that are not available to the parents for their general need. These are the following items: Income and church tax, additional costs like health insurance, pension insurance, etc., work-related expenses, specific additional needs due to illness or old age, and debts worthy of consideration (von Heintschel-Heinegg and Gerhardt 1990, pp. 31, 34). However, I only consider the work-related expenses shown in Table 3.2 and self-reported net incomes.
For the adjusted net income, the monthly average income is determined. This is formed for non-self-employed and retirees from the average of one year. In reality, for self-employed individuals

and tradespeople, the adjusted net income is calculated from the average of the last three years (von Heintschel-Heinegg and Gerhardt 1990, p. 30). However, I use the average of one year for all individuals. Since I use one-year retrospective information on employment situation and incomes, I compare this information to current reports. Jürges (2005), e.g., finds evidence of retrospective bias in SOEP calendar data in case of unemployment. Further, missing data on unemployment benefit I and II, and sick pay is added (Institute for Employment Research 1993, accessed on 11.20.2017; Federal Government 2013, accessed on 11.26.2017; Steffen 2018, accessed on 06.03.2018).

I calculate the amount of child support obligations every year post-separation based on the child support formula presented in Section 3.4. For the IV, I use allowable incomes reported in *bsepy*. I do not include information on personal debt since it is only available every five years. Net incomes in the year before separation are pre-determined at the time of child support calculation (Rossin-Slater and Wüst 2016, pp. 3 et seq.).

Child support enforcement

A maintenance claim is only enforceable if it is titled. That is, in order to recover the maintenance, there must be an enforceable title, in the form of a decision, a judgment or the like. In case of non-payment, these deeds on maintenance payments can be used for enforcement.[26] For this purpose, either bailiffs can seize objects from a debtor. Alternatively, a court of execution may seize labor income: A seizure and remittance order will cause the debtor's employer to pay part of debtor's salary directly to the parent who has the right to collect child support payments. Notaries, judicial officers and judges of the district court and the employees of the youth welfare office can issue (enforceable) titles (VAMV 2012, p. 120).

There is variation across federal states and years in child support recourse rates. The recourse rate can be understood as a measure of the institutional enforcement of maintenance (Bremische Bürgerschaft 2008, p. 64) or as a repayment risk a non-paying parent faces living in a certain federal state and year.[27] Although information on a county level would be more meaningful, I could only find this ratio for the years 1995 and 2000-2013 for all 16 federal states. Bavaria is the most successful federal state in relation to the recourse available to persons owed maintenance. Bremen is the least successful (1995 and 2000-2014; Audit Office Baden-Wuerttemberg 2016, p. 161). Thus, I control for the recourse ratio in some specifications.

26 Enforcement implies that a titled claim that is not voluntarily paid by the debtor is enforced by a state procedure.

27 The purpose of the recourse is also to hold accountable the debtor for periods after the receipt of the maintenance advance (Bremische Bürgerschaft 2008, p. 7).

Descriptive statistics

Based on 2,586 parent-year observations, my sample is on average predominantly male, 42 years old, has an intermediate level of education, about 19 years experience in full-time employment, and 1.33 children entitled to maintenance.
Comparing parent-year observations with a self-report in child support amount with those with missing information reveal some significant differences. On average, the former have higher educational attainment and LFP, and more experience in full-time employment. The nonresponse sample has significantly more minor children living in its household post-separation, on average. Further, child support obligations for observations with self-report is higher in comparison to observations with nonresponse, on average (Appendix Table A.2.3 on page 182). This is an indication of a selective response behavior on the part of the parents.

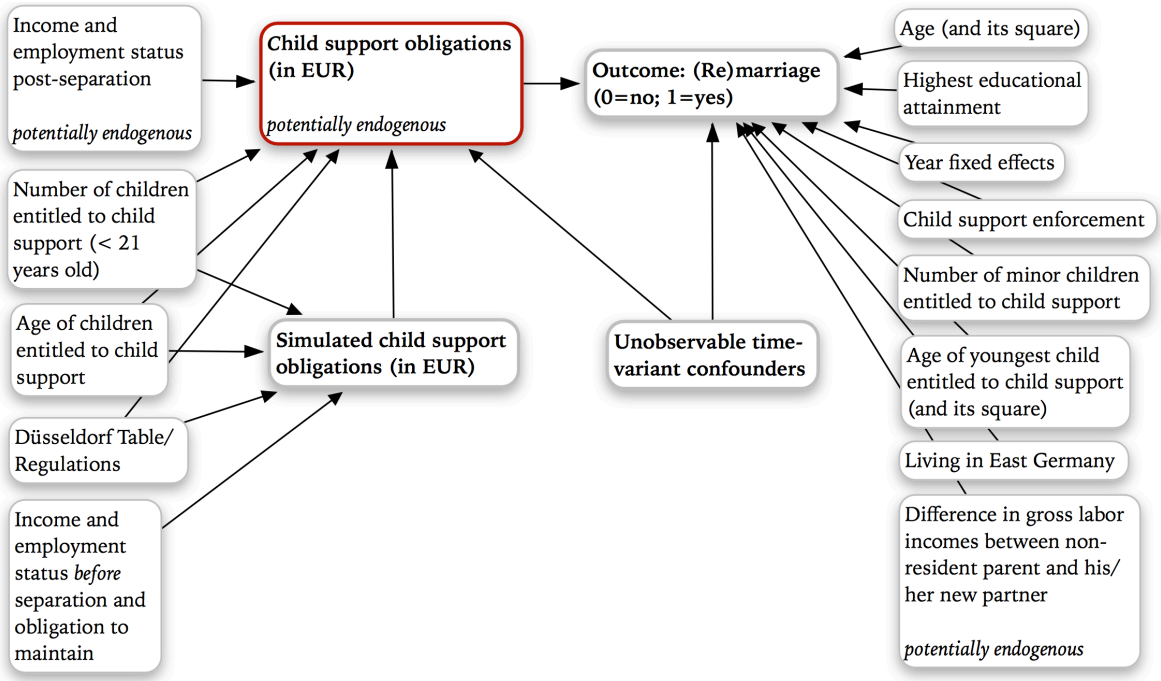
3.7 IDENTIFICATION STRATEGY

The main focus of this study is on the effect of varying child support obligations on a wide range of parental behaviors: Labor supply, family formation, and parent-child contact post-separation. However, the endogeneity problem is raised by the liable parent being able to change the amount due because he/she can adjust his/her own income and change his/her own employment situation. Since a liable parent has some influence or choice over his/her child support obligations, I cannot simply estimate ordinary FE regressions with a liable parent's obligations as an explanatory variable.
When the child support obligation is changed as explained in Section 3.4, the non-resident parent's new maintenance payments are determined by two elements:

1. the exogenous variation in child support obligations which is uncorrelated with any characteristics or behavior of the paying parent,

2. the parent's decision on how to respond to the change in the obligation which is probably correlated with the error term in a standard FE regression.

Therefore, the basic idea is to construct an IV that captures only the exogenous changes in child support obligations, but not the changes in the parent's labor market behavior (see Figure 3.2). Thus, I use changing Düsseldorf Tables, child benefits etc. to look up the mandated payments a parent would face *if* he/she did *not* change his/her allowable net income and employment status from before the obligation to maintain. This simulated instrumental variables (SIV) approach is



Notes: Child support obligations are monthly payments, after deduction of the corresponding share of the child benefit. Simulated child support obligations are my constructed IV. The recourse rate of the maintenance advance is included as a proxy for the institutional enforcement of child support (Bremische Bürgerschaft 2008, p. 64). As demonstrated by Shafer and James (2013) controlling for socioeconomic characteristics might be important for the (re)marriage formation. However, income is a potentially endogenous variable since it influences the amount of child support obligations. To avoid this problem I control for the highest educational attainment and additionally conduct subgroup analysis. I split my sample using the CASMIN educational classification into two categories: Parents with an intermediate level of education or less, and parents with general and vocational certification at the maturity level or tertiary education. The absolute difference in intra-household incomes is potentially endogenous and is therefore only included in some specifications. For single households and couples with the same individual gross incomes this difference is zero. The intuition behind the inclusion of this variable is to control for the potential to save taxes due to a marriage when there is a gap between a non-resident parent's gross income and his/her partner's gross income.
Source: Own illustration

Figure 3.2: Causal diagram for (re)marriage

borrowed from Rossin-Slater and Wüst (2016).[28] However, I run FE models[29] with constructed child support obligations based on a parent's allowable net income and employment status before separation.[30] Thus, I use a time-varying SIV.

28 Rossin-Slater's and Wüst's (2016, 2017) SIV approach is mainly inspired by two studies on Earned Income Tax credit benefits in the U.S. (Dahl and Lochner 2012; Chetty et al. 2011).

29 I estimate linear models with binary outcomes. In general, FE probit or logit models do not produce consistent estimates for the endogenous variables (Greene 2012).

30 Rossin-Slater and Wüst (2016) investigate the responses of Danish fathers liable for child support to child support obligations. Their analysis is cross-sectional. The authors limit their sample to fathers with annual separation year incomes within the 175,000-505,000DKK range (in real year 2000; $25,991-$75,004; Rossin-Slater and Wüst 2016, p. 9). A flexible function of the father's real gross income in each year post-separation is, in addition to other various controls, included in their 2SLS IV models (Rossin-Slater and Wüst 2016, p. 13). The authors find that a 1,000 DKK ($149) increase in a fathers's annual obligation reduces the fraction of years with positive labor income by 0.2% and increases the proportion of years outside the labor force by 5% at the respective sample means. The decline in the LFP is driven entirely by higher-income fathers (Rossin-Slater and Wüst 2016, pp. 22 et seq.). However, after restricting the sample to fathers with annual incomes within the 270,000-405,000DKK range (in real year 2000; in the year of separation) the authors find no labor response anymore (Rossin-Slater and Wüst 2017, p. 9). This demonstrates that it is challenging to control for all important characteristics across fathers in order to make them comparable. Therefore, a FE-IV approach might be helpful to overcome this problem.

In a standard FE model I would estimate the outcome Y of non-resident parent i at time t as follows:

$$Y_{it} = \beta_1 + \beta_2 \cdot Obl_{it} + \beta_3 \cdot X_{it} + \delta_t + \epsilon_i + u_{it} \tag{3}$$

where Obl_{it} indicates the potentially endogenous variable, X_{it} is a vector of individual characteristics, δ_t is the fixed year effects. The ϵ_i captures time-invariant factors (Greene 2012, p. 400). The u_{it} are idiosyncratic disturbances that represent time-variant factors and affect the outcome (Wooldridge 2002, p. 251). The coefficient β_2 is the parameter of interest.

The model in Equation (3) produces more accurate estimates than an OLS regression that does not control for heterogeneity at individual level (Kennedy 2008, pp. 283 et seq.). However, there may be a concern that unobserved time-variant individual-specific factors u_{it} are correlated with both the outcome and child support obligations. In order to address this potential endogeneity problem in Equation (3) I use a FE-IV approach:

$$Obl_{it} = \alpha_1 + \alpha_2 \cdot Obl\_IV_{it} + \alpha_3 \cdot X_{it} + \delta_t + \epsilon_i + \nu_{it} \tag{4}$$

where Obl_IV_{it} is my instrument, and ν_{it} is an idiosyncratic error term.

I need to include all non-problematic variables in X_{it} that explain the outcome besides the instrument variable in my FE-IV models. Also, my instrument *Obl_IV* should not be a linear combination of other exogenous variables in the model (Verbeek 2012, p. 150). As demonstrated by Deuchert and Huber (2017), the inclusion of improper controls may lead to severely biased estimates. The authors show that that the timing of the determination and measurement of time-varying control variables affects the plausibility of conditional IV independence (Deuchert and Huber 2017, p. 412). Since a parent's pre-separation income is kept constant over time, changes in *Obl_IV* stem from the number of entitled children, children's move from one age group to another in the Düsseldorf table and from the variation presented in Table 3.2.

The individual's age as a second order polynomial, the highest educational attainment, the youngest non-resident child's age as a second order polynomial, the number of minor non-resident children, and year fixed effects seem to be good candidates when exploring an individual's behavioral response. Information like the year of separation, partnership status at separation (married/non-married), income at separation, migration background, fixed costs due to separation, alimony payments, gender of non-resident children etc. are all time-invariant variables at individual level. Parent's income and employment status post-separation are potentially endogenous and should, therefore, not be included in the model. However, Shafer and James (2013) show, for example, that controlling for socioeconomic characteristics might be important

for the (re)marriage formation. Since I do not include income in my models, I control for the individual's highest educational attainment and additionally conduct subgroup analysis. I split my sample using the CASMIN educational classification into two categories: Parents with an intermediate level of education or less, and parents with general and vocational certification at the maturity level or tertiary education. This approach is also supported by related literature, demonstrating that some educational groups of men are more affected by child support (enforcement) than others (Bloom et al. 1996).

When investigating (re)marriage behavior I also include the absolute difference in intra-household incomes in some specifications. For single households and couples with the same individual gross incomes this difference is zero. The intuition behind the inclusion of this variable is to control for the potential to save taxes due to a marriage when there is a gap between a non-resident parent's gross income and his/her partner's gross income. Controlling for this variable might be, however, problematic.

An IV must satisfy two conditions: Relevance and exclusion. The relevance condition can be easily tested by running the regression of *Obl* on all the other regressors and instrument *Obl_IV* to see if the instrument explains *Obl*. The exclusion condition means *Obl_IV* is uncorrelated with the time-variant individual-specific disturbance. The instrument must be uncorrelated with the outcome except through *Obl*. It is impossible to test the exclusion restriction because the disturbance is unobservable. I assume that changes in *Obl_IV* explain the changes in the outcome, but only through its effect on *Obl*. In Section 3.4, I presented arguments as to why changes in obligations are quasi-random.

There are a number of threats to my FE-IV identification assumptions, for example:

- a lack of within-variation in the outcome, *Obl*, and the instrument *Obl_IV*,
- the omission of time-variant variables that are potentially associated with both – my instrument *Obl_IV* and the dependent variable at the same time (Angrist and Pischke 2009, p. 243; Thu Le and Nguyen 2018, p. 205).

Since I do not observe the actual child support transfer for non-resident parents, I additionally look at specific periods when the lawmaker aimed to increase child support compliance: The 2001 law introduced stricter payment rules for non-resident parents within the first five income groups in the Düsseldorf Table (Wörz 2011, pp. 24 et seq.).[31] The purpose of *2008 Reform of the German Maintenance Law* was to strengthen the best interest of the child. However, the way the reform was designed meant that it would only benefit children in so-called cases of shortfall, if

31 In 1991 the *Law to Modify Maintenance Security Law and Maintenance Security Ordinance* came into force, extending the duration of advance child support from 36 to 72 months. However, the improvement of child support payments/compliance was not in the focus.

at all. The obligation to provide information regarding the income of non-resident parents has been, nonetheless, improved.

3.8 EMPIRICAL RESULTS

First stage

For every FE-IV specification, I report the first stage coefficient and the corresponding F-statistic. Figure 3.2 illustrates the relationship between the potentially endogenous child support obligations Obl and the constructed instrument Obl_IV. Both quantities are reported in year 2000 real units of €10. The interpretation of the first stage coefficient ≈ 0.679 is, for example, the following: An increase of €10 monthly in child support obligations Obl_IV is associated with a €6.79 increase in Obl. Across all specifications, the correlation between *Obl* and *Obl_IV* seems to be strong.[32] The F-statistic is always above 10, indicating a strong first stage.[33]

Self-reported average amount of child support

The sample of non-resident parents that is included here reports positive amounts of child support (including zero) at least two times. Based on 1,021 parent-year observations, the self-reported child support payment is €335.40 per month on average. 53% of observations are classified as paying at least the amount of child support that has been mandated. All results for self-reported child support can be found in Appendix A.2.1 starting on page 182.

There is a positive correlation between obligation and payment when I control for parent's age as a second order polynomial, his/her highest educational attainment, and year fixed effects in my FE-IV model: I find that a €10 increase in a parent's monthly child support obligation is associated with a €2.42 increase in his/her self-reported monthly payment.[34] When I include youngest child's age as a second order polynomial and the number of minors entitled to child support, the coefficient is reduced to €0.93. For parents with an intermediate level of education or less, the coefficient of interest does not vary greatly between the different specifications: It

32 In the case of one endogeneous variable and one instrument, weak identification corresponds to a weak correlation between the regressor and the instrument (Mikusheva 2013, pp. 118 et seq.).

33 Staiger and Stock (1997) proposed that instruments should be considered weak if the first-stage F-statistic is less than 10. The Staiger-Stock rule of thumb is further discussed by Stock and Yogo (2005). Note, the Sanderson-Windmeijer multivariate F test of excluded instruments produces the same F-statistic as the Kleibergen-Paap Wald rk F-statistic in my models with one endogenous variable and one instrument.

34 In comparison, Rossin-Slater and Wüst (2017) find that a 1,000DKK ($160) increase in a father's annual obligation is associated with a 273DKK ($45) increase in his average annual payment (significant at 0.10 level; Rossin-Slater and Wüst 2017, p. 19).

ranges between €2.90 and €1.98. For more educated parents, the coefficient is €1.80 and is not statistically significant at the 0.10 level when including – only – parent's age as a second order polynomial and year fixed effects. When additionally controlling for parent's highest educational attainment, youngest child's age as a second order polynomial, and the number of minor children outside the household, the coefficient of interest is €0.67.

Note, the null hypothesis that the potentially endogenous regressor, Obl, can be treated as exogenous is not rejected in all FE-IV models when taking into account all non-resident parents and less educated parents. When I run FE regressions for less educated parents the response is smaller in comparison to the FE-IV models: A €10 increase in a parent's monthly child support obligation is now associated with a €1.40 instead of a €1.98 increase in his/her self-reported monthly payment.[35] For more educated parents the coefficient is similar – about €1.39 – but not statistically significant at 0.10 level.

Further, it is shown that higher child support obligations reduce the likelihood of reportedly paying the amount of the obligations or more by about 1.6 percentage points (about 3% at the sample mean; Column (3) of Panel A in Appendix Table A.2.6). A negative coefficient suggests that payments defined by the courts may be in part substituting for voluntary child support that parents would have otherwise paid. Also of note here, the null hypothesis that the potentially endogenous regressor, Obl, can be treated as exogenous cannot be rejected. The response is somewhat stronger when estimating FE models: For less educated parents it is about -1.7 instead of -1.4 percentage points in FE-IV models. For more educated parents, however, the coefficients do not differ very much in FE and FE-IV models: A reduction by about 2.0-2.1 percentage points (about 4% at the sample mean).

Note, I do not analyze actual payments; rather I analyze self-reported payments from the parents liable for child support. Therefore, these findings should be interpreted with caution. There are other explanations for the discrepancy between obligations and self-reported payments besides the ones stated in Section 3.6: Imperfect compliance, informal agreement between the former couple, missing adjustment to changes in the child support formula, and changing in-kind payments. Keep in mind, the measurement in the SOEP of child support is problematic.

The findings reported should certainly be taken in light of the natural shortcomings in the data, however, it is also noted that they are in line with Rossin-Slater's and Wüst's (2017) study of Danish fathers. There is a lack of perfect correlation between obligations and payments. Further, the authors find indication for partial substitution of obligations for child support paid voluntarily. I.e., there is a negative relationship between higher obligations and the likelihood of paying more than the mandated amount of child support (Rossin-Slater and Wüst 2017, pp. 3, 19).

35 My preferred specification includes parent's age as a second order polynomial, his/her highest educational attainment, the number of his/her minor children outside the household, youngest child's age as a second order polynomial, and year fixed effects (see, e.g., Column (3) of Appendix Table A.2.7).

(Re)marriage

There is no statistically significant change in the likelihood of being (re)married as a reaction to increasing child support obligations when including all post-separation years from 1985-2013. Considering the time period after the entry into force of the *2001 Law on the Proscription of Violence in Upbringing and Modification of Child Support* produces a statistically significant but relatively small effect: A €10 increase in a parent's monthly obligation might increase her/his likelihood of being (re)married by about 0.33 percentage points (about 2% at the sample mean; see Column (2) of Table 3.3).[36] It seems that this result is driven by better educated non-resident parents. If I split my sample using the CASMIN educational classification into two categories, the response is about 0.59 percentage points (about 3% at the sample mean) in the group of individuals with general and vocational certification at the maturity level or tertiary education (Column (4) of Table 3.3).[37]

For non-resident parents with an intermediate level of education or less, the result is about 0.17 percentage points (about 0.9% at the sample mean) and the coefficient is not statistically significant at the 0.10 level (Column (6) of Table 3.3). More important, the null hypothesis that the endogenous regressor Obl can be treated as exogenous cannot be rejected. Tests of significance of Obl in the main equation suggest that the parameter of this endogenous variable is not different from zero (weak-instrument-robust inference; Baum et al. 2007, p. 491; Núñez 2008, p. 133).

The likelihood of (re)marrying might also be influenced by the income or employment situation of the new partner. Note, however, the choice of a potential spouse or (cohabitation) partner might be endogenous. When I include indicators for different households (living alone; living with a partner who does not work; living with a partner employed part-time; living together with a partner who works full-time) besides individual's age as a second order polynomial, highest educational attainment, year fixed effects, youngest child's age as a second order polynomial, the number of non-resident minors who are entitled to child support, and recourse rate, the coefficient of interest is still $\approx$ 0.3 percentage points (about 2% at the sample mean) and significant at the 0.05 level for all non-resident parents.[38,39] This result holds even when I additionally include

36 Additionally controlling for "living in East Germany" as presented in Figure 3.2 does not change the results. Interestingly, controlling for socioeconomic characteristics, like current employment status, education and income, that might be important for (re)marriage formation (see, e.g., Shafer and James 2013), hardly changes the magnitude of the coefficient from Column (1). The coefficient is $\approx$ 0.4 percentage points when I include control variables for minors living in the household. Note, current income, employment status, and new children in the household are all potentially endogenous variables. Controlling for new children, for example, might lead to collider or selection bias (Deuchert and Huber 2017, pp. 422 et seq.) because non-resident parents might respond to changing child support obligations by having new children.

37 Since the number of clusters (78 non-resident parents) is higher than the number of included exogenous regressors and the excluded instrument, partialling-out of some exogenous regressors is not necessary (Baum et al. 2007, p. 485).

38 The sample from Columns (1) and (2) of Table 3.3 is reduced to 1,529 observations or 280 non-resident parents when controlling for household categories.

39 For better educated parents, additionally controlling for household categories changes the magnitude of the coefficient for Obl. It is $\approx$ 0.4 percentage points (about 2% at the sample mean) and not statistically significant at 0.10 level. The sample is further reduced to 381 observations or 72 non-resident parents. The choice of a potential spouse or cohabitation

Table 3.3: FE-IV (2SLS) regressions for the likelihood of being (re)married after the *2001 Law on the Modification of Child Support*

	(Re)marriage (1 = married after separation; 0 = otherwise)					
Sample restriction			More educated		Less educated	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Monthly child support obligations *Obl*	0.0048*** (0.0019)	0.0033* (0.0017)	0.0077** (0.0029)	0.0059** (0.0023)	0.0034 (0.0022)	0.0017 (0.0033)
Control variables	no	yes	no	yes	no	yes
Mean, dep. var.	0.1911	0.1911	0.1950	0.1950	0.1897	0.1897
Fst. stage coef.	0.719***	0.679***	0.837***	0.837***	0.646***	0.601***
Fst. stage F-stat.	111.73***	90.47***	107.43***	131.54***	51.90***	40.66***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	43.24***	40.87***	15.60***	16.06***	27.74***	25.24***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	112.98***	91.71***	112.17***	138.67***	52.69***	41.38***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	6.67***	3.61*	7.90***	6.69**	2.30	0.56
AR Wald test χ^2	6.75***	3.66*	8.25***	7.05***	2.33	0.57
SW LM S stat. χ^2	10.09***	4.91**	10.78***	12.41***	3.29*	0.80
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	3.978**	2.260	4.490**	4.914**	1.130	0.221
N	1,664	1,664	436	436	1,228	1,228
Av. obs per parent	5.5	5.5	5.6	5.6	5.5	5.5
Non-resident parents	300	300	78	78	222	222

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification), youngest non-resident child's age as a second order polynomial, the number of minor children who are entitled to child support and live outside the household, and recourse rate. The recourse rate is the ratio of total government expenditure to the repayments of maintenance debtors at the federal state level. This measure is publicly available since 2000 for all federal states. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference. For an explanation of these tests see Baum et al. (2007).
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

potentially bad controls like being full-time employed, and full-time employment in years as a second order polynomial. Controlling also for the absolute difference in intra-household incomes reduces the coefficient to $\approx$ 0.2 percentage points (about 2% at the sample mean). It remains statistically significant at 0.10 level. For single households and couples with the same individual gross incomes this difference is zero. The intuition behind this approach is the potential to save taxes due to a marriage when there is gap between a non-resident parent's gross income and his/her partner's gross income. Controlling for this variable might be problematic, because non-resident parents' income is potentially endogenous. The endogeneity tests in these FE-IV models cannot reject the null hypothesis at 0.10 level.[40] All corresponding results are shown in Appendix A.2.2 starting on page 187.

partner might be endogenous. Nevertheless, this exercise questions the found effects as presented in Columns (3) and (4) of Table 3.3.

40 In FE regressions, regardless of the included controls, the coefficients of Obl are smaller in comparison to those in FE-IV models and not statistically significant at 0.10 level.

In an additional analysis, I explore the impact on the likelihood of cohabitating with a new partner and fail to find any statistical significance irrespective of the chosen specification. In general, a cohabitation requires less commitment than marriage. Cohabitation is treated differently to marriage in many aspects of the law including income tax, health insurance, adoption rights, residence permit, or acquisition of citizenship. This different legal treatment of cohabitation may influence selection into marriage (Perelli-Harris and Gassen 2012, pp. 445, 447). That is why non-resident parents who marry may make more discriminating choices of partner than parents who cohabit with a new partner (e.g., Blackwell and Lichter 2000; Blackwell and Lichter 2004). Moreover, marriage gives some couples more financial advantages such as tax savings in comparison to cohabitation. Regardless of these differences, the empirical evidence of a positive marriage incentive seems to be also rather weak and less convincing.

New children in the household

There is an indication for a negative effect of obligations Obl on the number or presence of minor children in the household that can be explained in two different ways: First, non-resident parents decrease their fertility due to increased child support obligations. Second, their choice of a potential partner changes in favor of an individual with fewer children or no children due to increased obligations. I find evidence for negative fertility incentives: A €10 increase in a parent's monthly child support obligation reduces his/her likelihood of having new biological children by about 0.27 percentage points (about 2.5% at the sample mean).

Restricting the sample to parents 50 years old and younger leads to a slightly higher effect: A reduction by about 0.39 percentage points (about 3% at the sample mean; Column (3) of Panel A in Table 3.4). Parents with an intermediate level of education or less seem to drive the results: The response is about 0.61 percentage points (at 5% at the sample mean; Column (3) of Panel B). When I additionally control for household categories, the magnitude of the coefficient does not change significantly, also when I additionally include another potentially endogenous variable – (re)marriage status. Although not presented here, additionally controlling for the parent's age group ($\leqslant$ 25, 26-30, ..., 46-50 years old) does not significantly change the coefficients.[41] However, limiting my sample to parents younger than 45 years old with an intermediate level of education or less leads to a reduction of about 1.1 percentage points (about 8% at the sample mean) as a result of a €10 increase in monthly child-support obligations. The response is slightly stronger for parents with a general and vocational certification at the compulsory level or less: About -1.7

41 Although not presented here, additionally including potentially bad controls such as the current employment situation hardly changes the magnitude of the response.

Table 3.4: FE-IV (2SLS) regressions for having new biological children of parents younger than 50 years of age

	New biological children (1 = yes; 0 = no)			
	(1)	**(2)**	**(3)**	**(4)**
	Panel A: All non-resident parents			
Child support *Obl*	-0.0027	-0.0039**	-0.0042**	-0.0044***
	(0.0017)	(0.0017)	(0.0016)	(0.0017)
Control variables	no	yes	yes	yes
Household category	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	yes
Mean, dep. var.	0.1187	0.1187	0.1187	0.1222
Fst. stage coef.	0.684***	0.673***	0.660***	0.647***
Fst. stage F-stat.	100.20***	93.28***	77.25***	68.96***
Underid. tests	H_0: equation is underidentified; H_a: identified			
KP rk LM stat.	43.87***	42.45***	39.70***	37.16***
	H_0: endogenous regressor *Obl* is unidentified			
SW fst. stage χ^2	101.82***	94.92***	78.85***	70.48***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid			
AR Wald test F-stat.	2.69	5.38**	6.58**	7.30***
AR Wald test χ^2	2.74*	5.48**	6.72***	7.46***
SW LM S stat. χ^2	4.28**	8.15***	10.91***	14.23***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous			
End. test stat. χ^2	2.912*	5.062**	5.631**	6.033**
N	2,224	2,224	2,031	1,948
Av. obs per parent	6.4	6.4	6.2	6.1
Non-resident parents	348	348	325	320
	Panel B: Less educated parents			
Child support *Obl*	-0.0050**	-0.0061***	-0.0056***	-0.0060***
	(0.0022)	(0.0023)	(0.0019)	(0.0020)
Control variables	no	yes	yes	yes
Household category	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	yes
Mean, dep. var.	0.1180	0.1180	0.1165	0.1200
Fst. stage coef.	0.623***	0.613***	0.622***	0.607***
Fst. stage F-stat.	59.36***	55.05***	52.07***	46.03***
Underid. tests	H_0: equation is underidentified; H_a: identified			
KP rk LM stat.	32.35***	30.80***	29.77***	27.72***
	H_0: endogenous regressor *Obl* is unidentified			
SW fst. stage χ^2	60.57***	56.26***	53.42***	47.31***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid			
AR Wald test F-stat.	5.67**	7.93***	8.64***	9.62***
AR Wald test χ^2	5.79**	8.11***	8.86***	9.88***
SW LM S stat. χ^2	8.91**	11.82***	15.57***	21.33***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous			
End. test stat. χ^2	5.255**	6.965***	7.724***	8.369***
N	1,780	1,780	1,631	1,559
Av. obs per parent	6.5	6.5	6.4	6.3
Non-resident parents	274	274	254	249

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification), youngest non-resident child's age as a second order polynomial, the number of minor children who are entitled to child support and live outside the household. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference. For an explanation of these tests see Baum et al. (2007).
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

percentage points (about 12% at the sample mean). All corresponding results are presented in Appendix A.2.3 starting on page 193.

I additionally include a number of presumably bad controls like being full-time employed, parent's work experience in years as a second order polynomial or difference in intra-household incomes to see if their addition has any effect on estimates. For parents with an intermediate level of education or less and younger than 45 years old the addition of all these variables in my FE-IV models leads to a coefficient of about -0.9 percentage points (about 8% at the sample mean). It is statistically significant at 0.05 level. For parents with a general and vocational certification at the compulsory level or less this inclusion produces a coefficient of -1.6 percentage points (about 13% at the sample mean) which is comparable to estimations without these controls. Again, the coefficient is statistically significant at 0.05 level.

Focusing on the time period after the 2001 reform produces similar results. When restricting the sample to the years after 2008, the number of observations is reduced and the coefficient is slightly smaller.[42]

It is worth mentioning that I consider the period of the child maintenance obligation. I.e., at least one non-resident child is younger than 21 years old. How fertility develops beyond that period of time is not investigated in the current study. It is conceivable that some parents postpone having new children until they are no longer liable to pay child support.

Childcare of non-resident children

As expected, non-resident parents do not change the time spent with their children during an average weekday. This applies to parents who have new children in the household as well as to parents without children in the household (see, e.g., Appendix Table A.2.24 on page 201).[43] Furthermore, changes in child support obligations have no impact on the hours spent with children during an average weekend day. This holds for non-resident parents with and without new children in the household.

Labor market behavior

Empirically, there are no significant effects of child support obligations on parents' working hours during an average weekday, participating in the labor force or work full-time (see, e.g., Appendix

42 Overall, this reduces the sample to 774 observations. For parents with an intermediate level of education or less, the parent-year observation number is 390.

43 Note, for parents with children in the household I control for their number in different age groups which is problematic due to the potential endogeneity of these controls.

Table A.2.25 on page 202).[44] This holds equally for less and more educated parents irrespective of age restrictions.

Additional robustness checks

As a first robustness check for the fertility of parents with an intermediate level of education or less, I include only parent-year observations with at least one child in the first three age groups of the Düsseldorf Table. I.e., at least one child entitled to child support is a minor. The response to a €10 increase in monthly child support for parents younger than 50 years of age is slightly stronger in comparison to the results shown in Table 3.4: Now it is about -0.76 percentage points (about 7% at the sample mean). All results are presented in the Appendix A.2.6 starting on page 203.

Further, excluding times when a parent is self-employed leads to the same fertility response as observed in Table 3.4. Note, I use the average monthly income from the previous 12 months, not the last three years as per the Düsseldorf guidelines for self-employed parents. Next, I exclude so-called cases of shortfall from the initial sample, i.e. parents who are financially incapable to pay full maintenance to children and to a former spouse at separation. Here, I assume that post-marital alimony did not exist after 2008. Results are qualitatively similar when applying this sample restriction.

As has already been pointed out, when calculating the level of maintenance, tables and guidelines developed by the Higher Regional Courts to standardize the case-law are used. The Düsseldorf Table is used for child maintenance by all Higher Regional Courts with the exception of the Higher Regional Court of Nuremberg, which has developed, based on the Düsseldorf Table, its own maintenance table (von Heintschel-Heinegg and Gerhardt 1990, p. 28). In Panel A of Appendix Table A.2.28, results are presented for parents younger than 50 years of age who do not live in Bavaria. Again, these coefficient results are similar to those found in the main results for fertility presented in Table 3.4.

3.9 CONCLUSIONS AND DISCUSSION

In this chapter I consider parents who experience quasi-random variation in their child support obligations over the years. The Düsseldorf Tables are (and have been) subject to repeated adjust-

44 Additionally, I do not find significant changes in parents' work experience in full-time employment, which is measured in years.

ment by courts, thus leading to inconsistent changes in mandated financial payments to children over time.

I apply individual FE-IV models to address the potential endogeneity of child support obligations. Results indicate that a €10 increase in a parent's monthly child support obligation is associated with a reduction in the likelihood of having more biological children by about 0.39 percentage points (at about 3% at sample mean) for parents younger than 50 years old. This finding is in line with the majority of studies showing a fertility adjustment, of fathers liable for child support, to child support enforcement or obligations (Case 1998; Huang 2002; Plotnick et al. 2004; Rossin-Slater and Wüst 2017).

Besides the impact on post-separation fertility, I find no other behavioral response. Thus, I can reject the other hypotheses stated in Section 3.5: There is only weak evidence for a positive (re)marriage incentive (Hypothesis 1a) and no indication for a change in the likelihood to cohabit with a new partner (Hypothesis 1b). Considering these two outcomes, my study thus supports Rossin-Slater's and Wüst's (2017) findings.

Further, obligations seem not to reduce childcare hours (Hypotheses 3). I.e., this finding suggests that – in the sample I study – there might not be a harmful effect on children from increasing child support obligations, as suggested by other authors (for evidence on the role of fathers in children's development, see, e.g., Suh et al. 2016; Ibrahim et al. 2017). My study validates the results presented by Veum (1993) and Nepomnyaschy (2007).

It seems that changes in obligations are uncorrelated with parents' post-separation labor supply behavior (Hypotheses 4). This means I do not find any evidence for possible loss in tax revenue due to a decline in labor supply. Thus, my study supports findings by Klawitter (1994), Rich et al. (2007), and Rossin-Slater and Wüst (2017).

It is important to emphasize that my findings may be specific to the population and setting I study. The estimated effects should be interpreted within the local average treatment effect framework (Imbens and Angrist 1994, p. 467; Jurajda 2007, p. 19; Kennedy 2008, p. 150).[45] Future research may examine parental behavioral responses to child support obligations within the German context using other data sources and considering other groups of parents. As Angrist and Pischke (2010) point out "[a] constructive response to the specificity of a given research design is to look for more evidence, so that a more general picture begins to emerge" (Angrist and Pischke 2010, p. 23).

Note that I do not investigate post-separation outcomes for parents with more than two dependent children at the time of the first separation. Also, before divorce or separation both parents and children share the same household. Separated parents with joint physical care of children

45 Here, the compliant population consists of parents whose behavior was influenced by the changes of constructed child support obligations (Angrist and Pischke 2009, p. 158). In general, the local average treatment effect has a "high degree of internal but possibly limited external validity" (Imbens 2010, p. 415).

are excluded. Further, individuals who continue to participate in surveys after the separation from their families – such as the SOEP – are accessible to the Youth Welfare Office. This implies that they are unlikely to move away in hopes of avoiding child support payments. Thus, the conclusions drawn from this study do not apply to parents who choose to engage in this kind of child support avoidance. Hence, the survey's participants are likely to exhibit higher child support compliance because they are in the "public eye".[46]

Child support schemes are usually designed to reduce the reliance of children affected by parental separation on government transfers (Fischer 2017, p. 189). A fertility reduction of the liable parents, as found in the present study, is not a policy objective but, rather, an unintentional side effect. Whether this is a desirable parental reaction should be clarified by the policymakers and designers of child support tables and guidelines.

In general, the construction of child support tables and guidelines in Germany should be more discussed by economists. So far, this topic is largely left to legal scholars. They rightly point out that the Higher Regional Courts exactly specify the legal maintenance provisions of family law on the regular basis. I.e., the courts transform words into numbers (Schönberger 2012, p. 306). From the point of view of some jurists, this is problematic because the courts have the judicial but not the legislative power. The legislature leaves the design of the tables to the Higher Regional Courts and these can claim that the tables have no legal force and are merely guidelines.[47] Both sides seem to be satisfied with this praxis. The legislature does not have to worry about concrete values, and courts reduce their workload through the child support tables. The structure of financial incentives regarding the maintenance amount and subsequent changes specified in the tables is not addressed at all by the two sides. That is why economists should conduct empirical investigations.

Further, one of the questions that could not be addressed here is whether parents tend to work more in the informal labor market as a result of increased child support obligations. Thus, child support avoidance has important policy implications and is a promising field of study.

Furthermore, one could perform a comparative analysis of two systems: First, the German child maintenance system is preserved. Second, it follows Altman's (2008) proposal, and the taxpayer completely finances the children in single-parent households.[48] A holistic analysis would be all the more important because recently the advance on child support has been extended to older

46 Whether my sample is representative of all parents liable for child maintenance cannot be clarified. Note, I have not found representative statistics on non-resident parents for 1985-2013. A representative survey between July 2001 and June 2002 found that 96% of maintenance debtors were fathers. They were on average 42 years old, 74% had only one minor child entitled to child support, and 84% were employed. On average, they had 1.3 non-resident minor children (forsa 2002, pp. 174 et seq.). Based on my 1985-2013-sample, the average survey year is 2003, about 97% of year-parent observations are male, about 42 years old, with an average of 1.08 minor children entitled to child support. About 86% are employed (Appendix Table A.2.16 on page 193).

47 In 1992, the presiding judge at the Düsseldorf Higher Regional Court declared that the Youth Welfare Offices and lawyers misunderstand the Düsseldorfer Table as a quasi-legal force (Breithaupt 2012, p. 165).

48 Altman (2008) advocates for greater public funding based on the idea that children provide public benefits (Altman 2003, p. 173).

children. This means increased public funding of child-rearing costs in single-parent households is a reality. On the one hand, there are the costs of the advance on maintenance, the cost of recourse from the debtors, and the costs of social security systems. On the other hand, direct public spending would have to be extended in comparison to the maintenance advance, especially if the taxpayer would have to pay for the contributions specified in the Düsseldorf Table. Of course, one should not ignore the (dis)incentives of both systems. It is conceivable that in the second system more children will be born because the financial liability in the case of separation would no longer exist.

Special attention should be given to child-maintenance debtors in such a generous welfare system like the German one. It is important to analyze how this group differs from other parents. Further, it is crucial to understand if changes in the established minimum personal need have an impact on incurring debt. The function of the minimum personal need is to protect the non-resident parent. Without this scheme, would more non-resident parents be in debt? In Denmark, for example, all parents have to pay a so-called normal amount to the children regardless of their own income (Rossin-Slater and Wüst 2017, p. 5). This is not the case in Germany, since being financially able to pay child support is a precondition for the obligation to maintain (see §1603 (1) Civil Code).

4 CAREER, PRIVATE LIFE, AND WELL-BEING AMONG COLLEGE-EDUCATED WEST GERMAN WOMEN

"The last generation's slogan of "having it all" was little more than a marketing trick, much like the great flavor of New Coke. Women didn't have it all then (just ask all the GenX kids who watched them try), and they're not much closer now."

Gayle Tzemach Lemmon, cited from The Atlantic, June 29, 2012
(Lemmon 2012, accessed on 06.01.2013)

I am grateful to the participants at the internal workshops at the Chair of Health Economics and Management that took place between 2012-2014, the 2015 Annual Conference of the Verein für Socialpolitik, the European Society for Population Economics Annual Conference 2015, and the 71st Annual Congress of the International Institute of Public Finance for valuable comments and suggestions.
Note, my work on this chapter was completed in early 2015. Accordingly, the literature research is based on search results obtained up to that point.

4.1 ABSTRACT

This chapter investigates the reconciliation of a career and a private life among college-educated West German women. This descriptive study details the time-wise overlap of these two "achievements" across different birth cohorts and generations. In addition, it explicitly investigates how the concurrence of career and cohabitation and/or motherhood is linked to women's life satisfaction. I attempt to overcome the difficulties associated with estimating this relation using FE models.

The results suggest that only a small fraction of woman-year observations is classified as having a career and cohabitation/family/children simultaneously. Further, it seems to be easier to combine a career with a cohabitation than with a child or both. There are no improvements in the reconciliation of career and family across more recent birth cohorts or generations of women. Further, while there are life-satisfaction gains for career and cohabitation/family/children individually, the interaction terms are consistently negative. A career without a cohabitation/family seems to provide a higher level of life satisfaction in comparison to having either cohabitation/-family only or both. This is even more pronounced for women over 40 years of age.

4.2 INTRODUCTION

Since 2005, women account for more than 50% of university graduates (including university of applied sciences degrees). The trend toward higher numbers of university entrance qualifications and higher education among women continues (Weishaupt et al. 2010, p. 10; Federal Office of Statistics 2018b, pp. 8 et seq.). Given this educational success, the question arises as to what extent women holding a college degree manage to combine a career and private life at the same time. Do college-educated women have to come to terms with "hard choices": Either to pursue a professional career or to establish a stable relationship or a family? The second question I address is whether achieving both is associated with superior life satisfaction.

This study indeed finds that it is challenging to balance a career and a private life. About 18% of the observations are categorised as having a career and cohabitation simultaneously and about 5% of woman-year observations show a time-wise overlap of both career and family. Considering different birth cohorts and generations of West German women, there is no significant progress in the reconciliation between career and family. When not taking into account children, younger generations of women seem to be slightly more successful in balancing a career and cohabitation than older generations. These two phenomena – on the one hand, the increasing success in higher

education and, on the other hand, the low compatibility of career and family – raise important questions to be addressed by lawmakers and future research.

Estimating fixed-effects models, I find life satisfaction premiums related to both "career" and "cohabitation/family" separately. However, their interaction terms throughout are negative. West German women who "have it all" do not report superior life satisfaction premiums. This finding is opposite to the intuitive expectation that women, who can reconcile "full" professional and private lives, enjoy the highest well-being. That is consistent with the results for U.S. college-educated women (Bertrand 2013).

To the best of my knowledge, no study so far has examined the success rates of combining a career and a private life for German college-educated females. Furthermore, none has looked at the relationship between "having it all" and life satisfaction for these women. This study tries to fill this gap.

The structure of this chapter is as follows. In Section 4.3, I give a brief overview of the literature on college-educated women balancing career and family. In Section 4.4, the theoretical concept *Work-family conflict* is presented. It is helpful to understand the empirical outcomes. Section 4.5 describes the data, while Section 4.6 contains descriptive results. Section 4.7 presents the empirical approach to address the question of how work-life reconciliation and life satisfaction are related. In Section 4.8, results of pooled OLS and fixed-effects models are presented. As a robustness check, I consider women older than 40 years of age, nearly all of whom have completed their fertility cycle. Section 4.9 summarizes and concludes.

4.3 RELATED LITERATURE

In general, there is some evidence for women's aspiration of "having it all" in the academic literature with the main focus on the U.S. setting (see, e.g., Ridgeway 1978, p. 282; Bronzaft 1991, p. 115; Bridges and Etaugh 1994, p. 430; Lovejoy and Stone 2012, p. 638). In the study conducted by Hoffnung in 1993 and 2000, for example, U.S. college women were asked during the senior year and seven years later about their expectations for career, marriage, and motherhood. The combination of wife-mother-career was always the most attractive role option (Hoffnung 2004, p. 719. 722).

In Germany, Middendorf conducted an online survey in 2002 asking students about their goals in their post-college lives. About 24% of college women gave equal value to all areas of life, 30% favored professional objectives, 27% private lives and about 20% had a hedonistic approach to life. When students were asked to value factors that will determine their happiness in life,

95% of college women prioritized "interesting work", 93% "fulfilling relationship", 78% "solve task related problems", 72% "demonstrate own performance capacity at work", and 60% "having child(ren)". In contrast, only 59% of college men agreed (fully) with the statement "demonstrate own performance capacity at work" and 51% with "having child(ren)". There are only small gender differences in "achieving a career success" (35% of college wives, 38% of college men) and "having a high income" (31% vs. 37%). Overall, about 2/3 strive for attainment of private *and* professional goals (Middendorff 2003, pp. 3, 10).

Only a few studies have empirically investigated the relationship between life satisfaction and the concurrence of career and family targeting college-educated women. In addition, different definitions of family and career are applied in these studies.

Most closely related to my study is the work of Bertrand (2013), who measures life satisfaction and emotional well-being for groups of U.S. college-educated women based on whether they have a family, a career, both, or neither. Two family definitions are applied in her study: Being currently married, or being currently married with children (ever having children/having minor children in the household). Career is constructed according to the approach of Goldin (2004): Reaching an annual or weekly income level greater than that achieved by a comparable college graduate man who was at the 25th percentile of the male income distribution. Estimating pooled OLS models, Bertrand (2013) finds no greater life satisfaction among those who "have it all" in comparison to those who have either a career or a family. Furthermore, it appears that the interaction variable "career and family" tends to result in lower levels of happiness, and increased sadness, stress and tiredness during the day (Bertrand 2013, p. 248).

Another recent study of U.S. college-educated women compares life satisfaction among full-time employed mothers, traditional mothers, and childless full-time working women. Traditional mothers are defined as mothers who work part time or not at all. Career, defined as being fully employed, is highly valued, but it does not outweigh the benefits of motherhood. As a result, women combining both do not report the highest level of life satisfaction among all groups of women (Hoffnung and William 2013, pp. 332, 323).

In summary, the general message of these two articles is that career-and-family women fail to transform this double-achievement into superior well-being. However, it should be stressed that this evidence is strictly descriptive.

4.4 WORK–FAMILY CONFLICT THEORY

As stated in the previous section, a superior life-satisfaction gain for those females who manage to combine a career and a family is not observed in the literature. In order to understand this phenomenon, a theoretical construct is borrowed from work-family literature: *Work-family conflict* (Staines 1980; Greenhaus and Beutell 1985; Lobel 1991; Edwards and Rothbard 2000). This concept emphasizes the mutual incompatibility of work and family demands.

Greenhaus and Beutell (1985) differentiate between three types of the work-life conflicts: Time-based, strain-based and behavior-based conflicts. The first type occurs when the transfer of limited personal resources from career to partner/child(ren), such as time or attention, leaves demands in the career domain unmet, and vice versa (Staines 1980; Edwards and Rothbard 2000, p. 182).[1] Secondly, strain from one domain – e.g. anxiety, tension, and fatigue – can reduce personal resources such as energy. This, in turn, makes it more difficult to meet requirements in the other domain (*strain-based conflict*). Finally, the same problem can occur in the case of conflicting domain-specific role demands. A transfer of behavior developed in one domain to the other inhibits role performance in the latter domain (*behavior-based conflict*). Note that role demands can be formed by women's own attitudes as well as by social norms.

In conclusion, meeting all demands while pursuing a career and establishing a partnership/family appears to be a balancing act rather than a simple task. Maintaining the role of nurturer at home and meeting standards at work might result in a double burden rather than a double achievement. Therefore, the concept of *career-life conflict* provides a plausible explanation why career-and-life women cannot transform their achievements into superior well-being. However, other theoretical constructs for the relationship between work and family exist – *(active) segmentation*, *spillover*, and *congruence* – providing an alternative perspective on the linking mechanisms of the two domains.[2]

1 Edwards and Rothbard (2000, p. 182) argue that the concept of *time-based conflict* incorporates the concept of the *resource drain*. "*Resource drain* refers to the transfer of finite personal resources, such as time, attention, and energy, from one domain to another" (Edwards and Rothbard 2000, p. 181). *Time-based conflict* additionally highlights that the transfer of time or attention "from a domain leaves demands in that domain unmet" (Edwards and Rothbard 2000, p. 182).

2 Career-to-life and life-to-career spillovers can occur when, for example, fatigue as a result of one domain inhibits the fulfillment in the other domain, generating similarities between the two domains career and private life, also in terms of mood and satisfaction (Edwards and Rothbard 2000, pp. 180, 186). The congruence is another concept that stands for similarity between career and private life, attributing these similarities to "a third variable that acts as a common cause" (Edwards and Rothbard 2000, p. 182), for example personality of women. The concept *segmentation* describes the independence or separateness of work and private life that would result in a lack of work-family linkage (Edwards and Rothbard 2000, pp. 181, 189).

4.5 DATA DESCRIPTION

Sources of data

I use three sources of data in my analyses in order to enhance the sample size of college-educated women in the relevant age range: The German Socio-Economic Panel study *SOEP* (1984-2012), the German Family Panel *pairfam* (2008-2012) and the German Welfare Surveys (1984, 1988, 1993, 1998). The *SOEP* is a representative longitudinal study providing information on all household members, including information on the presence of minors and a partner in the household and on women's time-use in hours.[3] The German Family Panel is another longitudinal study from a nationwide random sample of the three birth cohorts 1971-73, 1981-83, 1991-93.[4] The Welfare Surveys are representative surveys providing information about German citizens living in private households (Glatzer et al. 1986; Glatzer et al. 1990; Zapf et al. 1996; Zapf et al. 2001). These samples are pooled and harmonized regarding the variables of interest, which are described below.

Furthermore, I restrict the samples in several ways. As the conditions for the supply of childcare-facilities and on the labor market are different between West and East Germany, I conduct the analysis separately for western states. Furthermore, these samples are restricted to non-self-employed women who have at least a bachelor's degree. Graduates from universities and also graduates from technical colleges are considered. The focus of this study is thus on high-ability women, who have at least a college degree and the potential to achieve a career. I consider females who are between 25 and 54 years of age. About 90% of the sample is based on the *SOEP*, about 9% on *pairfam* and 1% on Welfare Surveys. For each woman in the pooled dataset I determine whether she has a career, a private life, both or neither.

Dependent variable

Overall life satisfaction is the dependent variable, ranging from 0 (completely dissatisfied) to 10 (completely satisfied). I interpret women's satisfaction with their life as a measure of their well-being.[5]

3 For more information see Wagner et al. 2007.

4 Analyses are based on data from the first five waves of the German Family Panel, release 5.0 (Nauck et al. 2014). A detailed description of the study can be found in Huinink et al. (2011). The German Family Panel is funded as a long-term project by the German Research Foundation.

5 On developments in the measurement of subjective well-being and the limitations of the concept of "overall life satisfaction" see Kahneman and Krueger (2006).

Operationalization of career

One of the key independent variables of interest is career. I employ a modified definition of career following Bertrand's (2013) approach, which was initially introduced by Goldin in 2004. In order to do so, I operationalize career on the basis of the monthly gross labor income of non-self-employed university graduates. Gross labor earnings reflect individuals' objective attainments and are proxies for performance in the labor market. Self-employed individuals are excluded because their remunerations are not verifiable by an impartial third party. These persons are very likely to be highly autonomous in deciding how much they want to work and earn. Therefore, I focus on academics who are employees in the private or public sector.

Using microdata from *SOEP*, I compute for each year and each age group (25-29, . . . , 50-54) the 25th percentile of the income distribution among college-educated men living in West Germany. Thus, I assume that these men are the relevant reference group for West German college-educated women. A given woman is defined as having a career if her monthly gross earnings are above the 25th percentile in the relevant year and age group.

"Career" is a difficult concept. There are different definitions and understandings of career. A clear and simple division of career into two categories – subjective and objective – is common (see, e.g., Poulsen 2006). A subjective career is only defined by an individual itself, while an objective career is an externally defined concept. The external signs of a career can be, for example, salaries, titles, and the position in the hierarchical ladder (Poulsen 2006, p. 251). Although a wide range of papers discusses the theoretical aspects of career or career success (see, e.g., Poulsen 2006; Gunz and Mayrhofer 2011; Grote and Hall 2013), only a few propose a concrete implementation or measurement of a career. Valcour and Ladge (2008), e.g., use self-reported incomes, career gaps, interorganizational mobility, and proportion of career spent in part-time employment as women's career success and career path variables. Many studies use simply income as a measure for objective career (success), without any comparison to a reference group (Grote and Hall 2013, p. 265). Others include more variables besides women's earnings to depict career or career success (see, e.g., Abele and Spurk 2009, p. 810; Volmer and Spurk 2011, p. 211). Vere (2007) uses, for example, working hours and real labor income to describe females' careers. Here, career is related to the working aspects of an individual's life. It is measured by rewards, in the form of salary, that are granted to the employee by the organization or employer. One could argue that women's career is likely to be hampered by family factors, such as childbearing or prioritization of the man's career in couples decision-making, leading to employment gaps or part-time work (Lovejoy and Stone 2012, pp. 632 et seq.; for wage penalty for motherhood see, e.g., Waldfogel 1997; Gangl and Ziefle 2009). That is why college-educated men with a linear career progress

seem to be an appropriate reference group. As a robustness check, I use other thresholds to construct career: 50th and 75th percentiles of the male income distribution.

Cohabitation partner

Taking into consideration that college graduates often postpone marriage or do not marry at all (Nazio and Blossfeld 2003, p. 56), it seems reasonable to focus on cohabitation rather than marriage. Besides that, German women vary the amount of time they spend on domestic labor depending on whether they live with a partner or live alone; this finding is irrespective of the legal status of their relationship (see, e.g., Geist 2009).
Primarily, I am interested in the existence of stable relationships in general, whether or not they involve an official marriage. Therefore, I construct a dummy that equals one if a given women has a partner living in her household, and zero otherwise.

Child(ren)

This study includes all sorts of children - biological, adopted, a partner's children. A constructed dummy equals one if a given woman has at least one child under 18 years of age in her household, zero otherwise. Goldin (2004), for example, defines "family" as ever having a child, irrespective of being married. This understanding of a family includes two-parent and one-parent households. In my study, single mothers are considered as well. However, for the sake of convenience, I refer to two-parent households as "families".

Family

Family implies at least one minor and a partner in woman's household. A dummy equals one if both are present, zero otherwise. It should be noted that this study follows a fairly "modern" understanding of family – partners do not have to be married, child(ren) do not have to be biological. Thus, patchwork families as well as traditional families are included in the analyses.
Two-way interactions are operationalized on two dummies respectively: Career and cohabitation; career and family; career and child(ren). I refer to the independent terms career and cohabitation, and the independent terms family or child(ren) as *simple terms* and to the product of these terms as the *interaction term*.[6]

6 The interaction is also referred to as a *two by two interaction*, the design is called a *two by two design* or a *two by two model* (Mitchell 2012, pp. 209, 215).

Total working time

As mentioned in Section 4.4, time pressure is one possible explanation for career and private life conflicts. Therefore, it should be controlled for. In order to measure the total workload women face every day, I create variables covering all non-leisure activities. Specifically, total working time includes the sum of hours spent in an average working day on caregiving (available for the period 2001-2012), child care, housework, repairs, running errands, job and further training (available for the period 1984-2012). Incomplete answers are excluded. Implausible values are recoded as missing. A categorical variable is constructed for each 4-hour bracket, ranging from "less than 4 hours" to "more than 16 hours". The information on activities in hours is only available in *SOEP*.

Partner's employment and income situation

I account for financial interdependence within the partnership using information on partnered men as control variables. In order to do so, I construct a dummy that equals one if an employed partner lives in a woman's household, and zero otherwise. Additionally, I control for the partner's monthly salary before taxes with a categorical variable for each €1,000 step (in 11 steps from €0-999, and then in equal €1,000 steps to less than €10,000, and finally more than €10,000). Again, this variable can be constructed for the *SOEP* sample only.

4.6 DESCRIPTIVE RESULTS

Descriptive statistics

Based on the definitions in Section 4.5, approximately a quarter of all woman-year observations are in the state "career" and about 79% in the state "having a cohabitation partner". About 45% are coded as "having a family" and almost half of the observations as "having child(ren)".
Only about 18% of the observations are classified as having a career and cohabitation simultaneously (Panel A of Appendix Table A.3.1 on page 206). About 29% of the 3,012 women in the sample had both at least once. Moreover, about 62% of females who ever achieved both concurrently always stayed in this state during the time period covered by the panel. Roughly 73% of career-and-cohabitation women in the data remained in the same state the following year; about 24% lost career but stayed in their relationships. On the other hand, women in cohabitations had

only a 6% chance of achieving or returning to the career-and-cohabitation state (Appendix Tables A.3.2 and A.3.3).

Furthermore, it is noteworthy that only about 5% of woman-year observations show a time-wise overlap of career and family (Panel B of Appendix Table A.3.1). Of the 3,003 women, approximately 9% attained both at least once. About 53% of these always stayed career-and-family women during the time period covered by the dataset. About 69% remained in this state the following period. Although the career-and-family woman had a 24% chance of keeping her family and getting off her career path, the woman with family had only a 3% chance of adding (or returning to) career (Appendix Tables A.3.4 and A.3.5). A similar picture emerges for those who have a career and child(ren) concurrently (Appendix Tables A.3.6 and A.3.7). Notably, roughly 6% of woman-year observations are coded as "career-and-child(ren)".

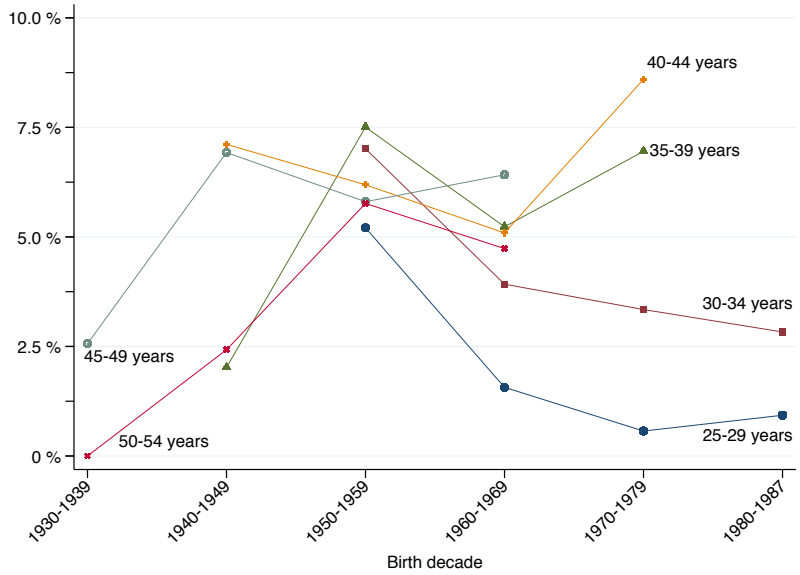
Birth cohorts

The dataset used covers nearly six birth decades of women: Women who were born 1930-1939 (cohort 1), 1940-1949 (cohort 2), 1950-1959 (cohort 3), 1960-1969 (cohort 4), 1970-1979 (cohort 5). Cohort 6, born 1980-87, is the most recent one that can be studied. This wide range makes it possible to ask whether there is a development in attainments concerning career and private life. Appendix Figures B.2.1-B.2.6 on pages 219 et seqq. illustrate success rates for these birth cohorts and six age groups (25-29, . . . , 50-54).

In general, age effects reflect social and biological processes and represent changes across the life course. Cohort effects, on the other hand, reflect different social and historical conditions, i.e. shared life events, at various stages of life course for a set of individuals (Yang and Land 2013, pp. 1 et seq.). Note that cohort 1 was born too early to track women younger than 45 years old in the dataset, and cohort 5 is too young to study women older than 35 years old. The whole age range, i.e. 25-54, is only available for women born between 1950 and 1969 (cohorts 3 and 4).

The data on career women show for 35-54 year-olds a very low rate of having a career in the oldest available cohorts. Overall, the percentage of career-observations among those younger than 35 years old is higher than for women between 35 and 54 years old, in the corresponding cohorts 3 and 4.

For 25-29 year-old college-graduate females a tendency towards living alone among younger birth cohorts is identifiable. For 35-44 year-old college-educated women one can observe the lowest rates of childlessness in comparison to other age groups across all birth cohorts. This suggests that nearly all college-educated women in this age range have completed their family planning.



Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.1: Birth cohorts of West German women: Percentage of woman-year observations classified as having a career and a family

A tendency towards increasing compatibility of career and cohabitation for those who are older than 30 is apparent in Appendix Figure B.2.5. However, there is no clear pattern for 25-29 year-old women across later cohorts.

For 25-34 year-old women a convex pattern from cohort 3 to 6 reflects the decreasing share of career-and-family observations among younger cohorts (Figure 4.1). The percentages of woman-year observations with both family and career across all age groups are close for cohort 3, ranging from about 5.2% to 7.5%. In contrast, for cohort 5 the proportion of career-and-family observations differs clearly across age groups, declining from about 7.8% (40-44 year-olds) to 0.6% (25-29 year-olds). This can be understood as a tendency to delay the realization of both career and family among more recent birth cohorts. Focusing on the concurrence of career and motherhood, cohort 4 shows the highest success rates for 25-29 year-olds (Appendix Figure B.2.6). Moving to the most recent cohorts, it can be seen that they drop behind 30-44 year-old women.

Generations

Although a birth cohort shares the initial event of birth and moves through life together as a group, it is worth to inspect specific generations of women as well. A generation shares in general a temporal, a historical and a socio-cultural location (Gilleard and Higgs 2002, p. 373). I follow Oertel's (2007) classification of West German employees into different generations, but

pool post-war and war generation because of the small observation number in the latter group. The post-war generation, born between 1945 and 1955, grew up in the days of the Cold War, experienced an expanding welfare state, called for the emancipation of private lives and for changes in the stiff social structures (Klaffke 2014a, p. 11).

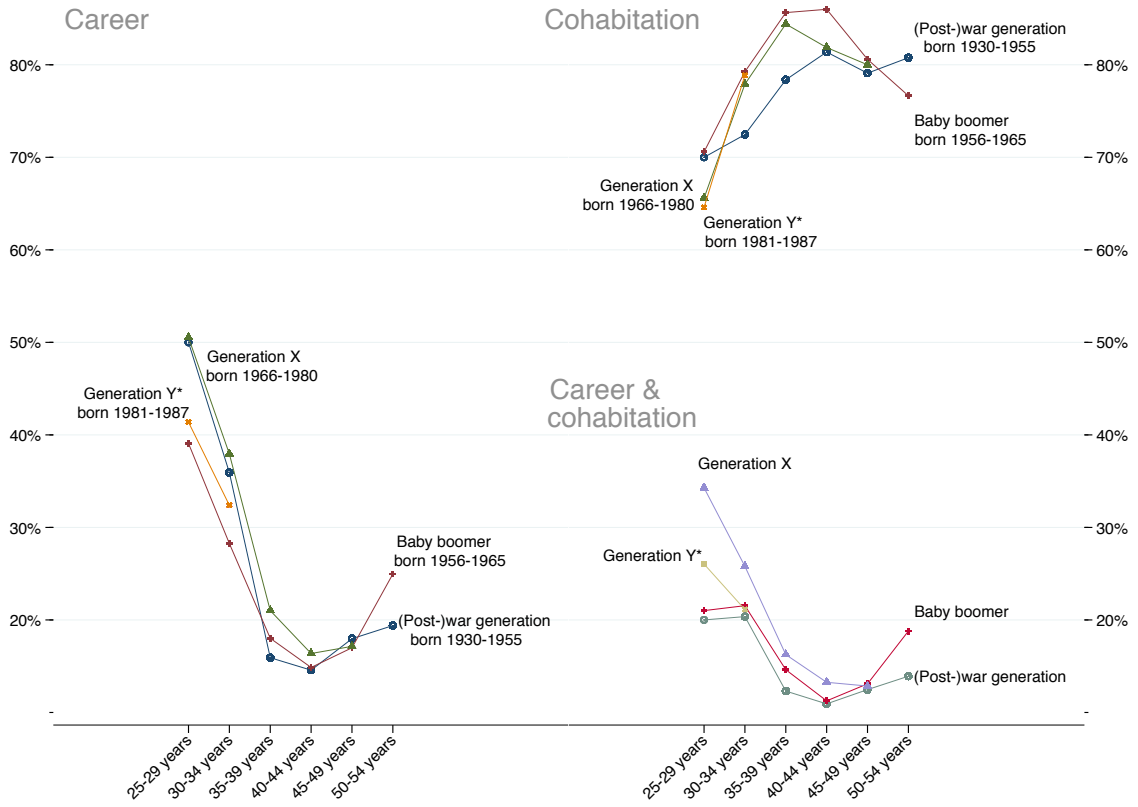
The baby boomer generation, born between 1956 and 1965, is the biggest of the generations in numbers. This cohort grew up in a stable, non-authoritarian family context. A movement towards equal rights and humanization in the private sphere and corporate world took place in the 1970s' and 1980s'. Baby boomers benefited from successful educational expansion, but witnesses also major crises such as rising unemployment rate, political arms race, and so-called oil crisis (Oertel 2014, p. 31, 33).

Women of the X generation (born between 1966 and 1980) belong to the first generation which took gender equality for granted and which benefited from the greatly improved educational opportunities. Furthermore, children of generation X are typically planned children who were financially supported by their parents and grandparents and who partly experienced a "liberal" parenting style. This generation was also not spared by crises: These include environmental problems like Chernobyl (1986), war events, AIDS and drug-related problems (Oertel 2014, p. 46).

The generation Y, born between 1981 and 1995, is the youngest generation that is only partly included in my sample. This cohort grew up in a globalized world marked by growing uncertainty, but also by the increasing importance of the internet and digitalization. The terror attacks on September 11, 2001, form its collective memory (Klaffke 2014b, p. 60). Millennials associate life satisfaction with intense experience and tangible actions, and less with material wealth. The work-life balance approach, i.e. the compatibility of work and family life, gained in importance (Klaffke 2014b, p. 66). Unfortunately, this cohort is incomplete in my sample: Women who were born between 1988 and 1995 are not in the dataset.

Figure 4.2 shows the above-introduced generations of West German women according age categories, and career and cohabitation status. Generation X seems to be more successful in combining a career and a cohabitation in comparison to the baby boomer generation and (post-war) generation in all age groups between 25 and 50 years of age. The baby boomer seem to be more successful in comparison to the older generation of women. To conclude, there seems to be a small progress in attaining simultaneously a career and a marital or non-marital cohabitation in younger generations. The investigation of whether it happened because of the evolution in "attitude" or because of other reasons does not form part of the present study.

In terms of combining a family and a career, it seems to be very challenging for all generations of women (Figure 4.3). No specific generation seems to be superior to others. For generation X we can see an increase in this double achievement as the observations age. There is a peak at



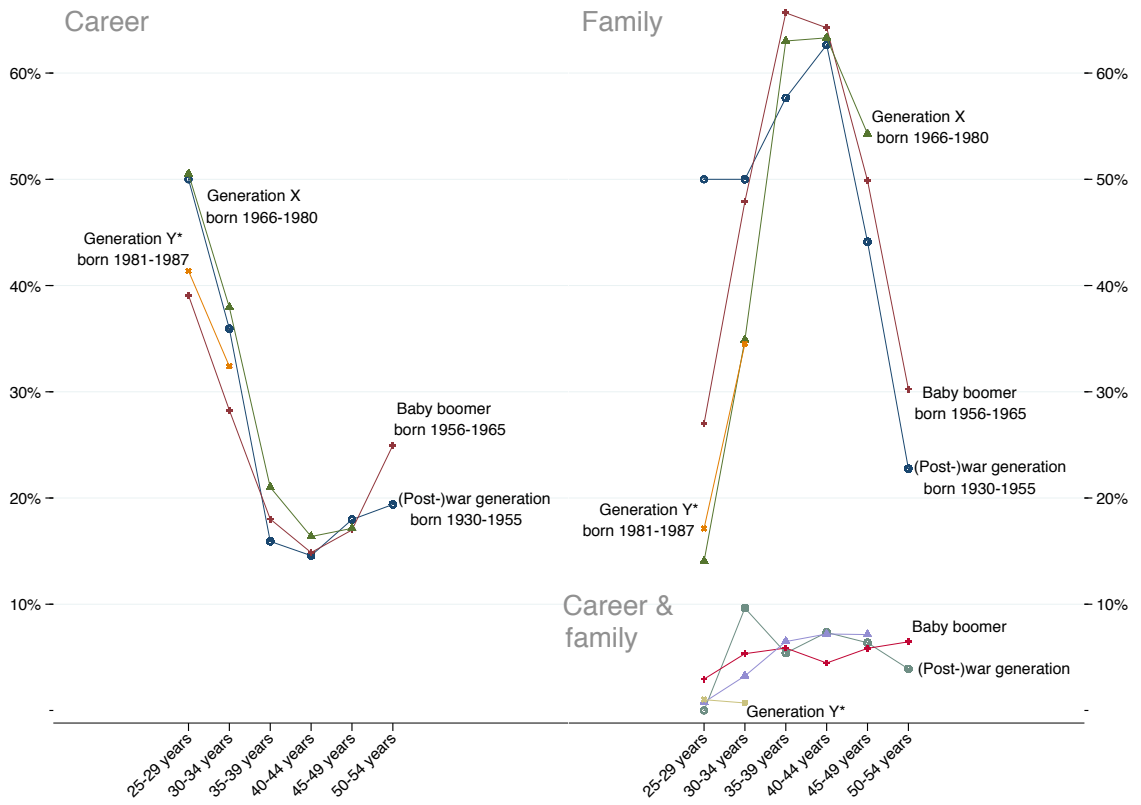
Notes: The generation Y* is incomplete. Women who were born between 1988 and 1995 are not in the dataset.
Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.2: Generations of West German women: Percentage of woman-year observations classified as having a career, a cohabitation partner, or both

age 30-34 years old in the (post-)war generation. The depiction of the reconciliation of career and children is very similar.

Evaluation of life satisfaction

By including both career and non-career women in the analysis, I ask whether the effect on life satisfaction is the same for those who are in a cohabitation as for those who are not in a stable relationship (or family, child(ren)). One can get a sense of whether such an interaction might exist by graphing the mean life satisfaction by career and life situation, as shown in Appendix Figures B.2.7-B.2.9 on pages 221 et seq. The mean-connecting line for women who live alone is steeper than the line for women who have a partner and/or child(ren) in the household. This implies that having a career could be more life-satisfying for those who live alone, and vice versa. The least satisfied group appears to be those women who do not have a career and who live alone.



Notes: The figure shows observations classified as having a career, a family or both. The generation Y* is incomplete.
Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.3: Generations of West German women: Percentage of woman-year observations classified as having a career, a family, or both

4.7 EMPIRICAL APPROACH

In order to capture a causal effect, in an ideal setting, one would like to compare the well-being of women *randomly* assigned to the states "career only", "cohabitation only", "career and cohabitation", or "neither career nor cohabitation". Obviously, women actively choose to be in one of these groups, trying to maximize their utility, i.e. enhance their well-being. Thus, that choice is not random. There are unobserved factors that can lead to a woman's self-selecting into these different states. These factors in turn can have a direct effect on life satisfaction.

For example, some of the difference in life satisfaction between women with a partner and those without may reflect systematic group differences in unobservable personality traits. These traits, for example agreeableness, may also directly influence women's well-being (Bertrand 2013, p. 247). Taking another example, women with career-enhancing characteristics may be more likely to have a partner and child(ren), thereby leading to greater life satisfaction. On the other hand, it might be the case that career-women differ in career commitment or underlying productivity in comparison to non-career women. Thus, women with fewer career opportunities may be

more likely to be in a cohabitation and/or have child(ren). That might influence their well-being as well. There is a possibility of negative selection into cohabitation and motherhood.

In pooled OLS models I accept the potential bias. Although noisily estimated, I compare my results with the results for U.S. college-educated women (Bertrand 2013). To account for unobserved heterogeneity I use longitudinal evidence. FE models allow for an individual specific constant, which will capture all time-constant observed and unobserved characteristics. Such characteristics can be personality traits, childhood experience or birth cohort. Boudreau et al. (1999), for example, point out that personality traits unlike motivation or human capital appear to be fairly stable over time and, thus, are controlled for in FE models.

When the source of endogeneity is time-constant or when the unobservable self-selection threshold is time-constant, FE models can be applied to deal with it. Consequently, in order to make a causal claim I would rely on the assumption that selection into different living conditions is based on unobserved but fixed individual characteristics. However, I cannot rule out time-varying unobserved heterogeneity. In particular, one could think that other events in women's lives can be associated with both – movement into "career" and into "family", and with different levels of life satisfaction. A changing company policy or corporate philosophy, for example, could promote the careers of its female employees and facilitate timing or provide childcare for its staffers. Thus, such actions could enhance a woman's motivation to pursue a career and reduce the costs of motherhood at the same time. As a result, family-friendly policies at firm level might reduce work-life conflict and enhance women's life satisfaction. Since such a time-varying unobserved heterogeneity cannot be addressed due to data constraints and study design, my results should be interpreted as correlational.

Comparing the coefficients of FE with pooled OLS models might help to identify whether or not selection plays a role in the impact of career, private life and its interaction on well-being. Thus, if this is the case, then the absolute values of coefficients should be reduced when controlling for the time-invariant characteristics.[7]

Another issue I need to address is the influence of cohabitation on partnered women. The comparison of well-being between women in cohabitation and career-and-cohabitation women may mask differences in the partner's employment status and earnings level. Since that may systematically bias the results (Bertrand 2013, p. 247), I need to control for it.

As shown in Subsection 4.5, any economic fluctuations and changes on the labor market over time are indirectly captured by the conceptualization of career. I assume that such fluctuations are not gender-specific, i.e. they affect college-educated men and women in the same way.

7 Note that if the FE estimates are themselves downwardly biased by measurement error, the difference between the two estimates will be exaggerated. As a result, conclusions concerning the degree of bias in OLS estimates will be inaccurate.

A woman's total working time depends on her workload, i.e. having a career, a partner and/or child(ren). Therefore, this is another important control variable.
Comparable evidence for East German women who have a college education is provided in the Appendix Tables A.3.11 and A.3.12 on pages 209 et seq. Estimation results for alternative career definitions are presented in Appendix Table A.3.13.

4.8 RESULTS

4.8.1 Pooled ordinary least squares estimation results

I start by estimating pooled OLS regressions with robust standard errors clustered at the individual level (Appendix Table A.3.8 on page 208). In particular, all regressions control for woman's age as a second order polynomial, the migration background (dummy), the year fixed effects and the birth decade fixed effects (indicator variables). While there are life-satisfaction gains for having a career and a cohabitation separately, there is a negative interaction term for having both concurrently. Furthermore, the same holds for career-and-family or career-and-child(ren). These results are in line with those for U.S. college-educated women (Bertrand 2013).
As can be seen in Appendix Table A.3.8 Column (2), the interaction of career and family/child(ren) for women over 40 years of age is not statistically significant anymore. However, in contrast to the findings of Bertrand (2013), there is a significant negative interaction term of career and cohabitation. Moreover, the simple effect of career remains statistically significant at 0.05 level. Hence, for women who have nearly completed their fertility cycle, career still seems to be enhance life satisfaction.

Dynamics

Since the dataset used covers the period from 1984 to 2012, I can explore whether the influence of career and cohabitation on life satisfaction changed in the course of these years (Appendix Figure B.2.10 on page 222). Except for the years 1985, 1986 and 1988, one can see throughout a positive simple effect of having a career on life satisfaction. Clearly, the coefficients for cohabitation are consistently positive. For the years 1984, 1985, 1986, 1988 and 1992 the interaction terms of career and cohabitation are positive, while insignificant at the 5% level. However, for the remaining 24 years, a zero or negative interaction term between career and cohabitation is observable. Overall, there seems to be no clear time trend for the years 1984 to 2012, as in the cases with career and family or child(ren). Referring to Appendix Figures B.2.11 and B.2.12, the simple effects for

having a family or child(ren) are consistently positive with the sole exception of 1999 for having child(ren). The simple effects of having a career are, again, positive, except for 1985, 1988 and 1991. The coefficients for the interaction of career and family or career and child(ren) are close to zero or negative for the vast majority of years. Again, there seems to be no clear time trend for the years 1984 to 2012.

4.8.2 Fixed-effects regression results

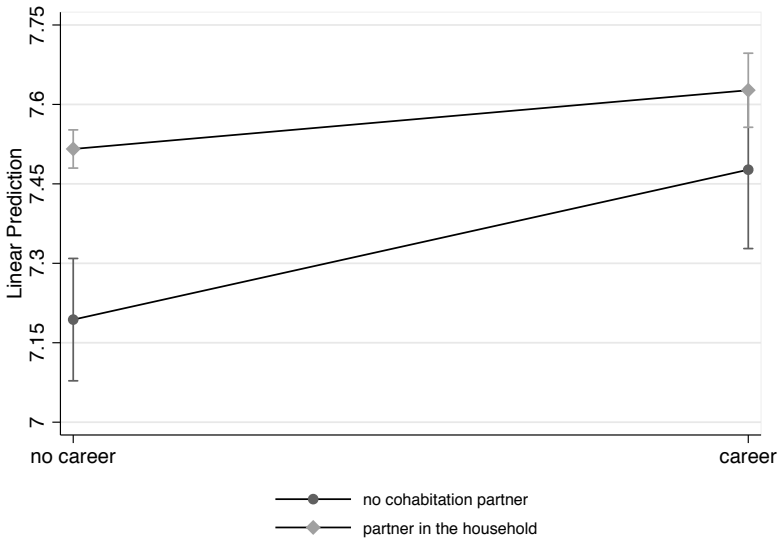
Two-by-two models are estimated using FE regressions. The control variables in all regressions are year fixed effects and woman's age as a second order polynomial. While there are life-satisfaction rewards for career and cohabitation/family individually, the interaction terms are consistently negative (Appendix Table A.3.9 on page 208). The worst-off living situation appears to be one without a career and without a cohabitation partner or a family.

Having a career and cohabiting partner seems to result in superior life satisfaction, but only when controlling for year fixed effects and age as a second order polynomial (Figure 4.4). When adding other control variables or when considering family instead of cohabitation, this is no longer the case (Figure 4.5). Career women without a family seem not to report a lower level of well-being in comparison to women who have either family only or both. This is even more pronounced for women over 40 years of age. The point estimate of the career-and-family interaction is large enough to eliminate the positive simple effect of having a family or a career on life satisfaction.[8]

In contrast, for East German women we do not observe statistically significant negative interaction terms (Appendix Tables A.3.11 and A.3.12). The reconciliation of work and family life was taken for granted, represented the normal way of life for the vast majority of women, and was systematically promoted in the former German Democratic Republic (Miethe et al. 1990, pp. 79 et seq.). For example, 91.2% of women worked in 1989, about 80% of 1-3 years old children were in a nursery, and 48.6% of college students were female (Lötsch and Falconere 1990, p. 42; Miethe et al. 1990, p. 63). Naturally, the reunification brought about major changes, but, as recognized by many researchers, Germany is still one country with two worlds when it comes to women's LFP, working hours, childcare, housework, etc. (see, e.g., Geist 2009; Krause and Ostner 2010). However, it is arguable whether the definition of career used in this study fits college-educated women who were educated in the former German Democratic Republic.[9]

8 Appendix Figure B.2.14 on page 223 illustrates the predictive margins reflecting this result. See Appendix Table A.3.10 on page 209 for FE results concerning women past the age 40. Figure B.2.15 illustrates the adjusted predictions of career#child(ren).

9 Applying alternative career definitions by using the 50th and 75th percentile of the male income distribution of comparable men provides also no meaningful results (see Panel B and C of Appendix Tables A.3.11 and of A.3.12). It is possible that East German college-educated men within the same age group are not an appropriate reference group for these women.



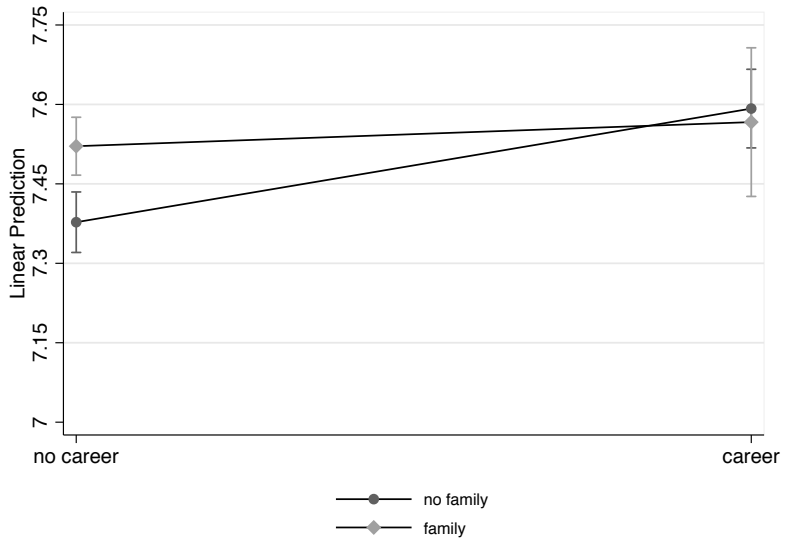
Notes: Adjusted predictions of career#cohabitation; The following control variables are included: Year fixed effects and age as a second order polynomial (see FE regression in Panel A Column (1) of Appendix Table A.3.9 on page 208); predictive margins with 95% CIs. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.4: Life satisfaction by career and cohabitation status for women between 25 and 54 years of age

If women aged 40 and older are considered, career women without a cohabitation partner seem to enjoy the highest level of well-being. Figure 4.6 clearly demonstrates that achieving a career appears to be life-satisfaction-enhancing only for women without a partner. Put differently, starting a cohabitation seems to result in increased satisfaction exclusively for non-career women. There is a statistically insignificant (negative) interaction term of career and child(ren). However, it seems to be more life-satisfying to have a career irrespective of the presence of underage child(ren) in the household (Appendix Figures B.2.13 and B.2.15 on pages 223 et seq.).

Including the control variables for a woman's total working time and her partner's income leads to statistically insignificant partnership or family-life satisfaction premiums (Column (5) of Appendix Table A.3.9 on page 208). Thus, these controls seem to explain primarily the simple effect of partnership/family on overall life satisfaction. Importantly, the negative career-and-cohabitation interaction is statistically significant and robust to the inclusion of these covariates. However, controlling for a partner's employment and income situation leads to statistically insignificant interaction between career and family on women's well-being (Panel B Columns (2) and (3) of Appendix Table A.3.9).

A comparison of FE estimates in Appendix Table A.3.9 Column (1) with the OLS estimates in Appendix Table A.3.8 Column (1) appears to provide evidence that the OLS estimates are upwardly biased. Thus, suggesting that unobserved heterogeneity is positively correlated with career and cohabitation/family status. OLS estimates are approximately 1.5-3.5 times the FE estimates in absolute values.



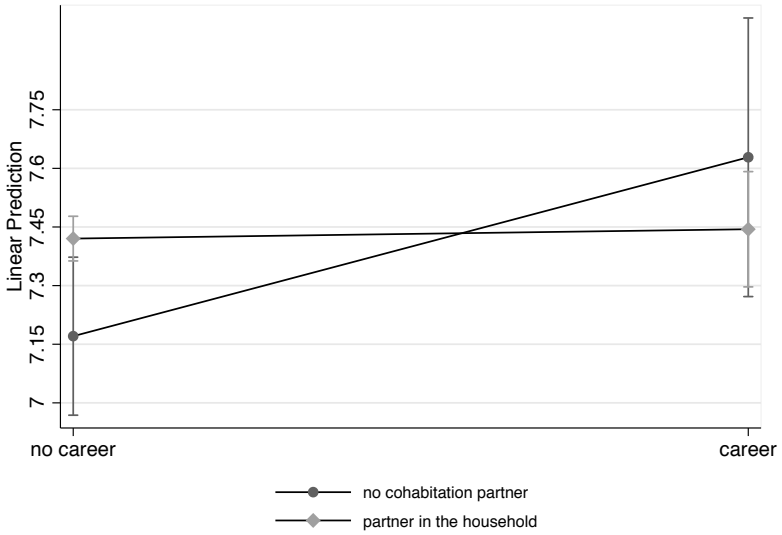
Notes: Adjusted predictions of career#family; The following control variables are included: Year fixed effects and age as a second order polynomial (see FE regression in Panel B Column (1) of Appendix Table A.3.9 on page 208); predictive margins with 95% CIs. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.5: Life satisfaction by career and family status for women between 25 and 54 years of age

In the end, I define "career" alternatively as reaching an income level greater than that achieved by a comparable man who was at the 50th or 75th percentile of the male income distribution. Estimation results applying these alternative career definitions show no significant results for the interaction terms of "career" and "cohabitation" or "family" (Appendix Table A.3.13 on page 210).

4.9 SUMMARY AND CONCLUSIONS

In this study I pool three different data sources in order to investigate the concurrence of career and private life among female academics in West Germany. The data show a relatively small proportion of woman-year observations classified as having both. Furthermore, it seems to be easier to combine a career with a cohabitation than with a child or both. For females younger than 35 years old, we observe for more recent birth cohorts a lower reconciliation between motherhood and a professional career. A look at different generations of women reveals a small progress in the compatibility of career and cohabitation in younger generations. However, the reconcilability of a professional career with family life seems to be very challenging across all included generations. To my knowledge, this study is the first to attempt to understand the relationship of "having it all" and women's well-being within the German context. Using FE models, I find consistent



Notes: Adjusted predictions of career#cohabitation (see Panel A Column (1) in Appendix Table A.3.10 on page 209); predictive margins with 95% CIs
Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure 4.6: Life satisfaction by career and cohabitation status for women over 40 years of age

evidence that the interaction of career and private life on life satisfaction is negative. These negative interaction effects are, however, not observed for East German women.

My findings for West Germans are in line with Bertrand's (2013) conclusion for college-educated women in the U.S.: While there are life-satisfaction gains when having a career and a family individually, there is no "double up" on these gains. Unlike Bertrand, I do not find that "[t]he biggest premium to life satisfaction is associated with having a family" (Bertrand 2013, p. 244).[10] When considering family and career, my FE models suggest that career is associated with a higher enhancement in women's well-being than family.

There are several limitations of the present study that should be discussed. First, detailed information on the working and living environment, for example temporal flexibility or reward system at work, is absent. I.e., changing workplace policies remain a potential source of bias when exploring the relationship between career-and-life interaction and women's life satisfaction. Another potential point for criticism is the definition of career. Here, following Goldin's (2004) and Bertrand's (2013) approach college-educated men are used as a reference group. However, men might be a less appropriate comparison group after all since their field of study and work differs on average.

A next step for research in this area might be to further examine the motivation for acquiring a college degree in the first place. A college degree does not necessarily represent a commitment to an achievement-oriented lifestyle or a career orientation (Ridgeway 1978, p. 282; Blakemore et al.

10 Bertrand (2013) defines family as having a husband and children (Bertrand 2013, p. 247).

2005, p. 327). Thus, the expectations of German students and, especially, changes in attitudes in their post-college lives are worth exploring.

From a public policy standpoint, any policy that can reduce the double burden for individuals may lower the costs these individuals incur from investing in careers and private life. For example, childcare infrastructure could be improved or school schedules that match parents work schedules could be introduced. However, imbalances at work and at home may still remain despite these investments as shown in Section 4.4. Career-family conflicts and other psychological constructs on the relationships between career and family provide a plausible framework why it is challenging to combine a career and private life and meet the demands in both domains.

The Federal Ministry of Health, for example, identified a balanced work-life environment as an important factor for attracting professionals in the health care system. In order to find new avenues for the reconciliation of family and career, the round table meetings took place in 2010 and in subsequent years. It seems that institutions with employee-oriented work organization are more successful in recruiting and retaining qualified personnel. These employers have a family-friendly company philosophy that plays an important role in all organizational desicions (Widmann-Mauz 2012, pp. 4 et seq.). Thus, businesses should take into account that employees have family obligations (even without having children) and are advised to implement family-friendly work practices. Measures like "egg freezing" which is supported by tech companies like Apple, Google and Facebook in the U.S. seem to encourage delaying childbirth and thus to support sequencing instead of having career and children at the same time. On the other hand, policies like flexibilization of working time, telecommuting or performance-linked rewarding system appear to be helpful instruments for this purpose (Federal Society of the German Employer Associations 2013, p. 6).

> "Why is the reconcilability of family and working life so important? [...] Germany cannot afford not to use the workforce of highly qualified women. [...] The main objective has to be to increase women's full-time employment and to avoid career breaks. This would not only be helpful in fighting skilled worker shortage, but also in women's catching up with men's careers and earning opportunities" (Federal Society of the German Employer Associations 2013, p. 5).

BIBLIOGRAPHY

Abadie, A.

2005 "Semiparametric Difference-in-Differences Estimators," *Review of Economic Studies*, vol. 72, 1, pp. 1-19.

Abele, A. E. and D. Spurk

2009 "How do objective and subjective career success interrelate over time?" *Journal of Occupational and Organizational Psychology*, vol. 82, 4, pp. 803-824.

Aizer, A. and S. McLanahan

2006 "The Impact of Child Support Enforcement on Fertility, Parental Investments, and Child Well-Being," *The Journal of Human Resources*, vol. 41, 1, pp. 28-45.

Allen, D. W. and M. Brinig

2012 "Child support guidelines and divorce incentives," *International Review of Law and Economics*, vol. 32, 3, pp. 309-316.

Allensbach Institute

2008 *Alleinerziehende: Lebens- und Arbeitssituation sowie Lebenspläne – Ergebnisse einer Repräsentativumfrage im Herbst 2008*, Federal Ministry for Family Affairs, Senior Citizens, Women, and Youth, Berlin.

Altman, S.

2003 "A Theory of Child Support," *International Journal of Law, Policy and the Family*, vol. 17, 2, pp. 173-210.

Angrist, J. D.

2004 "Treatment Effect Heterogeneity in Theory and Practice," *The Economic Journal*, vol. 114, 494, Conference Papers, pp. C52-C83.

Angrist, J. D. and J.-S. Pischke

2009 *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, Princeton.

2010 "The Credibility Revolution in Empirical Economics: How Better Research Design Is Taken the Con out of Econometrics," *Journal of Economic Perspectives*, vol. 24, 2, pp. 3-30.

2015 *Mastering 'metrics: the path from cause to effect*, Princeton University Press, Princeton.

Apps, P. and R. Rees

2007 *Household Models: An Historical Perspective*, CESifo Working Paper, 2172, Center for Economic Studies and Ifo Institute (CESifo), Munich.

2009 *Public Economics and the Household*, Cambridge University Press, Cambridge.

Ashenfelter, O.

1978 "Estimating the Effect of Training Programs on Earnings," *The Review of Economics and Statistics*, vol. 60, 1, pp. 47-57.

ASP Rechtsanwälte Krefeld

n.d. *Zugewinnausgleich*, URL: `http://www.asp-rechtsanwaelte.de/anwalt-fuer-familienrecht-scheidungsanwalt/zugewinnausgleich/`, accessed on 06.13.2017.

Attanasio, O., H. Low, and V. Sánchez-Marcos

2008 "Explaining Changes in Female Labor Supply in a Life-Cycle Model," *American Economic Review*, vol. 98, 4, pp. 1517-1552.

Audit Office Baden-Wuerttemberg

2016 "Unterhaltsleistungen nach dem Unterhaltsvorschussgesetz," in *Denkschrift 2016 zur Haushalts- und Wirtschaftsführung des Landes Baden-Württemberg*, Rechnungshof Baden-Württemberg, Karlsruhe, chap. 18, pp. 160-165.

Backer, L. A. and R. E. Emery

1993 "When Every Relationship Is above Average: Perceptions and Expectations of Divorce at the Time of Marriage," *Law and Human Behavior*, vol. 17, 4, pp. 439-450.

Baum, C. F., M. E. Schaffer, and S. Stillman

2007 "Enhanced routines for instrumental variables/generalized method of moments estimation and testing," *The Stata Journal*, vol. 7, 4, pp. 465-506.

Beblo, M. and C. Boll

2014 "Ökonomische Analysen des Paarverhaltens aus der Lebensverlaufsperspektive und politische Implikationen," *Vierteljahrshefte zur Wirtschaftsforschung*, vol. 83, 1, pp. 121-144.

Becker, G. S.

1981 *A Treatise on the Family*, Harvard University Press, Cambridge, London.

1993 *A Treatise on the Family*, Enlarged edition, Harvard University Press, Cambridge, London.

Bertrand, M.

2013 "Career, Family, and the Well-Being of College-Educated Women," *American Economic Review: Papers & Proceedings*, vol. 103, 1, pp. 244-250.

Bertrand, M., E. Duflo, and S. Mullainathan

2004 "How Much Should We Trust Differences-in-Differences Estimates?" *The Quarterly Journal of Economics*, vol. 119, 1, pp. 249-275.

Bitler, M. P.

1998 *The effect of child support enforcement on noncustodial parents' labor supply*, Unpublished paper, U.S. Federal Trade Commission, Washington DC.

Blackwell, D. L. and D. T. Lichter

2000 "Mate Selection Among Married and Cohabiting Couples," *Journal of Family Issues*, vol. 21, 3, pp. 275-302.

2004 "Homogamy among Dating, Cohabiting and Married Couples," *The Sociological Quarterly*, vol. 45, 4, pp. 719-737.

Blaese, D.

2000 *Anwalts-Taschenbuch Familienrecht*, Verlag Dr. Otto Schmidt KG, Köln.

Blakemore, J. E. O., C. A. Lawton, and L. R. Vartanian

2005 "I Can't Wait to Get Married: Gender Differences in Drive to Marry," *Sex Roles*, vol. 53, 5/6, pp. 327-335.

Bloom, D. E., C. Conrad, and C. Miller

1996 *Child Support and Fathers' Remarriage and Fertility*, NBER – National Bureau of Economic Research Working Paper, 5781.

Böheim, R. and M. P. Taylor

2004 "Actual and Preferred Working Hours," *British Journal of Industrial Relations*, vol. 42, 1, pp. 149-166.

Bonnet, C., G. Bertrand, and A. Solaz

2015 *Do women really bear the cost of divorce? New evidence based on French administrative data*, ESPE Conference 2015.

Borth, H.

2011 *Praxis des Unterhaltsrechts: Das UÄndG und seine Folgen*, Verlag Ernst und Werner Gieseking, Bielefeld.

2013 "Ausweitung des Schutzes des nachehelichen Unterhalts bei langer Ehedauer," *FamRZ – Zeitschrift für das gesamte Familienrecht*, pp. 165-168.

Boserup, E.

1987 "Inequality Between the Sexes," in *The New Palgrave: A Dictionary of Economics*, ed. by J. Eatwell, M. Milgate, and P. Newman, Macmillan, New York, pp. 824-827.

Böttner, F.

2001 "Ist die Neuregelung der Kindergeldanrechnung auf den Barunterhalt in §1612b Abs. 5 BGB verfassungsgemäß?" *Neue Justiz*, vol. 55, 4, pp. 169-224.

Boudreau, J. W., W. R. Boswell, and T. A. Judge

1999 *Effects of Personality on Executive Career Success in the U.S. and Europe*, Center for Advanced Human Resource Studies (CAHRS) Working Paper Series, 99-12, Cornell University, School of Industrial and Labor Relations, Ithaca, NY.

Brassiolo, P.

2013 *The Effect of Property Devision Laws on Divorce and Labor Supply: Evidence from Spain*, CAF – Development Bank of Latin America, Working Paper, 2.

Bredtmann, J. and C. Vonnahme

2017 *Less Alimony after Divorce – Spouses' Behavioral Response to the 2008 Alimony Reform in Germany*, SOEPpapers on Multidisciplinary Panel Data Research at DIW, Berlin, 942.

Breithaupt, M.

2006 *Stellungnahme zum Entwurf eines Gesetzes zur Änderung des Unterhaltsrechts*, Bundestag Drucksache 16/1830.

2012 *50 Jahre Düsseldorfer Tabelle, 50 Jahre verordneter Unterhaltsverzicht*, Nomos Verlagsgesellschaft, Baden-Baden.

Bremische Bürgerschaft

2008 *Rechnungshof der Freien Hansestadt Bremen - Jahresbericht 2008 über die Prüfung der Haushalts- und Wirtschaftsführung und der Haushaltsrechnung 2006*, Freie Hansestadt Bremen (Land), Bremische Bürgerschaft Drucksache 17/256, 02.21.2008.

Brenke, K., U. Rinne, and K. F. Zimmermann

2013 "Short-time work: The German answer to the Great Recession," *International Labour Review*, vol. 152, 2, pp. 287-305.

Bridges, J. S. and C. Etaugh

1994 "Black and White College Women's Perception of Early Maternal Employment," *Psychology of Women Quarterly*, vol. 18, pp. 427-431.

Bröckel, M. and H.-J. Andreß

2015 "The Economic Consequences of Divorce in Germany: What Has Changed since the Turn of the Millennium?" *Comparative Population Studies*, vol. 40, 3, pp. 277-312.

Bronzaft, A. L.

1991 "Career, Marriage, and Family Aspirations of Young Black College Women," *The Journal of Negro Education*, vol. 60, 1, pp. 110-118.

Brown, M. and M. Manser

1978 *Neoclassical and Bargaining Approaches to Household Decision-Making - with Application to the Household Labor Supply Decision*, Discussion Paper, 401, State University of New York at Buffalo.

Browning, M., P.-A. Chiappori, and Y. Weiss

2011 *Family Economics*, URL: `https://www.tau.ac.il/~weiss/fam_econ/BCW_Book_index_07_09_2011_MB.pdf`.

Brühl, G.

1987 *Unterhaltsrecht begründet von Günter Brühl*, ed. by H. Göppinger, C.-P. Kindermann, R. W. Märkle, K. Roth-Stielow, V. Stöckle, P. Wax, and E. Wenz, 5th ed., Verlag Ernst und Werner Gieseking, Bielefeld.

Burkhart, S. and P. Manow
2006 *Was bringt die Föderalismusreform? Wahrscheinliche Effekte der geänderten Zustimmungspflicht*, Max Planck Institute for the Study of Societies, Working Paper, 6.

Cahuc, P. and A. Zylberberg
2004 *Labor Economics*, The MIT Press, Cambridge, London.

Caliendo, M. and R. Hujer
2006 "The microeconometric estimation of treatment effects - An overview," *Advances in Statistical Analysis - A Journal of the German Statistical Society*, vol. 90, 1, pp. 199-215.

Callaway, B. and T. Li
2015 *Quantile Treatment Effects in Difference in Differences Models with Panel Data*, Unpublished manuscript, URL: `http://economics.virginia.edu/sites/economics.virginia.edu/files/econometrics/li.pdf`, Vanderbilt University.

Cameron, A. C. and P. K. Trivedi
2009 *Microeconometrics Using Stata*, Stata Press, College Station.

Cancian, M., C. J. Heinrich, and Y. Chung
2013 "Discouraging Disadvantaged Fathers' Employment: An Unintended Consequence of Policies Designed to Support Families," *Journal of Policy Analysis and Management*, vol. 32, 4, pp. 758-784.

Cancian, M. and D. R. Meyer
2014 "Testing the Economic Independence Hypothesis: The Effect of an Exogenous Increase in Child Support on Subsequent Marriage and Cohabitation," *Demography*, vol. 51, 3, pp. 857-880.

Case, A.
1998 "The effects of stronger child support enforcement on nonmarital fertility," in *Fathers Under Fire: The Revolution in Child Support Enforcement*, ed. by S. S. Garfinkel, D. R. McLanahan, and J. A. Seltzer, Russell Sage Foundation, New York, pp. 191-215.

Chambers, D.
1979 *Making Fathers Pay: The Enforcement of Child Support*, University of Chicago Press, Chicago.

Chetty, R., J. N. Friedman, and J. Rockoff
2011 *New Evidence on the Long-term Impacts of Tax Credits*, National Tax Association Proceedings, 104th Annual Conference on Taxation.

Chiappori, P.-A., M. Iyigun, J. Lafortune, and Y. Weiss
2011 *Are Intra-Household Allocations Policy Neutral? Theory and Empirical Evidence*, IZA – Institute of Labor Economics Discussion Paper, 5594.

Chiappori, P.-A. and M Mazzocco
2015 *Static and Intertemporal Household Decisions*, Working Paper, September 2015, URL: `http://www.econ.ucla.edu/mazzocco/doc/HouseholdSurvey.pdf`.

Cooke, L. P.
2006 ""Doing" Gender in Context: Household Bargaining and Risk of Divorce in Germany and the United States," *American Journal of Sociology*, vol. 112, 2, pp. 442-472.

Coyle, D.
2007 *The Soulful Science: What Economists Really Do and Why It Matters*, Princeton University Press, Princeton.

Craig, L. and K. Mullan
2012 "Australian fathers' work and family time in comparative and temporal perspective," *Journal of Family Studies*, vol. 18, 2-3, pp. 165-174.

Dahl, G. B. and L. Lochner
2012 "The Impact of Family Income on Child Achievement: Evidence from the Earned Income Tax Credit," *The American Economic Review*, vol. 102, 5, pp. 1927-1956.

Damm, K. and D. Marquard

2015 *Scheidung nach kurzer Ehe – Scheidungsvorteile bei Kurzehen*, URL: http://www.famr-ratgeber.de/Scheidung/Scheidung-Kurzehe.htm, last update 10.08.2015, accessed on 01.10.2015.

Del Boca, D. and R. Ribero

2001 "The Effect of Child-Support Policies on Visitations and Transfers," *The American Economic Review, Papers and Proceedings of the Hundred Thirteenth Annual Meeting of the American Economic Association*, vol. 91, 2, pp. 130-134.

Deuchert, E. and M. Huber

2017 "A Cautionary Tale About Control Variables in IV Estimation," *Oxford Bulletin of Economics and Statistics*, vol. 79, 3, pp. 411-425.

Diwell, M.

2006 *Stellungnahme zum Gesetzesentwurf der Bundesregierung: Entwurf eines Gesetzes zur Änderung des Unterhaltsrechts, BT-Drucksache 16/1830, und dem Antrag der Abgeordneten Sabine Leutheusser-Schnarrenberger u.a. und der Fraktion der FDP: Unterhaltsrecht ohne weiteres Zögern sozial und verantwortungsbewusst den gesellschaftlichen Rahmenbedingungen anpassen, BT-Drucksache 16/891*, Öffentliche Anhörung des Rechtsausschusses des Deutschen Bundestages am 16. Oktober 2006.

Drewes, T. and R. Hollender

1985 *Familienrecht: Ehe, Scheidung, Unterhalt, Rechtsstellung der Kinder, Sorgerecht, Vormundschaft and Adoption*, Falken-Verlag, Niedernhausen/Ts.

Duflo, E.

2003 "Grandmothers and Granddaughters: Old Age Pension and Intra-Household Allocation in South Africa," *World Bank Economic Review*, vol. 17, 1, pp. 1-25.

Edwards, J. R. and N. P. Rothbard

2000 "Mechanisms Linking Work and Family: Clarifying the Relationship between Work and Family Constructs," *The Academy of Management Review*, vol. 25, 1, pp. 178-199.

Eissa, N.

1995 *Taxation and Labor Supply of Married Women: The Tax Reform Act of 1986 as a Natural Experiment*, NBER – National Bureau of Economic Research Working Paper Series, 5023.

Erler, D.

2009 "Germany: taking a Nordic turn?" In *The politics of parental leave policies: Children, parenting, gender and the labour market*, ed. by S. B. Kamerman and P. Moss, The Policy Press, University of Bristol, Bristol, chap. 8, pp. 119-134.

Eschenbruch, K.

1990 *Unterhaltsrecht nach der Rechtsprechung des OLG Düsseldorf und des BGH – Ein Handbuch für die anwaltliche Praxis*, WiRe Verlagsgesellschaft für Wirtschaft, Recht und Steuern, Göttingen.

European Commission, eurostat

n.d. *Database: Social protection*, URL: http://ec.europa.eu/eurostat/web/social-protection/data/database, accessed on 02.01.2017.

2012 *ESSPROS Manual and user guidelines - 2012 edition*, URL: http://ec.europa.eu/eurostat/documents/3859598/5922833/KS-RA-12-014-EN.PDF/6da3b2bf-85ba-4665-b318-a41d6a2df37f, accessed on 02.01.2017.

Fahn, M., R. Rees, and A. Wuppermann

2016 "Relational contracts for household formation, fertility choice and separation," *Journal of Population Economics*, vol. 29, 2, pp. 421-455.

Federal Constitutional Court

1982 *Beschlüsse des Bundesverfassungsgerichts, Steuerfreies Existenzminimum*, BVerfGE 82, 60.

Federal Constitutional Court

2011 *New case-law on the calculation of post-marital maintenance applying the so-called division-by-three method is unconstitutional*, Press Release, 13/2011, URL: http://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2011/bvg11-013.html, accessed on 05.02.2014.

Federal Employment Agency

2009 *Arbeitsmarktberichterstattung: Der Arbeitsmarkt in Deutschland, Kurzarbeit – Aktuelle Entwicklungen*, Bundesagentur für Arbeit, Nürnberg.

2014 *Der Arbeits- und Ausbildungsmarkt in Deutschland – Konjunkturelle Kurzarbeit, Stand September 2014*, Bundesagentur für Arbeit, Nürnberg.

Federal Government

1984 *Zweite Verordnung über die Anpassung und Erhöhung von Unterhaltsrenten für Minderjährige, Vom 26. Juli 1984*, Bundesgesetzblatt Teil I, 34, ausgegeben zu Bonn am 2. August 1984.

1992 *Vierte Verordnung über die Anpassung und Erhöhung von Unterhaltsrenten für Minderjährige, Vom 19. März 1992*, Bundesgesetzblatt Teil I, 14, ausgegeben zu Bonn am 27. März 1992.

2013 *Regelsätze für die Grundsicherung nach dem SGB II (Hartz IV) und SGB XII (Sozialhilfe) seit Einführung 2005, Neuberechnung ab 2011 nach BVerfG-Urteil*, URL: https://archiv.bundesregierung.de/resource/blob/656922/414340/2f8d0a92e64d481a69badac5096aa976/2013-09-04-entwicklung-regelsaetze-data.pdf, accessed on 11.26.2018.

Federal Ministry for Family Affairs, Senior Citizens, Women and Youth

2018 *Family benefits: Maintenance advance*, Infographics 01.31.2018, URL: https://www.bmfsfj.de/bmfsfj/themen/familie/maintenance-advance/121940, accessed on 02.03.2018.

Federal Ministry for Youth, Family, Women, and Health

1977 *Zur Situation von Alleinstehenden mit Kindern*, Repräsentativerhebung des EMNID-Instituts, Bundesministerium für Jugend, Familie, Frauen und Gesundheit, Bielefeld.

Federal Office of Statistics

2006 *Wirtschaftsrechnungen, Einkommens- und Verbrauchsstichprobe, Einnahmen und Ausgaben privater Haushalte 2003*, Statistisches Bundesamt, Wiesbaden.

2008a *Rechtspflege: Familiengerichte 2006*, series 10, 2.2, URL: https://www.destatis.de/GPStatistik/servlets/MCRFileNodeServlet/DEHeft_derivate_00006730/2100220067004.pdf, Statistisches Bundesamt, Wiesbaden.

2008b *Rechtspflege: Familiengerichte 2007*, series 10, 2.2, URL: https://www.destatis.de/GPStatistik/servlets/MCRFileNodeServlet/DEHeft_derivate_00006731/2100220077004.pdf, Statistisches Bundesamt, Wiesbaden.

2010 *Wirtschaftsrechnungen, Einkommens- und Verbrauchsstichprobe, Einnahmen und Ausgaben privater Haushalte 2008*, Statistisches Bundesamt, Wiesbaden.

2015 *Bevölkerung und Erwerbstätigkeit - Statistik der rechtskräftigen Beschlüsse in Eheauflösungssachen (Scheidungsstatistik) 2014*, series 1, 1.4, Statistisches Bundesamt, Wiesbaden.

2018a *Alleinerziehende in Deutschland 2017*, Begleitmaterial zur Pressekonferenz am 2. August 2018, URL: https://www.destatis.de/DE/PresseService/Presse/Pressekonferenzen/2018/Alleinerziehende/Pressebroschuere_alleinerziehende.pdf?__blob=publicationFile, accessed on 09.02.2018, Statistisches Bundesamt, Wiesbaden.

2018b *Hochschulen auf einen Blick*, Ausgabe 2018, Statistisches Bundesamt, Wiesbaden.

2018c *Was sind Teilzeitbeschäftigte?* URL: https://www.destatis.de/DE/Publikationen/STATmagazin/Arbeitsmarkt/2009_04/Teilzeitbeschaeftigte.html, accessed on 08.18.2018, Statistisches Bundesamt, Wiesbaden.

Federal Society of the German Employer Associations

2013 *Vereinbarkeit von Familie und Beruf: Praxisbeispiele aus der Wirtschaft*, URL: http://www.arbeitgeber.de/www/arbeitgeber.nsf/res/57B095F497D2E6BAC1257B90002C8413/$file/Vereinbarkeit-Familie-und-Beruf.pdf, Bundesvereinigung der Deutschen Arbeitgeberverbände, Berlin.

Finanztip

2012 *Einkommensveränderungen nach Trennung/Scheidung*, URL: `https://www.finanztip.de/einkommensveraenderungen/`, last update 12.13.2012, accessed on 05.29.2018.

Fischer, H.

2017 "The Impact of Child Support on the Household Income and Labour Supply of Payee Lone Mothers," *Economic Record*, vol. 93, 301, pp. 189-213.

forsa

2002 "Unterhaltszahlungen für minderjährige Kinder in Deutschland," in *Schriftenreihe des Bundesministeriums für Familie, Senioren, Frauen und Jugend*, Verlag W. Kohlhammer, Stuttgart, vol. 228.

Freeman, R. B. and J. Waldfogel

1998 "Does child support enforcement affect male labor supply?" In *Fathers Under Fire: The Revolution in Child Support Enforcement*, ed. by S. S. Garfinkel, D. R. McLanahan, and J. A. Seltzer, Russell Sage Foundation, New York, chap. 4, pp. 94-127.

Furstenberg, F. F. Jr., C. W. Nord, J. L. Peterson, and N. Zill

1983 "The Life Course of Children of Divorce: Marital Disruption and Parental Contact," *American Sociological Review*, vol. 48, 5, pp. 656-668.

Gangl, M. and A. Ziefle

2009 "Motherhood, Labor Force Behavior, and Women's Careers: An Empirical Assessment of the Wage Penalty for Motherhood in Britain, Germany, and the United States," *Demography*, vol. 46, 2, pp. 341-369.

Garasky, S., S. D. Stewart, C. Gundersen, and B. J. Lohman

2010 "Toward a Fuller Understanding of Nonresident Father Involvement: An Examination of Child Support, In-Kind Support, and Visitation," *Population Research and Policy Review*, vol. 29, 3, pp. 363-393.

Gartner, H. and S. Klinger

2010 "Verbesserte Institutionen für den Arbeitsmarkt in der Wirtschaftskrise," *Wirtschaftsdienst 2010*, 11, pp. 728-734.

Geist, C.

2009 "One Germany, Two Worlds of Housework? Examining Employed Single and Partnered Women in the Decade after Unification," *Journal of Comparative Family Studies*, vol. 40, 3, pp. 415-437.

Gelman, A. and J. Hill

2006 *Data Analysis Using Regression and Multilevel/Hierarchical Models*, Cambridge University Press, New York.

Genadek, K. R., W. A. Stock, and C. Stoddard

2007 "No-Fault Divorce Laws and the Labor Supply of Women with and without Children," *Journal of Human Resources*, vol. 42, 1, pp. 247-274.

German Bundestag

2000a *Dritter Bericht über die Höhe des Existenzminimums von Kindern und Familien für das Jahr 2001*, Bundestag Drucksache 14/1926, 04.01.2000.

2000b *Gesetz zur Ächtung der Gewalt in der Erziehung und zur Änderung des Kindesunterhaltsrechts. Vom 02. November 2000*, Bundesgesetzblatt Jahrgang 2000, Teil I, 48, 11.07.2000, pp. 1479-1480.

German Bundestag

2006a *Antrag der Abgeordneten Sibylle Laurischk, Dr. Karl Addicks, Daniel Bahr (Münster), Rainer Brüderle, Angelika Brunkhorst, Ernst Burgbacher, Helga Daub, Jörg van Essen, Ulrike Flach, Otto Fricke, Horst Friedrich (Bayreuth), Rainer Funke, Hans-Michael Goldmann, Joachim Günther (Plauen), Dr. Karlheinz Guttmacher, Dr. Christel Happach-Kasan, Klaus Haupt, Ulrich Heinrich, Dr. Werner Hoyer, Michael Kauch, Dr. Heinrich L. Kolb, Gudrun Kopp, Jürgen Koppelin, Harald Leibrecht, Ina Lenke, Dirk Niebel, Günther Friedrich Nolting, Hans-Joachim Otto (Frankfurt), Detlef Parr, Gisela Piltz, Dr. Hermann Otto Solms, Dr. Max Stadler, Dr. Rainer Stinner, Jürgen Türk, Dr. Claudia Winterstein, Dr. Wolfgang Gerhardt und der Fraktion der FDP:Unterhaltsrecht sozial und verantwortungsbewusst gesellschaftlichen Rahmenbedingungen anpassen*, Bundestag Drucksache 16/891, 03.08.2006.

2006b *Gesetzentwurf der Bundesregierung - Entwurf eines Gesetzes zur Änderung des Unterhaltsrechts*, Bundestag Drucksache 16/1830, 06.15.2006.

2006c *Protokoll der 28. Sitzung am 16. Oktober 2006, Öffentliche Anhörung, a) Gesetzesentwurf der Bundesregierung, Entwurf eines Gesetzes zur Änderung des Unterhaltsrechts, BT-Drucksache 16/1830, b) Antrag der Abgeordneten Sabine Leutheusser-Schnarrenberger, Sibylle Laurischk, Jens Ackermann, weiterer Abgeordneter und der Fraktion der FDP, Unterhaltsrecht ohne weiteres Zögern sozial und verantwortungsbewusst den gesellschaftlichen Rahmenbedingungen anpassen*, 16. Wahlperiode, Rechtsausschuss, Bundestag Drucksache 16/891, 03.08.2006.

2007a *Beschlussempfehlung und Bericht des Rechtsausschusses (6. Ausschuss) a) zu dem Gesetzesentwurf des Bundesregierung –Drucksache 16/1830, b) zu dem Antrag der Abgeordneten Sabine Leutheusser-Schnarrenberger, Sibylle Laurischk, Jens Ackermann, weiterer Abgeordneter und der Fraktion der FDP – Drucksache 16/891 – Unterhaltsrecht ohne weiteres Zögern sozial und verantwortungsbewusst den gesellschaftlichen Rahmenbedingungen anpassen*, Bundestag Drucksache 16/6980, 11.07.2007.

2007b *Deutscher Bundestag, Stenografischer Bericht, 124. Sitzung*, Plenarprotokoll 16/124, Berlin, 11.09.2007.

2007c *Gesetz zur Änderung des Unterhaltsrechts vom 21. Dezember 2007*, Bundesgesetzblatt Jahrgang 2007, Teil I, 69, 12.28.2007, pp. 3189-3193.

2012 *Beschlussempfehlung und Bericht des Rechtsausschusses (6. Ausschuss) zu dem Gesetzentwurf der Bundesregierung, Drucksache 17/10492, Entwurf eines Gesetzes zur Durchführung des Haager Übereinkommens vom 23. November 2007 über die internationale Geltendmachung der Unterhaltsansprüche von Kindern und anderen Familienangehörigen sowie zur Änderung von Vorschriften auf dem Gebiet des internationalen Unterhaltsverfahrensrechts*, Bundestag Drucksache 17/11885, 12.12.2012.

2016 *Bericht über die Auswirkungen der Einführung des Kontenabrufverfahrens nach §6 Absatz 6 des Unterhaltsvorschussgesetzes sowie über die gegebenenfalls notwendige Weiterentwicklung dieser Vorschrift*, Bundestag Drucksache 18/7700, 02.25.2016, Unterrichtung durch die Bundesregierung.

Gertler, P. J., S. Martinez, P. Premand, L. B. Rawlings, and C. M. J. Vermeersch

2011 *Impact Evaluation in Practice*, The International Bank for Reconstruction and Development/The World Bank, Washington DC.

Gilleard, C. and P. Higgs

2002 "The third age: class, cohort or generation?" *Ageing & Society*, vol. 22, 3, pp. 369-382.

Glatzer, W., H.-H. Noll, and W. Zapf

1986 *Welfare Survey 1984*, GESIS Data Archive, Cologne. ZA1339 Data file Version 1.0.0, doi: 10.4232/1.1339.

1990 *Welfare Survey 1988*, GESIS Data Archive, Cologne. ZA1839 Data file Version 1.0.0, doi: 10.4232/1.1839.

Gnann, T.

1995 *Scheidungsrecht - Der Ratgeber zur Ehescheidung und deren Folgen*, Bund-Verlag, Köln.

Göhring, H.-J.

1969 "Aktuelle Fragen zum Unterhaltsrecht," *FamRZ – Zeitschrift für das gesamte Familienrecht*, pp. 512-514.

Goldin, C.

2004 "The Long Road to the Fast Track: Career and Family," *The ANNALS of the American Academy of Political and Social Science*, vol. 596, 1, pp. 20-35.

González, L. and B. Özcan

2013 "The Risk of Divorce and Household Saving Behavior," *Journal of Human Resources*, vol. 48, 2, pp. 404-434.

González, L. and T. Viitanen

2008 *The Long Term Effects of Legalizing Divorce on Children*, IZA – Institute of Labor Economics Discussion Paper, 3789.

Google

2015 *Google Trends, Regional web search interest, Search keyword: "Düsseldorfer Tabelle"*, accessed on 09.23.2015.

2016a *Google Trends, Regional web search interest, Search keyword: "neues unterhaltsrecht"*, accessed on 04.26.2016.

2016b *Google Trends, Search keywords: "unterhaltsrecht" and "neues unterhaltsrecht"*, accessed on 04.26.2016.

2017 *Google Trends, Search keywords: "Zugewinnausgleich" and "Zugewinnausgleichsrecht"*, accessed on 13.06.2017.

Granger, C. W. J.

1969 "Investigating Causal Relations by Econometric Models and Cross-spectral Methods," *Econometrica*, vol. 37, 3, pp. 424-438.

Gray, J. S.

1998 "Divorce-Law Changes, Household Bargaining, and Married Women's Labor Supply," *The American Economic Review*, vol. 88, 3, pp. 628-642.

Greene, W. H.

2012 *Econometric Analysis*, Pearson Education, Harlow.

Greenhaus, J. H. and N. J. Beutell

1985 "Sources of Conflict Between Work and Family Roles," *The Academy of Management Review*, vol. 10, 1, pp. 76-88.

Grossbard, S.

2011 "Independent Individual Decision-Makers in Household Models and the New Home Economics," in *Household Economic Behaviors*, ed. by J. A. Molina, Springer, New York, Dordrecht, Heidelberg, London, chap. 2, pp. 41-56.

Großmann, H.

1996 *Unterhaltssituation von Kindern im Land Brandenburg*, Studie gefördert durch das Ministerium für Arbeit, Soziales und Frauen des Landes Brandenburg, Potsdam.

Grote, G. and D. T. Hall

2013 "Reference groups: A missing link in career studies," *Journal of Vocational Behavior*, vol. 83, 3, pp. 265-279.

Gruber, J.

2004 "Is Making Divorce Easier Bad for Children? The Long-Run Implications of Unilateral Divorce," *Journal of Labor Economics*, vol. 22, 4, pp. 799-833.

Gude, J.

2009 "Ehescheidungen 2007," in *Wirtschaft und Statistik 12/2008*, Statistisches Bundesamt, Wiesbaden.

Gunz, H. and W. Mayrhofer

2011 "Re-conceptualizing career success: a contextual approach," *Zeitschrift für Arbeitsmarkt-Forschung*, vol. 43, 3, pp. 251-260.

Hanglberger, D.

2011 "Arbeitszeiten außerhalb der Normalarbeitszeit nehmen weiter zu: eine Analyse zu Arbeitszeitarrangements und Arbeitszufriedenheit," *Informationsdienst Soziale Indikatoren*, vol. 46, pp. 12-16.

Hartmann, B.

2014 *Unterhaltsansprüche und deren Wirklichkeit: Wie groß ist das Problem nicht gezahlten Kindesunterhalts?* SOEPpapers on Multidisciplinary Panel Data Research at DIW, Berlin, 660.

Hausman, J. A. and D. A Wise

1979 "Attrition Bias in Experimental and Panel Data: The Gary Income Maintenance Experiment," *Econometrica*, vol. 47, 2, pp. 455-473.

Heckmann, M., A. Kettner, S. Pausch, J. Szameitat, and K. Vogler-Ludwig

2009 *Unternehmensbefragung im II. Quartal 2009: Wie Betriebe in der Krise Beschäftigung stützen*, IAB – Institute for Employment Research, Research Report, 18.

Heineck, G. and J. Schwarze

2004 *Fly Me to the Moon: The Determinants of Secondary Jobholding in Germany and the UK*, IZA – Institute of Labor Economics Discussion Paper, 1358.

Higher Regional Court Düsseldorf

1999a "Düsseldorfer Tabelle, Stand 1. Juli 1999," *FamRZ – Zeitschrift für das gesamte Familienrecht, 1. Halbjahr 1999*.

1999b *Unterhaltsrechtliche Leitlinien des Oberlandesgerichts Düsseldorf, Stand 1.7.1999*, OLG Report Düsseldorf – Schnelldienst zur Zivilrechtsprechung des OLG Düsseldorf, Sonderbeilage zu Heft 11/1999, Verlag Dr. Otto Schmidt, Köln, pp. 1-4.

2002 "Düsseldorfer Tabelle, Euro, Stand 1.1.2002," *Beilage zu Heft 11/2001 des OLG-Reports Düsseldorf*, pp. 6-8.

2003a "Dokumentation: Düsseldorfer Tabelle, Stand 1. Juli 2003," *FamRZ – Zeitschrift für das gesamte Familienrecht*, vol. 13, pp. 903-906.

2003b *Leitlinien zum Unterhalt zur Ergänzung der Düsseldorfer Tabelle, Stand 1.7.2003*, OLG Report Düsseldorf – Schnelldienst zur Zivilrechtsprechung des OLG Düsseldorf, Sonderbeilage zu Heft 19/2003, pp. 1-8.

2005a *Düsseldorfer Tabelle, Stand 1. Juli 2005*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2005/2005-07-01_duess-tab.pdf`.

2005b *Leitlinien zum Unterhalt, Stand 01.07.2005, zur Ergänzung der Düsseldorfer Tabelle herausgegeben von den Senaten für Familiensachen des Oberlandesgerichts Düsseldorf*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2005/2005-07-01-leitlinien-olgd.pdf`.

2007a *Düsseldorfer Tabelle, Stand 01.07.07*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2007/2007-07-01_ddorftab.pdf`.

2007b *Leitlinien zum Unterhalt, Stand 01.07.2007, zur Ergänzung der Düsseldorfer Tabelle herausgegeben von den Senaten für Familiensachen des Oberlandesgerichts Düsseldorf*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2007/2007-08-07_leit_unterh.pdf`.

2008a *Düsseldorfer Tabelle, Stand 01.01.2008*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2008/ddorftab2008.pdf`.

2008b *Leitlinien zum Unterhalt, Stand 01.01.2008, zur Ergänzung der Düsseldorfer Tabelle herausgegeben von den Senaten für Familiensachen des Oberlandesgerichts Düsseldorf*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2008/leitlinien2008.pdf`.

2009 *Düsseldorfer Tabelle, Stand 01.01.2009*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2009/2009-01-05_ddorfer_tab.pdf`.

2010a *Düsseldorfer Tabelle, Stand 01.01.2010*, URL: `http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2010/Duesseldorfer_Tabelle_Stand_01_01_2010.pdf`.

Higher Regional Court Düsseldorf

2010b *Leitlinien zum Unterhalt, Stand 01.09.2010, zur Ergänzung der Düsseldorfer Tabelle herausgegeben von den Senaten für Familiensachen des Oberlandesgerichts Düsseldorf*, URL: http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2010/leitlinien_zur_Duesseldorfer_tabelle_stand_01092010.pdf.

2011 *Düsseldorfer Tabelle, Stand 01.01.2011*, URL: http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2011/Duesseldorfer_Tabelle_2011.pdf.

2012 *Leitlinien zum Unterhalt, Stand 01.07.2012, zur Ergänzung der Düsseldorfer Tabelle herausgegeben von den Senaten für Familiensachen des Oberlandesgerichts Düsseldorf*, URL: http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle_2011/Leitlinien_OLG_D__sseldorf_Stand_01_07_2012.pdf.

2013 *Düsseldorfer Tabelle, Stand 01.01.2013*, URL: http://www.olg-duesseldorf.nrw.de/infos/Duesseldorfer_Tabelle/Tabelle-2013/Duesseldorfer-Tabelle-Stand-01_01_2013.pdf.

Hoffnung, M.

2004 "Wanting It All: Career, Marriage, and Motherhood During College-Educated Women's 20s," *Sex Roles*, vol. 50, 9/10, pp. 711-723.

Hoffnung, M. and M. A. William

2013 "Balancing Act: Career and Family During College-Educated Women's 30s," *Sex Roles*, vol. 68, pp. 321-334.

Hohloch, G.

2001 "Internationales Verfahrensrecht in Ehe- und Familiensachen," *FF - Forum Familienrecht*, vol. 2001, 2, pp. 45-53.

Holzer, H. J., P. Offner, and E. Sorensen

2005 "Declining Employment among Young Black Less-Educated Men: The Role of Incarceration and Child Support," *Journal of Policy Analysis and Management*, vol. 24, 2, pp. 329-350.

Hook, J. L. and C. M. Wolfe

2012 "New Fathers? Residential Father's Time With Children in Four Countries," *Journal of Family Issues*, vol. 33, 4, pp. 415-450.

Horner, E. M.

2014 "Continued Pursuit of Happily Ever After: Low Barriers to Divorce and Happiness," *Journal of Family and Economic Issues*, vol. 35, 2, pp. 228-240.

Huang, C.-C.

2002 "The Impact of Child Support Enforcement on Nonmarital and Marital Births: Does It Differ by Racial and Age Groups?" *Social Service Review*, vol. 76, 2, pp. 275-301.

Huinink, J., Brüderl J., B. Nauck, and M. Feldhaus

n.d. "Panel analysis of intimate relationships and family dynamics (pairfam): conceptual framework and design," *Zeitschrift für Familienforschung - Journal of Family Research*, vol. 23, 1, pp. 77-101.

Ibrahim, M. H., J. A. Somers, L. J. Luecken, W. V. Fabricius, and J. T. Cookston

2017 "Father-adolescent engagement in shared activities: Effects on cortisol stress response in young adulthood," *Journal of Family Psychology*, vol. 31, 4, pp. 485-494.

Imbens, G. W.

2010 "Better LATE Than Nothing: Some Comments on Deaton (2009) and Heckman and Urzua (2009)," *Journal of Economic Literature*, vol. 48, 2, pp. 399-423.

Imbens, G. W. and J. D. Angrist

1994 "Identification and Estimation of Local Average Treatment Effects," *Econometrica*, vol. 62, 2, pp. 467-475.

Institute for Employment Research

1993 *Chronik der Arbeitsmarktpolitik: Die wesentlichen Änderungen im Bereich des Arbeitsförderungsgesetzes seit 1969*, Federal Employment Agency, IAB – Institute for Employment Research, URL: http://doku.iab.de/chronik/31/1993_06_20_31_diew.pdf, accessed on 11.20.2017.

Ivanova, K., M. Kalmijn, and W. Uunk

2013 "The Effect of Children on Men's and Women's Chances of Re-partnering in a European Context," *European Journal of Population*, vol. 29, 4, pp. 417-444.

IVW

n.d.a *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: BILD DEUTSCHLAND (Mo-Sa), Axel Springer SE (Berlin)*, URL: http://www.ivw.eu/aw/print/qa/titel/1090, accessed on 04.26.2016.

n.d.b *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: BILD am SONNTAG Gesamt (So), Axel Springer SE (Berlin)*, URL: http://www.ivw.eu/aw/print/qa/titel/1086, accessed on 04.26.2016.

n.d.c *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: Frankfurter Allgemeine (Mo-Sa), Frankfurter Allgemeine Zeitung (Frankfurt)*, URL: http://www.ivw.eu/aw/print/qa/titel/1056, accessed on 04.26.2016.

n.d.d *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: Frankfurter Allgemeine Sonntagszeitung (So), Frankfurter Allgemeine Zeitung (Frankfurt)*, URL: http://www.ivw.eu/aw/print/qa/titel/5600, accessed on 04.26.2016.

n.d.e *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: Focus (woe), Focus Magazin Verlag (München)*, URL: http://www.ivw.eu/aw/print/qa/titel/2952, accessed on 04.28.2016.

n.d.f *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: Focus Money (woe), Focus Magazin Verlag (München)*, URL: http://www.ivw.eu/aw/print/qa/titel/5197, accessed on 04.28.2016.

n.d.g *Informationsgemeinschaft zur Feststellung der Verbreitung von Werbeträgern e. V., Quartalsauflagen Titelanzeige: DER SPIEGEL (woe), Spiegel-Verlag Rudolf Augstein (Hamburg)*, URL: http://www.ivw.eu/aw/print/qa/titel/122, accessed on 04.28.2016.

Jurajda, Š.

2007 *Lecture Notes on Identification Strategies*, URL: http://home.cerge-ei.cz/jurajda/rms07b.pdf, accessed on 06.12.2017.

2016 *Econometrics III*, URL: http://home.cerge-ei.cz/jurajda/ecmiv.pdf, accessed on 06.12.2017.

Jürges, H.

2005 "Retrospective Error in SOEP Calendar Data: The Case of Unemployment," *Journal of Applied Social Science Studies (Schmollers Jahrbuch)*, vol. 125, 1, pp. 157-165.

Kahneman, D. and A. B. Krueger

2006 "Developments in the Measurement of Subjective Well-Being," *Journal of Economic Perspectives*, vol. 20, 1, pp. 3-24.

Kalmijn, M. and R. Alessie

2008 "Life course changes in income: An exploration of age-and stage effects in a 15-year panel in the Netherlands," *Netspar – Network for Studies on Pensions, Aging and Retirement Panel Paper*, vol. 10.

Kapan, T.

2008 *Property Division Laws: The Effects on Labor Supply and Household Bargaining*, Ph.D. thesis, Columbia University.

Kemnitz, A. and M. Thum

2013 *Gender power, fertility, and family policy*, Dresden Discussion Paper in Economics, 01/13.

Kemper, R.
2013 "Besserer Schutz der langjährig verheiratet gewesenen Ehegatten – Änderungen bei der Herabsetzung und Befristung von nachehelichen Unterhaltsansprüchen," *Der Familienratgeber*, pp. 20-21.

Kennedy, P.
2008 *A Guide to Econometrics*, 6th ed., Blackwell Publishing, Oxford.

Kim, Y., M. Cancian, and D. R. Meyer
2017 "Child Support and Subsequent Nonmarital Fertility With a New Partner," *Journal of Family Issues*, vol. 38, 2, pp. 151-176.

Kimmel, J. and R. Connelly
2007 "Mothers' Time Choices: Caregiving, Leisure, Home Production, and Paid Work," *The Journal of Human Resources*, vol. 42, 3, pp. 643-681.

Klaffke, M.
2014a "Erfolgsfaktor Generationen-Management – Handlungsansätze für das Personalmanagement," in *Generationen-Management: Konzepte, Instrumente, Good-Practice-Ansätze*, ed. by M. Klaffke, Springer Gabler, Wiesbaden, chap. 1, pp. 3-25.
2014b "Millennials und Generation Z – Charakteristika der nachrückenden Arbeitnehmer-Generationen," in *Generationen-Management: Konzepte, Instrumente, Good-Practice-Ansätze*, ed. by M. Klaffke, Springer Gabler, Wiesbaden, chap. 3, pp. 57-82.

Klawitter, M. M.
1994 "Child Support Awards and the Earnings of Divorced Noncustodial Fathers," *Social Service Review*, vol. 68, 3, pp. 351-368.

Klingelhöffer, H.
1994 "Tabellen und Leitlinien zum Unterhaltsrecht: Regionales Richterrecht als Rechtsquelle?" *Zeitschrift für Rechtspolitik*, vol. 27, 10, pp. 383-386.

Klinger, S., T. Rothe, and E. Weber
2013 *Die Vorteile überwiegen. Makroökonomische Perspektive auf die Hartz-Reformen*, IAB – Institute for Employment Research, Research Report, 11.

Knaus, M. C. and S. Otterbach
2016 *Work Hour Mismatch and Job Mobility: Adjustment Channels and Resolution Rates*, IZA – Institute of Labor Economics Discussion Paper, 9735.

Konrad, K. A. and K. E. Lommerud
2008 *Love and taxes – and matching institutions*, WZB – Social Science Research Center Berlin Discussion Paper, SP II 208-4.

Kott, K., C. Kühnen, and L. Maier
2016 "Zeitverwendung und Ausgaben für Freizeitaktivitäten," in *Datenreport 2016 – Ein Sozialbericht für die Bundesrepublik Deutschland*, ed. by G. Dallinger, K. Hänsel, M. Petter, M. Bünning, A. Juckel, J. Schupp, and B. Dresen, Statistisches Bundesamt, Wissenschaftszentrum Berlin für Sozialforschung, Bundeszentrale für politische Bildung, Bonn, chap. 12.1, pp. 361-377.

Krack-Roberg, E.
2010 "Ehescheidungen 2008," in *Wirtschaft und Statistik 12/2009*, ed. by R. Egeler and B. Reimann, Statistisches Bundesamt, Wiesbaden, pp. 1191-1204.

Krause, L.
2008 *Unterhaltsrecht*, URL: `http://www.rak-freiburg.de/fileadmin/dokumente/Referendare/Krause_Unterhaltsrecht_ab_2008.pdf`, accessed on 05.28.2018.

Krause, P. and I. Ostner
2010 *Leben in Ost- und Westdeutschland – Eine sozialwissenschaftliche Bilanz der deutschen Einheit 1990-2010*, Andreß, H.-J., Berger, J. and Böhnke, Christoph, B. and Crayen, C. and Dallinger, U. and Diehl, C. and Eid, M. and Frick, J. R. and Frommert, D. and Gerstorf, D. and Giesecke, J. and Gießelmann, M. etc., Campus Verlag, Frankfurt am Main.

Krieger, S. and J. Weinmann

2008 "Lebensformen in der Bevölkerung, Kinder und Kindertagesbetreuung," in *Datenreport 2008 - Ein Sozialbericht für die Bundesrepublik Deutschland*, Statistisches Bundesamt, Gesellschaft Sozialwissenschaftlicher Infrastruktureinrichtungen, Mannheim, Zentrum für Sozialindikatorenforschung, and Wissenschaftszentrum Berlin für Sozialforschung, pp. 27-43.

Lafortune, J.

2010 *Not Yet Married But Already Paying the Price? The Impact of Granting Alimony Rights to Cohabiting Partners*, URL: `https://www.ecn.ulaval.ca/sites/ecn.ulaval.ca/files/commonlaw-draft-10-10.pdf`.

Lafortune, J., P. A. Chiappori, M. Iyigun, and Y. Weiss

2012 *Changing the rules midway: The impact of granting alimony rights on existing and newly-formed partnerships*, Documentos de Trabajo from Instituto de Economia, Pontificia Universidad Católica de Chile.

Lafortune, J. and C Low

2017 *Betting the House: How Assets Influence Marriage Selection, Marital Stability, and Child Investments*, IZA – Institute of Labor Economics Discussion Paper, 11176.

Landtag von Baden-Württemberg

2001 *Antrag der Abg. Heiderose Berroth u. a. FDP/DVP und Stellungnahme des Sozialministeriums – Unterhaltsvorschussgesetz*, Drucksache 13/187, 08.16.2001.

Lechner, M.

2010 "The Estimation of Causal Effects by Difference-in-Difference Methods," *Foundations and Trends in Econometrics*, vol. 4, 3, pp. 165-224.

Lemmon, G. T.

2012 *We Need to Tell Girls They Can Have It All (Even If They Can't)*, The Atlantic; URL: `https://www.theatlantic.com/business/archive/2012/06/we-need-to-tell-girls-they-can-have-it-all-even-if-they-cant/259165/`, accessed on 06.01.2013.

Lobel, S. A.

1991 "Allocation of Investment in Work and Family Roles: Alternative Theories and Implications for Research," *The Academy of Management Review*, vol. 16, 3, pp. 507-521.

Lötsch, I. and I. Falconere

1990 "Berufliche Bildung," in *Frauenreport '90*, ed. by G. Winkler, Verlag Die Wirtschaft, Berlin, chap. 2, pp. 37-54.

Lovejoy, M. and P. Stone

2012 "Opting Back In: The Influence of Time at Home on Professional Women's Career Redirection after Opting Out," *Gender, Work and Organization*, vol. 19, 6, pp. 631-653.

Lundberg, S. J. and R. A. Pollak

1996 "Bargaining and Distribution in Marriage," *The Journal of Economic Perspectives*, vol. 10, 4, pp. 139-158.

Lundberg, S. J., R. A. Pollak, and T. J. Wales

1997 "Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit," *The Journal of Human Resources*, vol. 32, 3, pp. 463-480.

Lundberg, S. J., J. L. Romich, and K. P. Tsang

2007 *Decision-Making by Children*, IZA – Institute of Labor Economics Discussion Paper, 2952.

Mai, C.-M.

2010 "Der Arbeitsmarkt im Zeichen der Finanz- und Wirtschaftskrise," in *Wirtschaft und Statistik 3/2010*, ed. by R. Egeler and B. Reimann, Statistisches Bundesamt, Wiesbaden, pp. 237-248.

Mai, C.-M. and F. Schwahn

2017 "Erwerbsarbeit in Deutschland und Europa im Zeitraum 1991 bis 2016," in *Wirtschaft und Statistik 3/2017*, ed. by D. Sarreither, Statistisches Bundesamt, Wiesbaden, pp. 9-21.

Manser, M. and M. Brown

1979 "Bargaining Analysis of Household Decisions," in *Women in the Labor Force*, Columbia University Press, New York, pp. 3-26.

1980 "Marriage and Household Decision-Making: A Bargaining Analysis," *International Economic Review*, vol. 21, 1, pp. 31-44.

Martens, W. U.

2008 *International Issues for Prenuptial Agreements and Marriage Contracts from the German View*, URL: `https://www.iafl.com/cms_media/files/wm_germany.pdf?static=1`, accessed on 12.03.2016.

Martiny, D. and D. Schwab

2002 *Grounds for Divorce and Maintenance Between Former Spouses: Germany*, URL: `http://ceflonline.net/wp-content/uploads/Germany-Divorce.pdf`, accessed on 01.02.2017.

Mätzke, M. and I. Ostner

2010 "The Role of Old Ideas in the New German Family Policy Agenda," *German Policy Studies*, vol. 6, 3, pp. 119-162.

McElroy, M. B.

1990 "The Empirical Content of Nash-Bargained Household Behavior," *The Journal of Human Resources*, vol. 25, 4, pp. 559-583.

McElroy, M. B. and M. J. Horney

1981 "Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand," *International Economic Review*, vol. 22, 2, pp. 333-349.

Middendorff, E.

2003 *Kinder eingeplant? Lebensentwürfe Studierender und ihre Einstellung zum Studium mit Kind*, Kurzbericht, 5, HIS Hochschul-Informationssystem, Hannover.

Miethe, H., H. Radtke, S. Sallmon, I. Löetsch, and E. Ebert

1990 "Berufstätigkeit," in *Frauenreport '90*, ed. by G. Winkler, Verlag Die Wirtschaft, Berlin, chap. 3, pp. 55-100.

Mikusheva, A.

2013 "Survey on Statistical Inferences in Weakly-Identified Instrumental Variable Models," *Applied Econometrics*, vol. 29, 1, pp. 117-131.

Mitchell, M. N.

2012 *Interpreting and Visualizing Regression Models Using Stata*, Stata Press, College Station.

Mnookin, R. H. and L. Kornhauser

1979 "Bargaining in the Shadow of the Law: The Case of Divorce," *The Yale Law Journal*, vol. 88, 5, pp. 950-997.

Moran, M., M. Rein, and R. E. Goodin

2008 *The Oxford Handbook of Public Policy*, Oxford University Press, Oxford.

Napp-Peters, A.

1985 *Ein-Elternteil-Familien – Soziale Randgruppe oder neues familiales Sebstverständnis?* Juventa, Weinheim/München.

Nash, J.

1953 "Two-Person Cooperative Games," *Econometrica*, vol. 21, 1, pp. 128-140.

Nauck, B., J. Brüderl, J. Huinink, and S. Walper

2014 *The German Family Panel (pairfam)*, GESIS Data Archive, Cologne. ZA5678 Data file Version 5.0.0, doi:10.4232/pairfam.5678.5.0.0.

Nazio, T. and H.-P. Blossfeld

2003 "The Diffusion of Cohabitation among Young Women in West Germany, East Germany and Italy," *European Journal of Population*, vol. 19, 1, pp. 47-82.

Nepomnyaschy, L.

2007 "Child Support and Father-Child Contact: Testing Reciprocal Pathways," *Demography*, vol. 44, 1, pp. 93-112.

Núñez, L. G.

2008 "IV Estimation with weak instruments: an application to the determinants of school attainment in Peru," *Economía*, vol. XXXI, 62, pp. 127-146.

Oertel, J.

2014 "Baby Boomer and Generation X – Charakteristika der etablierten Arbeitnehmer-Generationen," in *Generationen-Management: Konzepte, Instrumente, Good-Practice-Ansätze*, ed. by M. Klaffke, Springer Gabler, Wiesbaden, chap. 2, pp. 27-56.

Olivetti, C.

2006 "Changes in women's hours of market work: The role of returns to experience," *Review of Economic Dynamics*, vol. 9, 4, pp. 557-587.

Ott, N.

1992 *Intrafamily Bargaining and Household Decisions*, Springer-Verlag, Berlin, Heidelberg.

1995 "Fertility and Division of Work in the Family: A game theoretic model of household decisions," in *Out of the Margin: Feminist Perspectives on Economics*, ed. by E. Kuiper and J. Sap, Routledge, London, New York, chap. 5, pp. 80-99.

Parkman, A.

2004 "Bargaining Over Housework: The Frustrating Situation of Secondary Wage Earners," *The American Journal of Economics and Sociology*, vol. 63, 4, pp. 765-794.

Perelli-Harris, B. and N. S. Gassen

2012 "How Similar Are Cohabitation and Marriage? Legal Approaches to Cohabitation across Western Europe," *Population and Development Review*, vol. 38, 3, pp. 435-467.

Peschel-Gutzeit, L.

2008 *Die Entwicklung des Familienrechts in der BRD*, Vortrag, Friedrich-Ebert-Stiftung, Forum Berlin, URL: `http://www.fes-forumberlin.de/pdf_2008/Vortrag_Peschel-Gutzeit.pdf`, accessed on 05.09.2015.

Peters, H. E., L. M. Argys, H. W. Howard, and J. S. Butler

2004 "Legislating Love: The Effect of Child Support and Welfare Policies on Father-child Contact," *Review of Economics of the Household*, vol. 2, 3, pp. 255-274.

Phipps, S. A. and P. S. Burton

1995 "Social/institutional variables and behavior within households: An empirical test using the Luxembourg Income Study," *Feminist Economics*, vol. 1, 1, pp. 151-174.

Piskor, G.

2011 *Demystifying Child Support*, Presented at 2nd Male Studies Conference, April 6, 2011; URL: `https://motoristoppression.wordpress.com/2011/04/28/10-2/`, accessed on 02.13.2018.

Plotnick, R. D., I. Garfinkel, S. S. McLanahan, and I. Ku

2004 "Better Child Support Enforcement: Can It Reduce Teenage Premarital Childbearing?" *Journal of Family Issues*, vol. 25, 5, pp. 634-657.

2006 "The Impact of Child Support Enforcement Policy on Nonmarital Childbearing," *Journal of Policy Analysis and Management*, vol. 26, 1, pp. 79-98.

Postler, J., I. Wegemann, and I. Helbrecht-Jordan

1988 *Lebens- und Arbeitssituation von Frauen in Niedersachsen*, Landesbeauftragte für Frauenfragen bei der Niedersächsischen Landesregierung, Hannover.

Poulsen, K. M.

2006 "Implementing successful mentoring programs: career definition vs mentoring approach," *Industrial and Commercial Training*, vol. 38, 5, pp. 251-258.

Proksch, R.

2001 *Begleitforschung zur Umsetzung der Neuregelung zur Reform des Kindschaftsrechts – 2. Zwischenbericht*, Bundesministerium der Justiz, Berlin.

Rangel, M. A.

2006 "Alimony rights and intrahousehold allocation of resources: evidence from Brazil," *The Economic Journal*, vol. 116, 513, pp. 627-658.

Reinhold, S., T. Kneip, and G. Bauer

2013 "The long run consequences of unilateral divorce laws on children – evidence from SHARELIFE," *Journal of Population Economics*, vol. 26, 3, pp. 1035-1056.

Rich, L. M., I. Garfinkel, and Q. Gao

2007 "Child Support Enforcement Policy and Unmarried Fathers' Employment in the Underground and Regular Economies," *Journal of Policy Analysis and Management*, vol. 26, 4, pp. 791-810.

Ridgeway, C. L.

1978 "Predicting College Women's Aspirations From Evaluations of the Housewife and Work Role," *The Sociological Quarterly*, vol. 19, 2, pp. 281-291.

Rossin-Slater, M.

2017 "Signing Up New Fathers: Do Paternity Establishment Initiatives Increase Marriage, Parental Investment, and Child Well-Being?" *American Economic Journal: Applied Economics*, vol. 9, 2, pp. 93-130.

Rossin-Slater, M. and M. Wüst

2016 *Parental Responses to Child Support Obligations: Evidence from Administrative Data*, NBER – National Bureau of Economic Research Working Paper, 22227.

2017 *Parental Responses to Child Support Obligations: Evidence from Administrative Data*, Stanford University, Working Paper, October 2017.

Rotz, D.

2012 *Do Outside Options Matter Inside Marriage? Evidence from State Welfare Reforms*, Working Paper, URL: http://dx.doi.org/10.2139/ssrn.1960027.

RP Online

2008 *Nach Neuregelung des Unterhaltsrechts: Zypries rät Frauen zu Ehevertrag*, URL: http://www.rp-online.de/politik/deutschland/zypries-raet-frauen-zu-ehevertrag-aid-1.2128843, accessed on 09.01.2016.

Rübenach, S. P. and M. Keller

2011 "Vereinbarkeit von Familie und Beruf – Ergebnisse des Mikrozensus 2009," in *Wirtschaft und Statistik April 2011*, Statistisches Bundesamt, Wiesbaden, pp. 329-348.

Rürup, B. and S. Gruescu

2003 *Nachhaltige Familienpolitik im Interesse einer aktiven Bevölkerungsentwicklung: Gutachten im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend*, Bundesministerium für Familie, Senioren, Frauen und Jugend, Berlin.

Ryan, A. M., J. F. Burgess Jr., and J. B. Dimick

2015 "Why We Should Not Be Indifferent to Specification Choices for Difference-in-Differences," *Health Services Research*, vol. 50, 4, pp. 1211-1235.

Schmidt-Bandelow, S.

2012 *Seminar Internationales Familienrecht, 02.03.2012*, Verband binationaler Familien und Partnerschaften, URL: http://verband-binationaler.de/fileadmin/user_upload/Regionalgruppen/berlin/Vortrag_Internationales_Familienrecht_2012.pdf, accessed on 04.20.2016.

Schönberger, C.

2012 "Höchstrichterliche Rechtsfindung und Auslegung gerichtlicher Entscheidungen," in *Grundsatzfragen der Rechtsetzung und Rechtsfindung*, Veröffentlichungen der Vereinigung der Deutschen Staatsrechtslehrer, Walter de Gruyter, Berlin, vol. 71, pp. 296-330.

Schulz, S.

2007 *CSU-Politiker Geis kritisiert Pläne zum Unterhaltsrecht: Bundestagsabgeordneter sieht "Institution Ehe" in Gefahr*, Deutschlandfunk, 11.05.2007, URL: http://www.deutschlandfunk.de/csu-politiker-geis-kritisiert-plaene-zum-unterhaltsrecht.694.de.html?dram:article_id=65095, accessed on 05.26.2017.

Schulz, W. and J. Hauß

2008 *Familienrecht: Handkommentar*, Nomos Verlagsgesellschaft, Baden-Baden.

Schwab, D.

2006 *Stellungnahme zum "Entwurf eines Gesetzes zur Änderung des Unterhaltsrechts" vom 15.6.2006 (BT-Drucksache 16/1830) für die öffentliche Anhörung im Rechtsausschuss des Bundestages am 16.10.2006*, URL: http://www.gesmat.bundesgerichtshof.de/gesetzesmaterialien/16_wp/unterhalt/stellung_schwab.pdf, accessed on 03.26.2015.

Seifert, H., E. Holst, W. Matiaske, and V. Tobsch

2016 "Arbeitszeitwünsche und ihre kurzfristige Realisierung," *WSI-Mitteilungen*, vol. 69, 4, pp. 300-308.

Seith, A.

2017 *Dr. Katarina Barley: Getrennt Erziehende besser unterstützen*, Der Spiegel, Interview am 04.09.2017, URL: https://www.bmfsfj.de/bmfsfj/aktuelles/reden-und-interviews/dr--katarina-barley--getrennt-erziehende-besser-unterstuetzen/118588, accessed on 11.21.2017.

Seltzer, J. A.

1991 "Relationships between Fathers and Children Who Live Apart: The Father's Role after Separation," *Journal of Marriage and the Family*, vol. 53, 1, pp. 79-101.

Seltzer, J. A., N. C. Schaeffer, and H.-W. Charng

1989 "Family Ties after Divorce: The Relationship between Visiting and Paying Child Support," *Journal of Marriage and the Family*, vol. 51, 4, pp. 1013-1031.

Shafer, K. and S. L. James

2013 "Gender and Socioeconomic Status Differences in First and Second Marriage Formation," *Journal of Marriage and Family*, vol. 75, 3, pp. 544-564.

Sorić, I., Z. Penezić, and I. Burić

2017 "The Big Five personality traits, goal orientations, and academic achievement," *Learning and Individual Differences*, vol. 54, pp. 126-134.

Soyka, J.

2004 "Überobligatorische Einkünfte des Unterhaltsberechtigten und Differenzmethode," *FK – Familienrecht kompakt*, vol. 07, p. 114.

Sperling, R.

2015 *Auswirkung der Steuerlast auf den Unterhalt*, URL: http://www.scheidung-online.de/finanzen---vermoegen/steuern/steuerlast-und-unterhalt/index.php, accessed on 19.11.2015.

Staiger, D. and J. H. Stock

1997 "Instrumental Variables Regression with Weak Instruments," *Econometrica*, vol. 65, 3, pp. 557-586.

Staines, G. L.

1980 "Spillover Versus Compensation: A Review of the Literature on the Relationship Between Work and Nonwork," *Human Relations*, vol. 33, 2, pp. 111-129.

Steffen, J.

2018 *Sozialpolitische Chronik: Die wesentlichen Änderungen in der Arbeitslosen-, Renten-, Kranken- und Pflegeversicherung sowie bei der Sozialhilfe (HLU) und der Grundsicherung für Arbeitsuchende - von den siebziger Jahren bis heute*, Portal Sozialpolitik, Berlin, Mai 2018, URL: http://portal-sozialpolitik.de/uploads/sopo/pdf/Sozialpolitische-Chronik.pdf, accessed on 06.03.2018.

Stevenson, B.

2007 "The Impact of Divorce Laws on Marriage-Specific Capital," *Journal of Labor Economics*, vol. 25, 1, pp. 75-94.

2008 "Divorce Law and Women's Labor Supply," *Journal of Empirical Legal Studies*, vol. 5, 4, pp. 853-873.

Stock, J. H. and M. Yogo

2005 "Testing for Weak Instruments in Linear IV Regression," in *Identification and Inference for Econometric Models*, ed. by D. W. K. Andrews and J. H. Stock, Cambridge University Press, New York, chap. 5, pp. 80-108.

Suh, G. W., W. V. Fabricius, M. M. Stevenson, R. D. Parke, J. T. Cookston, S. L. Braver, and D. S. Saenz

2016 "Effects of the Inter-Parental Relationship on Adolescents' Emotional Security and Adjustment: The Important Role of Fathers," *Developmental Psychology*, vol. 52, 10, pp. 1666-1678.

Suhrkamp Verlag

1998 *Familienrecht - Die Gesetzestexte des "Deutschen Bundesrechts"*, 3rd ed., Suhrkamp-Taschenbuch Nomos, Frankfurt am Main.

1999 *Familienrecht*, 4th ed., Die Gesetzestexte des "Deutschen Bundesrechts", Suhrkamp-Taschenbuch Nomos, Frankfurt am Main.

Tannenbaum, D. I.

2015 *The effect of child support on selection into marriage and fertility*, Working paper, November 12, 2015, URL: https://pdfs.semanticscholar.org/4852/b5d714646092ad199fc919f97e4a569ce9e3.pdf.

Thomas, D.

1994 "Like Father, Like Son or Like Mother, Like Daughter: Parental Education and Child Health," *The Journal of Human Resources*, vol. 29, 4, pp. 950-988.

Thu Le, H. and H. T. Nguyen

2018 "The Impact of Maternal Mental Health Shocks on Child Health: Estimates from Fixed-Effects Instrumental Variables Models for Two Cohorts of Australian Children," *American Journal of Health Economics*, vol. 4, 2, pp. 185-225.

Trampusch, C., P. Eichenberger, M. de Roo, R. Bartlett Rissi, I. Bieri, L. Schmid, and Steinlin S. (eds.)

2010 "Early Retirement in Germany," in *REBECA (Research on Social Benefits in Collective Agreements), Database*, SNF-Project, 100012-119898, Institute of Political Science, University of Berne, chap. 2 "Social Benefits in Collective Agreements".

Trennnungsväter e. V.

2017 *19.09.2017: Familienministerin verspricht mehr Rechte für Scheidungsväter*, URL: http://www.trennungsvaeter.de, accessed on 02.19.2018.

Trzcinski, E.

2000 "Family Policy in Germany: A Feminist Dilemma?" *Feminist Economics*, vol. 6, 1, pp. 21-44.

Unterhalt.net

2015 *Unterhaltsrechner - Unterhaltsberechnung 2015*, URL: http://www.unterhalt.net/unterhaltsrechner.html, accessed on 11.18.2015.

Unterhalt.net

2016 *Unterhaltspflicht - Pflichten der Eltern*, URL: http://www.unterhalt.net/kindesunterhalt/unterhaltspflicht.html, accessed on 11.18.2015.

Valcour, M. and J. J. Ladge

2008 "Family and career path characteristics as predictors of women's objective and subjective career success: Integrating traditional and protean career explanations," *Journal of Vocational Behavior*, vol. 73, 2, pp. 300-309.

VAMV

2012 *Alleinerziehend – Tipps und Informationen*, 20th ed., Verband alleinerziehender Muütter und Väter, Bundesverband e.V.

2017 *Endlich: Ausbau Unterhaltsvorschuss in Kraft getreten!* Pressemitteilung, Berlin, 18. August 2017, Verband alleinerziehender Muütter und Väter, Bundesverband e. V., URL: https://www.vamv.de/uploads/media/PM_VAMV_UV_in_Kraft_18082017.pdf, accessed on 08.25.2017.

Vaskovics, L. A., H. Buba, H. Rost, and M. Rupp

1994 *Lebenslage nichtehelicher Kinder*, Forschungsbericht im Auftrag des Bundesministeriums der Justiz, Sozialwissenschaftliche Forschungsstelle der Otto-Friedrich-Universität Bamberg, Bamberg.

Verbeek, M.

2012 *A Guide to Modern Econometrics*, 4th ed., John Wiley & Sons, Chichester.

Vere, J. P.

2007 ""Having It All" No Longer: Fertility, Female Labor Supply, and the New Life Choices of Generation X," *Demography*, vol. 44, 4, pp. 821-828.

Veum, J. R.

1993 "The Relationship between Child Support and Visitation: Evidence from Longitudinal Data," *Social Science Research*, vol. 22, 3, pp. 229-244.

Voena, A.

2011 *Yours, Mine and Ours: Do Divorce Laws a effect the Intertemporal Behavior of Married Couples?* SIEPR – Stanford Institute for Economic Policy Research Discussion Paper, 10-022.

Volmer, J. and D. Spurk

2011 "Protean and boundaryless career attitudes: relationships with subjective and objective career success," *Zeitschrift für Arbeitsmarktforschung*, vol. 43, 3, pp. 207-218.

von Heintschel-Heinegg, B. and P. Gerhardt

1990 *Materielles Scheidungsrecht - Schwerpunkte Scheidung, Unterhalt mit Abänderungsverfahren, vermögensrechtliche Auseinandersetzung, Übungsfälle mit Lösungen*, Juristische Arbeitsblätter: JA-Sonderheft 20, Alfred Metzner Verlag, Neuwied, Frankfurt am Main.

von Wahl, A.

2008 "From Family to Reconciliation Policy: How the Grand Coalition Reforms the German Welfare State," *German Politics and Society*, vol. 36, 4, pp. 25-49.

Vossenkämper, R.

2007 *Hinweis zur Berliner Tabelle ab dem Jahr 2008*, URL: http://www.famrb.de/BlnTabHinweis2008.pdf, accessed on 01.15.2015.

Wagner, G. G., J. R. Frick, and J. Schupp

2007 "The German Socio-EconomicPanel Study (SOEP) – Scope, Evolution and Enhancements," *Schmollers Jahrbuch*, vol. 127, 1, pp. 139-169.

Waldfogel, J.

1997 "The Effect of Children on Women's Wages," *American Sociological Review*, vol. 62, 2, pp. 209-217.

Weishaupt, H., M. Baethge, H. Döbert, H.-P. Füssel, H.-W. Hetmeier, T. Rauschenbach, U. Rockmann, S. Seeber, and A. Wolter

2010 *Bildung in Deutschland 2010: Ein indikatorengestützte Bericht mit einer Analyse zu Perspektiven des Bildungswesens im demografischen Wandel*, Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland, Bundesministerium für Bildung und Forschung, W. Bertelsmann Verlag, Bielefeld.

Wendl, P. and S. Staudigl

1995 *Das Unterhaltsrecht in der familienrichterlichen Praxis*, Verlag C.H. Beck, München.

Widmann-Mauz, A.

2012 "Runder Tisch zur "Vereinbarkeit von Familie und Beruf im Gesundheitswesen"," *GMS – Zeitschrift für Medizinische Ausbildung*, vol. 29, 2, pp. 1-6.

Willenbacher, B.

2010 "Die Umgestaltung des Geschlechterkontraktes durch das nacheheliche Unterhaltsrecht," in *Wie wirkt Recht? Ausgewählte Beiträge zum ersten gemeinsamen Kongress der deutschsprachigen Rechtssoziologie-Vereinigungen, Luzern 2008*, Cottier, M., Estermann, J., and Wrase, M., Nomos Verlagsgesellschaft, Baden-Baden.

Wippermann, C., S. Borgstedt, and H. Möller-Slawinski

2014 *Partnerschaft und Ehe – Entscheidungen im Lebensverlauf: Einstellungen, Motive, Kenntnisse des rechtlichen Rahmens*, 5th ed., Bundesministerium für Familie, Senioren, Frauen und Jugend, Berlin.

Wittmann, H.

n.d. *Steuerrechtliche Aspekte bei Trennung und Scheidung*, URL: `http://www.wittmann-kollegen.com/media/file/steuerrechtliche_aspekte_bei_trennung.pdf`, accessed on 03.24.2015.

Wooldridge, J. M.

2002 *Econometric Analysis of Cross Section and Panel Data*, The MIT Press, Cambridge, Massachusetts, London, England.

Wörz, M.

2011 *Family Dissolution and Public Policies in Germany: Social Provisions and Institutional Changes since the 1980s*, WZB – Social Science Research Center Berlin Discussion Paper, SP I 2011-207.

Wrede, M.

2003 "The Income Splitting Method: Is it Good for Both Marriage Partners?" *German Economic Review*, vol. 4, 2, pp. 203-216.

Yang, Y. and K. C. Land

2013 *Age-Period-Cohort Analysis: New Models, Methods, and Empirical Applications*, ed. by N. Keiding, B. J. T. Morgan, C. K. Wikle, and P. van der Heijden, Chapman & Hall/CRC Press, Taylor & Francis Group, New York.

Yeung, W. J., J. F. Sandberg, P. E. Davis-Kean, and S. L. Hofferth

2001 "Children's time with fathers in intact families," *Journal of Marriage and Family*, vol. 63, 1, pp. 136-154.

Zapf, W., R. Habich, and H.-H. Noll

1996 *Welfare Survey 1993*, GESIS Data Archive, Cologne. ZA2792 Data file Version 1.0.0, doi: 10.4232/1.2792.

2001 *Welfare Survey 1998*, GESIS Data Archive, Cologne. ZA3398 Data file Version 1.0.0, doi: 10.4232/1.3398.

Zubayr, C. and H. Gerhard

2008 "Tendenzen im Zuschauerverhalten – Fernsehgewohnheiten und Fernsehreichweiten im Jahr 2007," *Media Perspektiven*, vol. 3, pp. 106-119.

A | APPENDIX TABLES

A.1 CHAPTER 2 TABLES

Table A.1.1: Overview of related literature on time allocation and LFP

Reference	Country	Source of variation	Outcome	Method	Results
Phipps and Burton 1995	AUT, CAN, SWE, DEU, NLD, USA, UK	variation in social or institutional factors across countries: joint or separate taxation regime, ratio of female to male earnings, availability of social transfers to single women by child status, divorce rate, age difference between spouses	female LFP	probit analysis	1. social transfers to single women ↑ ⇒ female LFP ↓ c.p.; 2. child support to single women ↑ ⇒ female LFP ↓ c.p.
Gray 1998	USA	regional variation of adoption of unilateral-divorce laws in the 1970's (whilst taking into account underlying marital property laws in each state)	wives' LFP and time allocation (hours worked, home hours and pure leisure)	DiD approach	wives who benefited from the reassignment of property rights: 1. labor supply ↑ c.p., 2. home production time ↓ c.p., relative to women who did not face a redistribution of marital property rights, and vice versa
Rangel 2006	BRA	extension of alimony rights to cohabitations in 1994	housekeeping indicator, log hours worked in primary job (weekly)	DiD approach, married couples as control	bargaining power of women ↑ ⇒ 1. frequency of female housekeeping activities ↓ ; 2. weekly working hours ↓
Genadek et al. 2007	USA	introduction of unilateral no-fault divorce laws differently across time, 1960-90, and states, takes into account different property-division rules	LFP, weekly and daily working hours of married women with children	DDD approach, control groups: non-mothers, and married women in states with mutual consent-divorce regime	1. labor supply of married mothers relative to married non-mothers ↑; 2. a larger response for women with children under age six than for women with older children
Stevenson 2008	USA	regional variation of adoption of unilateral divorce laws in the 1970's	female LFP	DiD approach	divorce laws that are favorable to women: if married for 5-15 years LFP ↓ c.p. (irrespective of legal regimes for property division at divorce)

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Kapan 2008	UK	2000 House of Lords decision ⇒ a more equitable division of assets between divorcing spouses in England and Wales, Scotland as control	number of usual weekly paid labor hours (including overtime)	DiD approach	1. women gaining bargaining power: labor supply ↓ ; 2. no response of married men's labor supply to the law change
Voena 2011	USA	variation in divorce laws from the 1970s to the 1990s: change of property division laws and introduction of unilateral divorce	LFP, working hours	SEM	females' LFP in community property states ↓ ; hours worked by men in community property states ↑
Lafortune 2010, Chiappori et al. 2011, Lafortune et al. 2012	CAN	from 1975 alimony rights were granted to cohabitations at different times in different provinces and with different eligibility criteria	LFP, part-time or full-time employment, stopped working, schooling	DDD approach	when a couple is granted the right ⇒ 1. likelihood of female full-time employment ↓ ; 2. females' school attendance ↑ ; 3. women's work interruption ↑ ; 4. men experience the opposite pattern (Lafortune, P. A. Chiappori, et al. 2012)
Brassiolo 2013	ES	law changes ruling marital property division in 1993/1998 in Catalonia	number of usual hours worked per week, probability of being employed	DiD approach	wives entitled to a higher share of family assets: labor supply ↓, probability of employment ↓ ; introduction of marital contracts that limit compensation: wives' labor supply ↑, probability of employment ↑

Lafortune (2010) applies a difference-in-difference-in-differences (DDD) approach since whether a cohabitation was subject to the law depended on three criteria: the Canadian province, because the family law is mostly governed by provincial authorities, date of child birth and the year the relationship started as eligibility requirements (Lafortune 2010, pp. 6, 8). Source: Own compilation

Table A.1.2: Overview of related literature on outcomes of adults who were affected by intra-household bargaining shift during childhood

Reference	**Country**	**Source of variation**	**Outcome**	**Method**	**Results**
Gruber 2004	USA	exposure to increased ease of divorce before age 18: variation across states and over time in changes in divorce regime (in the 1970s)	long-term implications for children: odds of being married, having children, rates of suicide, education, living standards (income, labor supply)	DiD approach	for women and men: ↑ likelihood of being married, separated, ↑ suicide rates (the effect being stronger for women), ↓ education attainment and family income; for women: ↓ labor force supply and earnings
Rangel 2006	BRA	extension of alimony rights to cohabitations in 1994	enrollment in school (%)	DiD approach	bargaining power of women ↑ ⇒ school enrollment of oldest daughters; stronger effects for children of women with less than elementary school education, no significant effect for children of more educated women
González and Viitanen 2008	EU-15	different timing of divorce legalization across European countries; exposure to legal divorce during childhood (before age 18), additionally by length of exposure	adult outcomes: measure of income, employment or earnings, educational attainment, family formation and dissolution outcomes, health outcomes	DiD approach	exposed *men*: ↓ likely to be on benefits, ↑ to currently hold a job; those who are employed ↑ working hours, no effect on wages, earnings or income; exposed *women*: ↓ working hours, ↓ income and earnings; women exposed when younger than 10 years old: negative health effects (↑ likelihood of recent hospital stay, suffering from chronic illness, having a health problem that hampers their daily activity, cutting down on their usual activities because of illness)
Reinhold et al. 2013	AUT, DEU, SWE, NL, ESP, ITA, FRA, DNK, GRC, CHE, BEL	introduction of unilateral divorce in European countries at different times; exposure to unilateral divorce law of the respondent at age 18	long-term outcomes of children; human capital investments in children: education (ISCED) and health (self-rated health, presence of depressive symptoms, overweight etc.), and indicators of family formation	DiD approach	growing up under unilateral divorce: ↑ the probability of being overweight later on in life, ↓ of being married and having children, of starting smoking; condition on living in an intact family at age 10: estimates are hardly changed

Source: Own compilation

Table A.1.3: Weekly journals directed to the general public (print) and their online articles

DATE	SOURCE	HEADLINE OF THE ARTICLE
02.05.2007	FOCUS (print)	**UNTERHALTSRECHT: REFORM VERZÖGERT SICH**
		(MAINTENANCE LAW: THE REFORM IS DELAYED)
02.05.2007	FOCUS	UNTERHALTSRECHT: REFORM VERZÖGERT SICH
		(MAINTENANCE LAW: THE REFORM IS DELAYED)
02.05.2007	DER SPIEGEL (print)	**SCHEIDUNGEN: WEITER SONDERRECHTE FÜR EX-FRAU?**
		(DIVORCE: WILL PRIVILEGES FOR THE FORMER WIFE REMAIN?)
03.18.2007	FOCUS	UNTERHALTSRECHT: QUERSCHLÄGE AUS DER UNIONSFRAKTION
		(MAINTENANCE LAW: ATTACKS FROM THE CDU/CSU-PARLIAMENTARY GROUP)
03.19.2007	SPIEGEL ONLINE	UNTERHALTS-NOVELLE: KOALITION POKERT UM RECHTE DER EHEFRAUEN
		(ALIMONY-AMENDMENT: THE COALITION IS GAMBLING FOR WIVES' RIGHTS)
03.22.2007	SPIEGEL ONLINE	VERSORGUNGSANSPRÜCHE: KOALITION EINIG ÜBER NEUES UNTERHALTSRECHT
		(ENTITLEMENTS TO MAINTENANCE: THE COALITION FOUND AN AGREEMENT ON MAINTENANCE LAW)
03.22.2007	FOCUS	UNTERHALTSRECHT: VORRANG FÜR KINDER
		(MAINTENANCE LAW: PRIORITY FOR CHILDREN)
03.26.2007	FOCUS (print)	**HIER SCHREIBT HARALD SCHMIDT: UNTERHALTSRECHT**
		(MAINTENANCE LAW)
04.11.2007	FOCUS (print)	**UNTERHALTSREFORM: RANGELEI UMS GELD**
		(REFORM OF THE MAINTENANCE LAW: FIGHTING OVER MONEY)
04.13.2007	FOCUS	UNTERHALTSREFORM
		(REFORM OF MAINTENANCE LAW)
05.21.2007	FOCUS (print)	**UNTERHALT: BALD MEHR GELD FÜR LEDIGE?**
		(ALIMONY: MORE MONEY FOR SINGLES?)
05.23.2007	SPIEGEL ONLINE	VERFASSUNGSGERICHT: UNTERHALTSURTEIL ÜBERRASCHT DIE KOALITION
		(CONSTITUTIONAL COURT: VERDICT CONCERNING ALIMONY BLIND-SIDES THE COALITION)
05.23.2007	SPIEGEL ONLINE	BUNDESVERFASSUNGSGERICHT: RICHTER KIPPEN UNTERHALTSRECHT - REFORM IN GEFAHR
		(FEDERAL CONSTITUTIONAL COURT: JUDGES OVERTURN THE MAINTENANCE LAW - THE REFORM IS AT STAKE)
05.24.2007	SPIEGEL ONLINE	REGIERUNG: KOALITION STOPPT UNTERHALTSREFORM
		(GOVERNMENT: THE COALITION FREEZES THE REFORM OF THE MAINTENANCE LAW)
05.24.2007	FOCUS	KARLSRUHER URTEIL: KOALITION STOPPT REFORM FÜR UNTERHALTSRECHT
		(KARLSRUHE JUDGEMENT: THE COALITION STOPS REFORM OF MAINTENANCE LAW)
05.26.2007	SPIEGEL ONLINE	UNTERHALTSRECHT: KOALITION IM REFORMCLINCH
		(MAINTENANCE LAW: THE COALITION IS IN DISPUTE OVER THE REFORM)
06.06.2007	FOCUS (print)	**UNTERHALT: GLEICHE BETREUUNG**
		(MAINTENANCE: THE SAME LEVEL OF CHILDCARE)
06.09.2008	FOCUS	TRENNUNG: ÖFFENTLICHE SCHLAMMSCHLACHT
		(DIVORCE: PUBLIC MUDSLINGING)
06.11.2007	DER SPIEGEL (print)	**MEIN KOPF GEHÖRT MIR**
		(I AM THE MASTER OF MY MIND)
06.18.2007	DER SPIEGEL (print)	**DIE FRAUENREPUBLIK**
		(WOMEN'S REPUBLIC)
06.25.2007	FOCUS	EHE: LOHNT DAS JA?
		(MARRIAGE: DOES IT PAY OFF TO SAY YES?)
08.07.2007	DER SPIEGEL (print)	**FAMILIENDRAMEN: DER KAMPF UMS GELD**
		(FAMILY DRAMA: THE FIGHT OVER MONEY)
09.24.2007	DER SPIEGEL (print)	**KOALITION: ANNÄHERUNG BEIM UNTERHALTSRECHT**
		(THE GRAND COALITION: RAPPROCHEMENT CONCERNING MAINTENANCE LAW)
10.30.2007	FOCUS (print)	**UNTERHALTSRECHT: DAS PAULI-PRINZIP**
		(MAINTENANCE LAW: THE PAULI PRINCIPLE)
11.01.2007	FOCUS (print)	**FAMILIE: WER ZAHLT WAS NACH DER SCHEIDUNG?**
		(FAMILY: WHO PAYS HOW MUCH AFTER DIVORCE?)
11.05.2007	SPIEGEL ONLINE	KOALITION: EINIGUNG ÜBER UNTERHALTSRECHT
		(THE COALITION: AGREEMENT ON ALIMONY LAW)
11.12.2007	DER SPIEGEL (print)	**TRENNUNGEN: TÜCKEN DER GERECHTIGKEIT**
		(DIVORCE: PITFALLS OF JUSTICE)
11.12.2007	DER SPIEGEL (print)	**TRENNUNGEN: GESCHIEDENE FRAUEN VERLIEREN BEIM NEUEN UNTERHALTSRECHT**
		(SEPARATIONS: DIVORCED WOMEN LOSE AS A RESULT OF THE NEW MAINTENANCE LAW)
11.12.2007	DER SPIEGEL (print)	**UNION: NEID UND BRÄSIGER TROTZ**
		(CDU/CSU: GRUDGE AND CUMBERSOME DEFIANCE)
11.14.2007	FOCUS	UNTERHALTSRECHT: AUSGLEICH AUF ZEIT
		(MAINTENANCE LAW: TEMPORARY COMPENSATION)
11.15.2007	FOCUS	UNTERHALTSRECHT: VERSORGUNG MIT LIMIT
		(ALIMONY LAW: LIMITED MAINTENANCE)
11.30.2007	FOCUS	BUNDESRAT: BONUS FÜR RIESTER-SPARER, AUS FÜR STEINKOHLE; UNTERHALTSRECHT
		(FEDERAL ASSEMBLY: DIFFERENT DESICIONS - MAINTENANCE LAW)
12.08.2007	FOCUS	JAHRESRÜCKBLICK: NOVEMBER
		(REVIEW OF THE YEARS'S EVENTS: NOVEMBER)
12.13.2007	FOCUS	SCHEIDUNGSRECHT: GRENZE FÜR GIERIGE GESCHIEDENE
		(DIVORCE LAW: LIMITS FOR GREEDY DIVORCEES)
12.14.2007	FOCUS	NEUES UNTERHALTSRECHT: ERST DIE KINDER, DANN DER PARTNER
		(NEW ALIMONY LAW: CHILDREN FIRST, PARTNER SECOND)
12.17.2007	FOCUS	DÜSSELDORFER TABELLE: MEHR GELD FÜR TRENNUNGSKINDER
		(DÜSSELDORF TABLE: MORE MONEY FOR CHILDREN OF DIVORCED INDIVIDUALS)
01.02.2008	FOCUS (print)	**GESETZESÄNDERUNGEN 2008: BERLINER KNALLER**
		(LAW CHANGES IN 2008: BERLIN'S FIRECRACKER)
01.14.2008	SPIEGEL ONLINE	UNTERHALTSRECHTSREFORM: "KINDERFREUNDLICH IST DAS ALLES NICHT"
		(REFORM OF ALIMONY: "IT IS NOT CHILD-FRIENDLY")
01.14.2008	DER SPIEGEL (print)	**KEIN CENT MEHR FÜR DIE EX**
		(NO MONEY FOR THE FORMER WIFE)
01.28.2008	FOCUS (print)	**GESELLSCHAFT: DIE EX GEHT LEER AUS**
		(SOCIETY: THE FORMER WIFE GETS NOTHING)
01.28.2008	FOCUS (print)	**DEUTSCHLAND: HAUSFRAUEN BRAUCHEN EINEN EHEVERTRAG**
		(GERMANY: HOUSEWIVES NEED A PRENUP)
01.28.2008	FOCUS (print)	**GESELLSCHAFT: DIE FREUNDIN BEKOMMT MEHR GELD ALS DIE GESCHIEDENE MUTTER**
		(SOCIETY: GIRLFRIEND GETS MORE MONEY IN COMPARISON TO A DIVORCED MOTHER)
01.28.2008	FOCUS (print)	**GESELLSCHAFT: DIE KLUGE TAKTIK BESTIMMT DEN ERFOLG**
		(SOCIETY: A SMART TACTIC DEFINES THE SUCCESS)
01.28.2008	FOCUS (print)	**GESELLSCHAFT: DIE HOHE MATHEMATIK EINES FAMILIENRICHTERS**
		(SOCIETY: THE HIGHER MATHEMATICS OF A FAMILY JUDGE)
01.28.2008	FOCUS (print)	**DEUTSCHLAND: DER "SCHULDIGE" BEKOMMT KEINEN CENT**
		(GERMANY: THE "RESPONSIBLE" ONE GETS NO MONEY)
01.30.2008	FOCUS (print)	**UNTERHALTSREFORM: KINDER ALS GEWINNER**
		(REFORM OF THE MAINTENANCE LAW: CHILDREN ARE THE WINNERS)
02.11.2008	SPIEGEL ONLINE	MÜLLER-BUCH: HEILIGSPRECHUNG DER ERWERBSARBEIT
		(BOOK BY MÜLLER: CANONIZATION OF WORK AT THE LABOR MARKET)
02.12.2008	SPIEGEL ONLINE	NEUES UNTERHALTSRECHT: TIPPS
		(NEW MAINTENANCE LAW: TIPS)
02.13.2008	SPIEGEL ONLINE	SCHEIDUNGSDRAMA BEI "MAISCHBERGER": DAS ENDE DER HAUSFRAU
		(DIVORCE DRAMA AT "MAISCHBERGER": THE EXPIRY OF THE HOUSEWIFE)
02.16.2008	FOCUS	GESELLSCHAFT TEIL 6: DIE EX GEHT LEER AUS
		(SOCIETY: THE FORMER WIFE GETS NOTHING)
02.18.2008	SPIEGEL ONLINE	SCHEIDUNG: DAS ABC DES NEUEN UNTERHALTSRECHTS
		(DIVORCE: THE ABC OF THE NEW MAINTENANCE LAW)
02.21.2008	SPIEGEL ONLINE	LISA ORTGIES IM INTERVIEW: "DIE FRAUEN MÜSSEN DIE MACHTFRAGE STELLEN"
		(INTERVIEWING LISA ORTGIES: "WOMEN SHOULD RAISE THE QUESTION OF POWER")
02.23.2008	FOCUS	UNTERHALTSRECHT: ERSTE VERFASSUNGSBESCHWERDE EINGEREICHT
		(MAINTENANCE LAW: THE FIRST CONSTITUTIONAL COMPLAINT IS SUBMITTED)

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02.26.2008	DER SPIEGEL (print)	**FRAUEN-WELTEN: DIE FRAUENREPUBLIK**
		(WOMEN'S WORLD: WOMEN'S REPUBLIC)
02.26.2008	DER SPIEGEL (print)	**FRAUEN & GESELLSCHAFT: WAHLFREIHEIT ADE**
		(WOMEN & SOCIETY: GOODBYE TO THE FREEDOM OF CHOICE)
02.26.2008	DER SPIEGEL (print)	**FRAUEN-WELTEN: DIE ALPHA-MÄDCHEN**
		(WOMEN'S WORLD: THE ALPHA-GIRL)
02.28.2008	DER SPIEGEL (print)	**FRAUENDILEMMA: ANSCHLAG AUF DIE HEIMCHEN**
		(WOMEN'S DILEMMA: ATTACK ON THE HOMEMAKER)
04.19.2008	FOCUS	UNTERHALTSURTEIL: ERSTE FRAU GEHT FAST LEER AUS
		(JUDGEMENT REGARDING MAINTENANCE: FIRST WOMAN GETS ALMOST NOTHING)
04.21.2008	FOCUS (print)	**SCHEIDUNG: BEFRISTET GELD FÜR DIE EX**
		(DIVORCE: ALIMONY FOR A LIMITED PERIOD OF TIME)
05.08.2008	FOCUS	UNTERHALTSRECHT
		(MAINTENANCE LAW)
05.08.2008	FOCUS	"JAGD AUF RABENVÄTER": AUSWEITUNG DER KAMPFZONE
		("HUNTING THE FATHER WHO DO NOT CARE": REDEFINING THE BATTLY LINES)
05.13.2008	FOCUS	UNTERHALTSRECHT: KEIN GELD FÜR DIE EX, NEUE ECKPUNKTE BEACHTEN
		(MAINTENANCE LAW: NO MONEY FOR THE FORMER WIFE, MAIN PILLARS)
05.14.2008	FOCUS (print)	**UNTERHALTSRECHT: NIX FÜR DIE EX**
		(MAINTENANCE LAW: NO MONEY FOR THE FORMER WIFE)
05.15.2008	FOCUS	RECHTSIRRTÜMER: FAMILIENRECHT - ZWISCHEN FREUD UND LEID
		(ERRORS OF LAW: FAMILY LAW - BETWEEN SOMEBODY'S JOYS AND BURDENS)
05.28.2008	FOCUS	ALLEINERZIEHENDE: VOLLZEITSTELLE UNZUMUTBAR
		(SINGLE PARENTS: FULL-TIME EMPLOYMENT IS UNREASONABLE)
06.23.2008	DER SPIEGEL (print)	**TITEL: HALBE MÄNNER, GANZE FRAUEN**
		(LESS OF A MAN, MORE OF A WOMAN)
06.23.2008	DER SPIEGEL (print)	**UNTERHALTSRECHT: ZUGUNSTEN DER EMPFÄNDERIN**
		(MAINTENANCE LAW: IN FAVOR OF THE RECEIVING WOMAN)
07.14.2008	DER SPIEGEL (print)	**UNTERHALT: SEIN ÜBER SCHEIN**
		(ALIMONY: REALITY OVER APPEARANCE)
07.15.2008	FOCUS	UNTERHALT: NEUE GRENZEN FÜR DIE EX?
		(ALIMONY: NEW BOUNDARIES FOR THE FORMER WIFE?)
07.16.2008	FOCUS	UNTERHALT: WENN RICHTER ZU GESETZGEBERN WERDEN
		(ALIMONY: WHEN JUDGES GROW INTO LEGISLATURE)
07.16.2008	FOCUS	UNTERHALTSRECHT: BUNDESGERICHTSHOF FÄLLT GRUNDSATZENTSCHEIDUNG ZUM NEUEN UNTERHALTSRECHT
		(MAINTENANCE LAW: FEDERAL COURT OF JUDGES TAKES A DECISION IN PRINCIPLE CONCERNING THE NEW LAW)
07.17.2008	SPIEGEL ONLINE	BGH-GRUNDSATZURTEIL: ALLEINERZIEHENDE MÜSSEN NICHT ZWINGEND VOLLZEIT ARBEITEN
		(LEADING DECISION BY THE FEDERAL COURT OF JUDGES: SINGLE PARENTS ARE NOT NECESSARILY OBLIGED TO WORK FULL-TIME)
07.17.2008	FOCUS	ÜBERSICHT: UNTERHALT
		(OVERVIEW: ALIMONY)
07.17.2008	SPIEGEL ONLINE	GRUNDSATZURTEIL: RICHTER STÄRKEN ALLEINERZIEHENDEN DEN RÜCKEN
		(JUDGEMENT ESTABLISHING A PRINCIPLE: JUDGES BACK UP SINGLE-PARENTS)
07.21.2008	FOCUS (print)	**DEUTSCHLAND: AFFÄRE ODER BEZIEHUNG?**
		(GERMANY: JUST AN AFFAIR OR A RELATIONSHIP?)
07.28.2008	DER SPIEGEL (print)	**REGIERUNG: DIE BREMSERIN**
		(GOVERNMENT: THE BRAKER)
07.30.2008	FOCUS (print)	**UNTERHALT: ALLEINERZIEHENDE GESTÄRKT**
		(ALIMONY: SINGLE-PARENTS ARE SUPPORTED)
07.31.2008	SPIEGEL ONLINE	GRUNDSATZURTEIL: BGH STUTZT UNTERHALTSANSPRÜCHE VON EX-PARTNERN
		(LEADING DECISION: FEDERAL COURT OF JUDGES SUPPORTS ALIMONY CLAIMS OF SINGLE-PARENTS)
09.17.2008	FOCUS	UNTERHALT: AUCH STEUERVORTEILE SIND EINKOMMEN
		(ALIMONY: TAX ADVANTAGES ARE ALSO INCOME)
12.12.2008	FOCUS	JAHRESRÜCKBLICK: UNGEMACH BEIM UNTERHALT
		(REVIEW OF THE YEAR'S EVENTS: TROUBLES CONCERNING MAINTENANCE)

Notes: Der Spiegel is the leading periodical in 2007 and 2008 with an average 1,059,605 of distributed circulation per quarter (IVW n.d.g, accessed on 04.28.2016); FOCUS and FOCUS MONEY with an average of 903,948 (IVW n.d.e, accessed on 04.28.2016, IVW n.d.f, accessed on 04.28.2016). Source: FOCUS includes FOCUS Online(`http://www.focus.de`) and FOCUS MONEY Online (`http://www.focus.de/finanzen/`); SPIEGEL ONLINE (`http://www.spiegel.de`); search term: (Ehe UND Unterhalt) ODER Unterhaltsrecht ODER Ehegattenunterhalt ODER "nachehelicher Unterhalt" ODER (Unterhalt UND Zypries) ODER (Scheidung UND Unterhalt); own compilation

Table A.1.4: Television programs

BROADCASTING TIME	STATION	TELEVISION PROGRAM
03.18.2007 9:45 p.m.	DAS ERSTE	**SABINE CHRISTIANSEN***: SCHEIDUNGSRECHT: GEHÖRNT, GESCHIEDEN, GESCHRÖPFT?
04.18.2007 8:15 p.m.	WDR	**HART ABER FAIR**: DAS REIZTHEMA: MAMA GEGEN PAPA, GELD STATT LIEBE - WENN DIE EHE IM KRIEG ENDET
03.29.2007 8:45 a.m.	PHOENIX	**SITZUNG DES DEUTSCHEN BUNDESTAGES**, TAGESORDNUNG U.A.: UNTERHALTSRECHT
04.19.2007 10:00 a.m.	WDR	**HART ABER FAIR**: DAS REIZTHEMA: MAMA GEGEN PAPA, GELD STATT LIEBE - WENN DIE EHE IM KRIEG ENDET
04.21.2007 6:20 a.m.	EINSEXTRA	**HART ABER FAIR**: DAS REIZTHEMA: MAMA GEGEN PAPA, GELD STATT LIEBE - WENN DIE EHE IM KRIEG ENDET
04.21.2007 8:15 p.m.	EINSEXTRA	**HART ABER FAIR**: DAS REIZTHEMA: MAMA GEGEN PAPA, GELD STATT LIEBE - WENN DIE EHE IM KRIEG ENDET
05.23.2007 8:00 p.m.	ARD	**TAGESSCHAU***: BUNDESVERFASSUNGSGERICHT FÄLLT GRUNDSATZENTSCHEIDUNG ZUM UNTERHALT
05.24.2007 8:00 p.m.	ARD	**TAGESSCHAU***: DIE UNTERHALTSRECHTSREFORM MUSS NACHGEBESSERT WERDEN
05.25.2007 8:45 a.m.	PHOENIX	**SITZUNG DES DEUTSCHEN BUNDESTAGES**, TAGESORDNUNG U.A.: UNTERHALTSRECHT
10.01.2007 7:25 p.m.	ZDF	**WISO**: WISO-TIPP: SCHEIDUNG - DEN ROSENKRIEG VERMEIDEN
10.01.2007 10:15 p.m.	ZDFinfo	**WISO**: WISO-TIPP: SCHEIDUNG - DEN ROSENKRIEG VERMEIDEN
11.04.2007 9:45 p.m.	DAS ERSTE	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 3:35 a.m.	DAS ERSTE	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 5:50 a.m.	NDR	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 9:35 a.m.	MDR	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 10:00 a.m.	PHOENIX	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 9:02 p.m.	EINSEXTRA	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.05.2007 8:00 p.m.	ARD	**TAGESSCHAU***: REFORM DES UNTERHALTSRECHTS
11.06.2007 12:00 a.m.	RBB	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.06.2007 3:05 a.m.	EINSEXTRA	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.06.2007 7:00 a.m.	EINSEXTRA	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.06.2007 8:55 a.m.	HR	**ANNE WILL**: VATER, MUTTER, GELD - DIE SCHÖNE NEUE SCHEIDUNGSWELT
11.07.2007 11:30 p.m.	N24	**LINKS-RECHTS**: WAS HÄLT DIE VORSITZENDE DER GRÜNEN VOM NEUEN UNTERHALTSRECHT DER GROßEN KOALITION?
11.09.2007 9:05 a.m.	ZDF	**VOLLE KANNE**: ACH SO!: UNTERHALTSRECHT
11.10.2007 9:05 a.m.	BAYERN 2	**ORANGE** SAMSTAGSMAGAZIN: ALLEINERZIEHENDE VÄTER UND ZAHLENDE MÜTTER
11.13.2007 5:35 p.m.	BR FERNSEHEN	**ABENDSCHAU**: UNTERHALTSRECHT - WAS ÄNDERT SICH FÜR GESCHIEDENE EHEFRAUEN UND EHEMÄNNER?
11.19.2007 6:00 p.m.	BR FERNSEHEN	**ABENDSCHAU**: UNTERHALTSRECHT - WAS ÄNDERT SICH FÜR GESCHIEDENE EHEFRAUEN UND EHEMÄNNER?
11.19.2007 7:25 p.m.	ZDF	**WISO**: WISO-TIPP: SCHEIDUNG - DEN ROSENKRIEG VERMEIDEN
11.19.2007 10:15 p.m.	ZDF INFO	**WISO**: WISO-TIPP: SCHEIDUNG - DEN ROSENKRIEG VERMEIDEN

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01.03.2008 9:45 p.m.	DAS ERSTE	**PANORAMA**: GUT GEMEINT, SCHLECHT GEMACHT - NEUES UNTERHALTSRECHT SCHADET KINDERN
01.03.2008 11:30 p.m.	EINSEXTRA	**PANORAMA**: GUT GEMEINT, SCHLECHT GEMACHT - NEUES UNTERHALTSRECHT SCHADET KINDERN
01.09.2008 9:05 a.m.	ZDF	**VOLLE KANNE**: TOP-THEMA: NEUES UNTERHALTSRECHT
01.21.2008 7:25 p.m.	ZDF	**WISO**: WISO-TIPP: NEUES UNTERHALTSRECHT
01.21.2008 10:15 p.m.	ZDF INFO	**WISO**: WISO-TIPP: NEUES UNTERHALTSRECHT
02.-.2008	ZDF/ARD	**ZDF/ARD MORGENMAGAZIN**: DAS NEUE UNTERHALTSRECHT
02.12.2008 10:45 p.m.	DAS ERSTE	**MENSCHEN BEI MAISCHBERGER**: DER NEUE SCHEIDUNGSKRIEG: SIND DIE FRAUEN DIE DUMMEN?
02.13.2008 9:35 a.m.	MDR	**MENSCHEN BEI MAISCHBERGER**: DER NEUE SCHEIDUNGSKRIEG: SIND DIE FRAUEN DIE DUMMEN?
02.13.2008 8:50 a.m.	SWR	**ARD-BUFFET**: ZUSCHAUER-FRAGEN ZUM THEMA: "SCHEIDUNG UND UNTERHALT" EXPERTIN: DR. INGRID GROß
02.13.2008 12:15 p.m.	DAS ERSTE	**ARD-BUFFET**: ZUSCHAUER-FRAGEN ZUM THEMA: "SCHEIDUNG UND UNTERHALT" EXPERTIN: DR. INGRID GROß
02.13.2008 4:05 p.m.	RBB	**ARD-BUFFET**: ZUSCHAUER-FRAGEN ZUM THEMA: "SCHEIDUNG UND UNTERHALT" EXPERTIN: DR. INGRID GROß
02.13.2008 4:45 p.m.	EINSPLUS	**ARD-BUFFET**: ZUSCHAUER-FRAGEN ZUM THEMA: "SCHEIDUNG UND UNTERHALT" EXPERTIN: DR. INGRID GROß
02.16.2008 11:25 p.m.	3SAT	**MENSCHEN BEI MAISCHBERGER**: DER NEUE SCHEIDUNGSKRIEG: SIND DIE FRAUEN DIE DUMMEN?
03.15.2008 8:00 p.m.	ARD	**TAGESSCHAU***: Koalition BESCHLIEßT ÄNDERUNGEN IM UNTERHALTSRECHT
03.-.2008	ZDF	**ZDF DREHSCHEIBE**: DAS NEUE UNTERHALTSRECHT
04.10.2008 8:00 p.m.	ARD	**TAGESSCHAU***: GRUNDSATZ-URTEIL DER BVERFG
04.11.2008 8:00 p.m.	ARD	**TAGESSCHAU***: BGH-URTEIL
04.12.2008 8:00 p.m.	ARD	**TAGESSCHAU***: BGH ZUR UNTERHALTSPFLICHT
05.07.2008 7:30 p.m.	ZDF DOKUKANAL	**37 GRAD**: "BANKROTT DURCH SCHEIDUNG!"
05.07.2008 8:00 p.m.	ZDF DOKUKANAL	**37 GRAD PLUS**: DORO WIEBE diskutiert MIT Experten ÜBER DIE FINANZIELLE SEITE DER SCHEIDUNG UND MÖGLICHKEITEN, EINEN ERBITTERTEN ROSENKRIEG ZU VERMEIDEN
07.17.2008 4:29 p.m.	ARD	**TAGESSCHAU*** MELDUNG: HINTERGRUND: UNTERHALTSRECHT
07.18.2008 9:05 a.m.	ZDF	**VOLLE KANNE**: ACH SO!: UNTERHALTSRECHT
10.24.2008 8:00 p.m.	ARD	**TAGESSCHAU***: UNTERHALTSRECHT VON ALLEINERZIEHENDEN GESTÄRKT

Notes: * broadcasting schedules by third programs unknown; Political talk-shows: "Anne Will" is the leading show in 2007 (4.11 m), "Sabine Christiansen" comes second (3.90 m), "Hart aber fair" is ranked third (3.29 m), "Menschen bei Maischberger" is in fifth place (1.47 m). Public information broadcasts: Panorama (3.24 m in 2007), WISO (2.75 m), 37 Grad (2.29 m). Television news: Tagesschau im Ersten (5.34 m in 2007), Tagesschau including 5 third programs, 3sat and Phoenix (8.96 m).
Source: Zubayr and Gerhard 2008, pp. 113 et seqq. `http://www.fernsehserien.de/`, `http://www.presseportal.de`, `https://www.tagesschau.de`, search term: Unterhalt; own compilation

Table A.1.5: Extract from Düsseldorf Table (retrieved 01.01.2002)

		Age groups (age in years)				
	Net income of liable person	0 – 5	6 – 11	12 – 17	⩾ 18	**Percentage**
1.	< 1,300	188	228	269	311	100
2.	1,300 – 1,500	202	244	288	333	107
3.	1,500 – 1,700	215	260	307	355	114
4.	1,700 – 1,900	228	276	326	377	121
5.	1,900 – 2,100	241	292	345	399	128
6.	2,100 – 2,300	254	308	364	420	135
7.	2,300 – 2,500	267	324	382	442	142
8.	2,500 – 2,800	282	342	404	467	150
9.	2,800 – 3,200	301	365	431	498	160
10.	3,200 – 3,600	320	388	458	529	170
11.	3,600 – 4,000	339	411	485	560	180
12.	4,000 – 4,400	358	434	512	591	190
13.	4,400 – 4,800	376	456	538	622	200
	⩾ 4,800	according to the circumstances of the case				

Notes: Two children entitled to maintenance and a former spouse. Child benefit is not taken into account. All values of net income are given in €.
Source: Higher Regional Court Düsseldorf 2002, p. 6

Table A.1.6: Minimum standards (or standard rates) of Düsseldorf Table

Time period	Age groups (in years)			
	0-5	6-11	12-17	⩾ 18
01.01.2001 – 07.01.2001	355	431	510	589
07.01.2001 – 01.01.2002	366	444	525	606
01.01.2002 – 07.01.2003	188	228	269	311
07.01.2003 – 07.01.2005	199	241	284	327
07.01.2005 – 07.01.2007	204	247	291	335
07.01.2007 – 01.01.2008	202	245	288	389

Notes: Two children entitled to maintenance and a former spouse. Child benefit is not taken into account. All given values are in €, except for 2001.
Source: Higher Regional Court Düsseldorf 1999a, Higher Regional Court Düsseldorf 2002, p. 6, Higher Regional Court Düsseldorf 2003a, p. 1, Higher Regional Court Düsseldorf 2005a, Higher Regional Court Düsseldorf 2007a

A.1.1 Descriptive results

Table A.1.7: Descriptive statistics for the treatment and control groups before and after 2008

	Before 2008		**After 2008**	
	Mean	Std. Dev.	Mean	Std. Dev.
Control group				
Working hours	4.739	2.599	4.669	2.609
Participation (dummy)	0.855	0.353	0.862	0.345
Education in hrs	0.117	0.394	0.085	0.348
Education (dummy)	0.135	0.342	0.109	0.311
Housework in hrs	2.433	1.230	2.230	1.149
Childcare in hrs	2.181	3.287	1.592	2.876
Caregiving in hrs	0.075	0.560	0.063	0.329
Running errands in hrs	1.013	0.481	0.996	0.491
Hobbies in hrs	2.126	1.490	2.140	1.404
Year	2004.294	2.200	2010.331	1.430
Age	41.860	7.875	47.698	7.783
No. of children, age 0 – 1	0.035	0.184	0.023	0.170
No. of children, age 2 – 4	0.138	0.379	0.053	0.237
No. of children, age 5 – 7	0.150	0.376	0.085	0.300
No. of children, age 8 – 10	0.164	0.411	0.138	0.378
No. of children, age 11 – 12	0.119	0.329	0.100	0.310
No. of children, age 13 – 15	0.208	0.459	0.170	0.421
No. of children, age 16 – 18	0.171	0.413	0.191	0.456
N		572		341
Wives		197		197
Low-intensity treatment group				
Working hours	2.929	2.240	3.488	2.199
Participation (dummy)	0.743	0.438	0.849	0.359
Education in hrs	0.075	0.372	0.032	0.154
Education (dummy)	0.072	0.259	0.047	0.213
Housework in hrs	2.909	1.254	2.627	1.150
Childcare in hrs	3.579	3.938	2.147	3.231
Caregiving in hrs	0.065	0.390	0.109	0.491
Running errands in hrs	1.090	0.484	1.042	0.488
Hobbies in hrs	2.105	1.646	2.106	1.526
Year	2004.263	2.236	2010.264	1.382
Age	41.030	7.499	46.763	7.364
No. of children, age 0 – 1	0.035	0.184	0.021	0.143
No. of children, age 2 – 4	0.143	0.385	0.050	0.245
No. of children, age 5 – 7	0.196	0.429	0.101	0.311
No. of children, age 8 – 10	0.270	0.503	0.166	0.418
No. of children, age 11 – 12	0.183	0.415	0.142	0.375
No. of children, age 13 – 15	0.278	0.514	0.214	0.432
No. of children, age 16 – 18	0.230	0.479	0.329	0.530
N		540		337
Wives		199		199
Medium-intensity treatment group				
Working hours	2.504	2.390	2.732	2.278
Participation (dummy)	0.642	0.480	0.706	0.456
Education in hrs	0.056	0.274	0.084	0.300
Education (dummy)	0.079	0.270	0.100	0.300
Housework in hrs	3.017	1.347	2.789	1.241
Childcare in hrs	3.495	3.979	2.130	3.246
Caregiving in hrs	0.054	0.262	0.150	0.548
Running errands in hrs	1.091	0.516	1.071	0.514
Hobbies in hrs	2.070	1.620	2.065	1.625
Year	2004.210	2.202	2010.241	1.331
Age	42.222	7.222	47.871	6.988
No. of children, age 0 – 1	0.053	0.241	0.015	0.121
No. of children, age 2 – 4	0.158	0.403	0.041	0.199
No. of children, age 5 – 7	0.222	0.478	0.106	0.344
No. of children, age 8 – 10	0.232	0.464	0.156	0.394
No. of children, age 11 – 12	0.145	0.358	0.147	0.379
No. of children, age 13 – 15	0.208	0.445	0.268	0.511
No. of children, age 16 – 18	0.195	0.445	0.206	0.453
N		544		340
Wives		198		198
High-intensity treatment group				
Working hours	2.207	2.619	2.365	2.461
Participation (dummy)	0.517	0.500	0.589	0.493
Education in hrs	0.108	0.363	0.117	0.533
Education (dummy)	0.128	0.334	0.127	0.333
Housework in hrs	3.127	1.486	3.007	1.410
Childcare in hrs	2.816	3.632	1.643	2.791
Caregiving in hrs	0.146	0.588	0.180	0.580
Running errands in hrs	1.174	0.561	1.139	0.548
Hobbies in hrs	2.299	1.724	2.284	1.756
Year	2004.411	2.195	2010.245	1.383
Age	45.375	7.072	50.943	6.619
No. of children, age 0 – 1	0.039	0.204	0.006	0.078
No. of children, age 2 – 4	0.134	0.363	0.042	0.243
No. of children, age 5 – 7	0.143	0.373	0.094	0.302
No. of children, age 8 – 10	0.171	0.426	0.109	0.312
No. of children, age 11 – 12	0.134	0.357	0.097	0.296
No. of children, age 13 – 15	0.202	0.453	0.169	0.414
No. of children, age 16 – 18	0.196	0.431	0.227	0.486
N		509		331
Wives		198		198

Notes: Included time frame: 2001-2013; 792 wives, 3,514 observations; Data: SOEPlong v30

Table A.1.8: Balancing tests at pre-treatment (2007) for the treatment and control groups

	Mean				Difference between Control and ...		
Variable	Control	$Treat_{low}$	$Treat_{med}$	$Treat_{high}$	$Treat_{low}$	$Treat_{med}$	$Treat_{high}$
Age	43.638	43.420	44.803	48.511	0.217	-1.165	-4.873***
Migration background (1st generation)	0.123	0.116	0.110	0.036	0.007	0.013	0.087***
Husbands' age	45.652	45.855	47.039	50.691	-0.203	-1.387	-5.038***
Husbands' migration background	0.116	0.094	0.071	0.022	0.022	0.045	0.094***
Share of wives of equal/older age	0.326	0.304	0.260	0.266	0.022	0.066	0.060
Both spouses with migration background	0.109	0.087	0.071	0.007	0.022	0.038	0.102***
Marriage duration (exact and estimated)	17.872	18.282	18.089	22.162	-0.410	-0.217	-4.290***
Education (CASMIN)	5.167	4.613	5.134	5.681	0.554**	0.033	-0.514*
Husbands' education (CASMIN)	4.819	4.256	5.516	7.087	0.563**	-0.697**	-2.268***
Share of wives equal or higher educated than their husbands	0.797	0.745	0.683	0.478	0.053	0.115**	0.319***
No. of children, age 0 – 1	0.029	0.022	0.008	0.014	0.007	0.021	0.015
No. of children, age 2 – 4	0.109	0.123	0.110	0.094	-0.014	-0.002	0.015
No. of children, age 5 – 7	0.130	0.138	0.142	0.129	-0.007	-0.011	0.001
No. of children, age 8 – 10	0.188	0.246	0.252	0.094	-0.058	-0.064	0.095**
No. of children, age 11 – 12	0.138	0.130	0.213	0.1001	0.007	-0.075	0.037
No. of children, age 13 – 15	0.225	0.362	0.213	0.194	-0.138**	0.012	0.030
No. of children, age 16 – 18	0.181	0.304	0.244	0.144	-0.123**	-0.063	0.037
No. of pre-school children	0.217	0.239	0.205	0.187	-0.022	0.013	0.030
No. of children, age 0 – 18	0.957	1.225	1.102	0.727	-0.268**	-0.146	0.230*
No. of children, age 0 – 20	1.116	1.413	1.268	0.842	-0.297**	-0.152	0.274**
Experience: full-time employment (in yrs)	12.207	7.582	8.331	8.278	4.625***	3.876***	3.929***
Experience: part-time employment (in yrs)	5.857	8.182	7.539	7.622	-2.325***	-1.682**	-1.764**
Experience: full-time and part-time (in yrs)	18.064	15.764	15.870	15.899	2.300**	2.194**	2.164**
Husbands' experience: full-time employment (in yrs)	22.759	24.535	24.742	26.247	-1.776*	-1.983*	-3.489***
Husbands' experience: part-time employment (in yrs)	0.416	0.229	0.326	0.424	0.187	0.090	-0.009
Husbands' experience: full- and part-time employment (in yrs)	23.175	24.764	25.068	26.672	-1.589*	-1.893*	-3.497***
Share of wives having more or equal experience in full-time employment than their husbands	0.159	0.022	0.024	0.043	0.138***	0.136***	0.116***
Allowable income (in €)	1,126.66	529.82	511.47	422.98	596.83***	615.19***	703.68***
Employed (0 = no; 1 = yes)	0.893	0.793	0.733	0.525	0.101**	0.160***	0.368***
Husbands' allowable income (in €)	1,937.66	2,068.60	2,653.52	4,137.08	-130.95*	-715.86***	-2,199.42***
Husbands employed (0 = no; 1 = yes)	0.978	1.000	1.000	0.993	-0.022*	-0.022*	-0.015
Household labor income (in €)	3,274.23	2,855.89	3,455.43	4,851.53	418.34***	-181.20	-1,577.30***

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7-day week (per day):							
Working hours	4.863	2.976	2.603	2.068	1.887***	2.260***	2.796***
Education in hrs	0.104	0.053	0.030	0.108	0.051	0.073**	-0.004
Housework in hrs	2.351	2.790	2.827	3.043	-0.439***	-0.476***	-0.692***
Childcare in hrs	2.054	3.003	3.057	2.088	-0.949**	-1.004**	-0.035
Caregiving in hrs	0.021	0.080	0.096	0.172	-0.059	-0.075**	-0.151***
Running errands in hrs	0.999	1.109	1.040	1.166	-0.110**	-0.042	-0.168***
Hobbies in hrs	2.258	2.117	2.106	2.408	0.141	0.152	-0.150
Husbands: working hours	7.025	7.224	7.214	7.561	-0.199	-0.189	0.536***
Husbands: education in hrs	0.103	0.061	0.058	0.212	0.042	0.045	-0.109**
Husbands: housework in hrs	0.800	0.502	0.558	0.469	0.298***	0.242***	0.332***
Husbands: childcare in hrs	0.924	1.063	0.883	0.684	-0.138	0.041	0.241
Husbands: caregiving in hrs	0.009	0.025	0.049	0.020	-0.015	-0.039*	-0.011
Husbands: running errands in hrs	0.610	0.585	0.501	0.506	0.025	0.109*	0.104*
Husbands: hobbies in hrs	2.089	2.090	1.970	2.198	-0.001	0.119	-0.109
Share of wives spent equal/less hrs on housework than their husbands	0.081	0.023	0.025	0.030	0.058**	0.056**	0.051*
Share of wives spent equal/less hrs on childcare than their husbands	0.654	0.508	0.450	0.585	0.147**	0.204***	0.069

Notes: Balancing tests at $\texttt{Post} = 0$ (pre-treatment year 2007). 542 West German wives are included, except for household labor income (535), employment (525), allowable income (without deductions; 525), education (540), husband's employment (528), husbands' education (539), husbands' allowable income (528), and husbands' time spending in hours (523 wives). The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.9: Balancing tests at pre-treatment (2005/2007) for the treatment and control groups

	Mean				**Difference between** Control **and ...**		
Variable	Control	$\texttt{Treat}_{low}$	$\texttt{Treat}_{med}$	$\texttt{Treat}_{high}$	$\texttt{Treat}_{low}$	$\texttt{Treat}_{med}$	$\texttt{Treat}_{high}$
Age	43.246	42.669	43.993	47.059	0.577	-0.747	-3.813***
Migration background (first generation)	0.137	0.106	0.099	0.049	0.031	0.038	0.088***
Husbands' age	45.190	44.980	46.225	49.401	0.211	-1.035*	-4.211***
Husbands' migration background	0.131	0.089	0.061	0.021	0.042*	0.069***	0.110***
Age difference (0 = wife is younger; 1 = equal/older)	0.321	0.317	0.270	0.265	0.003	0.051	0.056
Both with migration background	0.118	0.082	0.058	0.007	0.036	0.060***	0.111***
Marriage duration (exact and estimated)	17.022	16.990	16.693	20.275	0.032	0.329	-3.253***
Education (CASMIN)	5.100	4.627	5.034	5.719	0.473***	0.066	-0.620***
Husbands' education (CASMIN)	4.878	4.302	5.397	7.084	0.576***	-0.518***	-2.206***
Educational qualifications (0 = wife is less educated; 1 = wife equal or higher educated than husband)	0.781	0.742	0.676	0.477	0.039	0.105***	0.304***
No. of children, age 0 – 1	0.025	0.038	0.027	0.028	-0.013	-0.002	-0.003
No. of children, age 2 – 4	0.125	0.123	0.126	0.101	0.002	-0.002	0.024
No. of children, age 5 – 7	0.134	0.160	0.167	0.125	-0.026	-0.033	0.009
No. of children, age 8 – 10	0.171	0.208	0.249	0.136	-0.037	-0.078**	0.035

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No. of children, age 11 – 12	0.115	0.181	0.160	0.129	-0.066**	-0.045	-0.014
No. of children, age 13 – 15	0.184	0.348	0.215	0.206	-0.164***	-0.031	-0.022
No. of children, age 16 – 18	0.178	0.270	0.201	0.164	-0.092**	-0.024	0.014
No. of pre-school children	0.243	0.253	0.246	0.213	-0.010	-0.003	0.030
No. of children, age 0 – 18	0.891	1.239	1.085	0.847	-0.345***	-0.194**	0.044
No. of children, age 0 – 20	1.019	1.399	1.229	0.990	-0.381***	-0.210**	0.029
Experience: full-time employment (in yrs)	12.256	7.785	8.434	8.215	4.471***	3.821***	4.040***
Experience: part-time employment (in yrs)	5.445	7.747	6.918	6.857	-2.303***	-1.474***	-1.413**
Experience: full-time and part-time (in yrs)	17.700	15.532	15.352	15.072	2.168***	2.348***	2.627***
Husbands' experience: full-time employment (in yrs)	22.486	23.730	23.980	24.981	-1.244*	-1.494**	-2.495***
Husbands' experience: part-time employment (in yrs)	0.329	0.232	0.431	0.437	0.097	-0.102	-0.108
Husbands' experience: full- and part-time employment (in yrs)	22.815	23.962	24.411	25.418	-1.147*	-1.596**	-2.603***
Experience in full-time employment (0 = husband has more yrs of experience; 1 = otherwise)	0.171	0.024	0.034	0.056	0.147***	0.137***	0.116***
Allowable income (in €)	1,130.34	544.66	462.46	420.76	585.67***	667.88***	709.58***
Employed (0 = no; 1 = yes)	0.889	0.771	0.686	0.521	0.118***	0.202***	0.367***
Husbands' allowable income (in €)	1,935.63	2,068.05	2,504.34	4,087.37	-132.42***	-568.71***	-2,151.73***
Husbands employed (0 = no; 1 = yes)	0.971	0.993	0.996	0.996	-0.022**	-0.025**	-0.025**
Household labor income (in €)	3,266.04	2,894.16	3,261.66	4,802.51	371.88***	4.38	-1,536.47***
7-day week (per day):							
Working hours	4.884	3.023	2.530	2.161	1.860***	2.353***	2.723***
Education in hrs	0.114	0.059	0.057	0.114	0.055**	0.058**	0.000
Housework in hrs	2.378	2.778	3.005	3.042	-0.399***	-0.627***	-0.664***
Childcare in hrs	1.977	3.170	3.244	2.432	-1.193***	-1.266***	-0.455*
Caregiving in hrs	0.109	0.080	0.068	0.156	0.029	0.041	-0.047
Running errands in hrs	0.991	1.112	1.061	1.188	-0.121***	-0.070*	-0.197***
Hobbies in hrs	2.182	2.099	2.084	2.322	0.083	0.098	-0.140
Husbands: working hours	6.933	7.146	7.163	7.566	-0.213	-0.229*	-0.633***
Husbands: education in hrs	0.112	0.078	0.082	0.204	0.034	0.030	-0.092***
Husbands: housework in hrs	0.764	0.534	0.542	0.475	0.230***	0.222***	0.289***
Husbands: childcare in hrs	0.837	1.185	0.930	0.795	-0.348***	-0.093	0.041
Husbands: caregiving in hrs	0.010	0.022	0.042	0.015	-0.012	-0.032***	-0.005
Husbands: running errands in hrs	0.666	0.591	0.526	0.491	0.075*	0.140***	0.175***
Husbands: hobbies in hrs	2.041	2.097	1.960	2.124	-0.056	0.081	-0.083
Housework (0 = wife spent more hrs; 1 = otherwise)	0.081	0.025	0.022	0.029	0.055***	0.059***	0.052***
Childcare (0 = wife spent more hrs; 1 = otherwise)	0.648	0.471	0.451	0.525	0.177***	0.197***	0.123***

Notes: Balancing tests at `Post` = 0 (pre-treatment 2005/07); West German wives. 1,194 person-year observations are included, except for household income (1,173 obs), employment (1,148 obs); allowable income (without deductions; 1,148 obs), education (obs = 1,191 obs), husbands' employment (1,157 obs), husbands' education (1,186 obs), husbands' allowable income (1,157 obs), husbands' time spending in hours (1,141 obs). The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.10: Descriptive statistics for the treatment and control groups of husbands before and after 2008, classification of husbands based on female alimony distribution

	Before 2008		**After 2008**	
	Mean	Std. Dev.	Mean	Std. Dev.
Control group				
Working hours	6.870	1.870	6.362	2.270
Participation (dummy)	0.963	0.189	0.919	0.273
Education in hrs	0.143	0.439	0.133	0.464
Education (dummy)	0.170	0.376	0.165	0.372
Housework in hrs	0.748	0.717	0.811	0.703
Childcare in hrs	0.917	1.363	0.681	1.248
Caregiving in hrs	0.008	0.070	0.020	0.147
Running errands in hrs	0.143	0.439	0.663	0.493
Hobbies in hrs	2.087	1.539	2.159	1.450
Year	2004.234	2.221	2010.316	1.437
Age	43.553	7.776	49.586	7.806
No. of children, age 0-1	0.034	0.180	0.020	0.160
No. of children, age 2-4	0.146	0.394	0.052	0.235
No. of children, age 5-7	0.151	0.390	0.087	0.302
No. of children, age 8-10	0.180	0.426	0.142	0.389
No. of children, age 11-12	0.124	0.340	0.104	0.316
No. of children, age 13-15	0.218	0.471	0.162	0.407
No. of children, age 16-18	0.178	0.417	0.186	0.445
N		595		345
Husbands		199		199
Low-intensity treatment group				
Working hours	7.122	1.466	6.868	1.886
Participation (dummy)	0.988	0.110	0.958	0.200
Education in hrs	0.115	0.521	0.082	0.295
Education (dummy)	0.139	0.346	0.122	0.328
Housework in hrs	0.507	0.569	0.630	0.657
Childcare in hrs	1.336	1.661	0.841	1.304
Caregiving in hrs	0.026	0.185	0.041	0.227
Running errands in hrs	0.587	0.485	0.604	0.522
Hobbies in hrs	2.031	1.523	2.122	1.622
Year	2004.228	2.225	2010.218	1.357
Age	42.934	7.182	48.803	6.995
No. of children, age 0-1	0.040	0.196	0.021	0.143
No. of children, age 2-4	0.158	0.402	0.048	0.240
No. of children, age 5-7	0.214	0.451	0.099	0.308
No. of children, age 8-10	0.289	0.515	0.167	0.412
No. of children, age 11-12	0.186	0.420	0.152	0.384
No. of children, age 13-15	0.266	0.498	0.227	0.447
No. of children, age 16-18	0.214	0.455	0.322	0.522
N		575		335
Husbands		200		200
Medium-intensity treatment group				
Working hours	7.155	1.201	6.902	1.747
Participation (dummy)	0.996	0.059	0.965	0.184
Education in hrs	0.138	0.387	0.077	0.271
Education (dummy)	0.198	0.399	0.117	0.321
Housework in hrs	0.562	0.581	0.634	0.671
Childcare in hrs	1.129	1.389	0.829	1.344
Caregiving in hrs	0.027	0.174	0.069	0.305
Running errands in hrs	0.554	0.489	0.574	0.479
Hobbies in hrs	1.945	1.380	1.809	1.396
Year	2004.214	2.226	2010.213	1.324
Age	44.365	7.196	50.233	7.049
No. of children, age 0-1	0.050	0.225	0.017	0.131
No. of children, age 2-4	0.165	0.412	0.041	0.198
No. of children, age 5-7	0.255	0.504	0.111	0.341
No. of children, age 8-10	0.248	0.479	0.157	0.388
No. of children, age 11-12	0.159	0.371	0.146	0.370
No. of children, age 13-15	0.221	0.460	0.271	0.501
No. of children, age 16-18	0.196	0.448	0.207	0.460
N		565		343
Husbands		197		197
High-intensity treatment group				
Working hours	7.532	1.243	7.192	1.989
Participation (dummy)	0.996	0.061	0.951	0.216
Education in hrs	0.250	0.487	0.138	0.365
Education (dummy)	0.330	0.471	0.196	0.397
Housework in hrs	0.483	0.536	0.529	0.549
Childcare in hrs	0.930	1.282	0.682	1.220
Caregiving in hrs	0.019	0.139	0.028	0.153
Running errands in hrs	0.499	0.431	0.481	0.415
Hobbies in hrs	2.044	1.543	2.107	1.605
Year	2004.369	2.179	2010.205	1.367
Age	47.503	7.446	53.070	6.883
No. of children, age 0-1	0.039	0.202	0.006	0.078
No. of children, age 2-4	0.139	0.367	0.055	0.277
No. of children, age 5-7	0.150	0.387	0.095	0.304
No. of children, age 8-10	0.180	0.438	0.113	0.317
No. of children, age 11-12	0.139	0.362	0.104	0.316
No. of children, age 13-15	0.202	0.445	0.177	0.428
No. of children, age 16-18	0.209	0.446	0.217	0.475
N		545		327
Husbands		198		198

Notes: Included time frame: 2001-2013; 794 husbands, 3,630 observations. Data: SOEPlong v30

Table A.1.11: Descriptive statistics for the treatment and control groups of husbands before and after 2008, classification of husbands based on male alimony distribution

	Before 2008		**After 2008**	
	Mean	Std. Dev.	Mean	Std. Dev.
Control group				
Working hours	6.866	1.869	6.351	2.264
Participation (dummy)	0.963	0.189	0.919	0.274
Education in hrs	0.143	0.439	0.133	0.465
Education (dummy)	0.170	0.376	0.166	0.372
Housework in hrs	0.749	0.717	0.813	0.703
Childcare in hrs	0.915	1.363	0.674	1.244
Caregiving in hrs	0.008	0.070	0.020	0.147
Running errands in hrs	0.663	0.504	0.665	0.493
Hobbies in hrs	2.091	1.538	2.158	1.452
Year	2004.232	2.223	2010.320	1.438
Age	43.542	7.778	49.573	7.814
No. of children, age 0-1	0.034	0.181	0.020	0.161
No. of children, age 2-4	0.146	0.394	0.052	0.236
No. of children, age 5-7	0.152	0.390	0.087	0.302
No. of children, age 8-10	0.178	0.425	0.142	0.389
No. of children, age 11-12	0.123	0.339	0.105	0.316
No. of children, age 13-15	0.217	0.470	0.160	0.405
No. of children, age 16-18	0.178	0.417	0.180	0.435
N		594		344
Husbands		198		198
Low-intensity treatment group				
Working hours	7.119	1.472	6.867	1.899
Participation (dummy)	0.988	0.110	0.958	0.201
Education in hrs	0.116	0.524	0.083	0.296
Education (dummy)	0.141	0.348	0.123	0.330
Housework in hrs	0.509	0.571	0.632	0.659
Childcare in hrs	1.339	1.665	0.843	1.308
Caregiving in hrs	0.027	0.186	0.041	0.228
Running errands in hrs	0.587	0.485	0.608	0.523
Hobbies in hrs	2.022	1.528	2.115	1.625
Year	2004.227	2.225	2010.217	1.360
Age	43.018	7.117	48.876	6.941
No. of children, age 0-1	0.039	0.193	0.021	0.144
No. of children, age 2-4	0.156	0.400	0.045	0.235
No. of children, age 5-7	0.213	0.450	0.096	0.306
No. of children, age 8-10	0.292	0.517	0.169	0.413
No. of children, age 11-12	0.190	0.423	0.151	0.383
No. of children, age 13-15	0.269	0.500	0.229	0.449
No. of children, age 16-18	0.214	0.455	0.331	0.532
N		569		332
Husbands		199		199
Medium-intensity treatment group				
Working hours	7.167	1.203	6.923	1.748
Participation (dummy)	0.996	0.059	0.965	0.184
Education in hrs	0.134	0.385	0.077	0.271
Education (dummy)	0.191	0.394	0.117	0.321
Housework in hrs	0.562	0.581	0.635	0.671
Childcare in hrs	1.125	1.392	0.831	1.345
Caregiving in hrs	0.027	0.174	0.069	0.305
Running errands in hrs	0.554	0.490	0.571	0.480
Hobbies in hrs	1.959	1.383	1.810	1.399
Year	2004.221	2.222	2010.213	1.324
Age	44.322	7.280	50.210	7.112
No. of children, age 0-1	0.051	0.229	0.017	0.131
No. of children, age 2-4	0.165	0.412	0.044	0.205
No. of children, age 5-7	0.255	0.504	0.114	0.344
No. of children, age 8-10	0.242	0.476	0.152	0.383
No. of children, age 11-12	0.158	0.369	0.146	0.370
No. of children, age 13-15	0.221	0.460	0.271	0.501
No. of children, age 16-18	0.198	0.449	0.201	0.456
N		565		343
Husbands		197		197
High-intensity treatment group				
Working hours	7.523	1.241	7.178	1.982
Participation (dummy)	0.996	0.060	0.952	0.215
Education in hrs	0.250	0.486	0.137	0.363
Education (dummy)	0.333	0.472	0.193	0.396
Housework in hrs	0.481	0.534	0.526	0.548
Childcare in hrs	0.937	1.279	0.685	1.218
Caregiving in hrs	0.019	0.138	0.028	0.153
Running errands in hrs	0.499	0.430	0.480	0.414
Hobbies in hrs	2.035	1.537	2.114	1.597
Year	2004.362	2.182	2010.202	1.363
Age	47.415	7.466	52.985	6.907
No. of children, age 0-1	0.038	0.201	0.006	0.078
No. of children, age 2-4	0.141	0.369	0.054	0.275
No. of children, age 5-7	0.152	0.389	0.094	0.302
No. of children, age 8-10	0.185	0.441	0.118	0.323
No. of children, age 11-12	0.139	0.362	0.106	0.318
No. of children, age 13-15	0.201	0.444	0.178	0.428
No. of children, age 16-18	0.207	0.444	0.221	0.476
N		552		331
Husbands		200		200

Notes: Included time frame: 2001-2013; 794 husbands, 3,630 observations. Quartiles from husbands' alimony distribution are used to classify husbands into different groups. Data: SOEPlong v30

A.1.2 Results for wives' time allocation

Table A.1.12: Fixed effects models, wives' average working hours per day, additional control variables

	Dependent variable: Wives' working hours																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
	Panel A																			
Post·Treat$_{low}$	0.389*	**0.479****	**0.478*****	**0.428****	0.321	**0.357****	**0.330****	**0.320****	0.331	**0.381****	**0.378****	**0.358****	0.419*	**0.386****	**0.323****	**0.325****	0.413*	**0.418****	**0.371****	**0.378****
	(0.230)	(0.186)	(0.170)	(0.172)	(0.214)	(0.176)	(0.161)	(0.160)	(0.216)	(0.179)	(0.165)	(0.166)	(0.235)	(0.178)	(0.159)	(0.160)	(0.240)	(0.180)	(0.163)	(0.165)
Post·Treat$_{med}$	0.228	0.335*	0.337*	0.225	0.238	0.246	0.179	0.047	0.234	0.286	0.233	0.084	0.334	0.294*	0.190	0.068	0.315	0.353*	0.246	0.117
	(0.238)	(0.192)	(0.184)	(0.184)	(0.219)	(0.177)	(0.169)	(0.166)	(0.231)	(0.186)	(0.171)	(0.170)	(0.237)	(0.176)	(0.166)	(0.166)	(0.252)	(0.187)	(0.169)	(0.170)
Post·Treat$_{high}$	0.247	0.276	0.141	-0.028	0.244	0.187	0.004	-0.151	0.289	0.214	0.044	-0.122	0.370	0.267	0.059	-0.080	0.393	0.312*	0.092	-0.045
	(0.223)	(0.188)	(0.182)	(0.193)	(0.207)	(0.175)	(0.170)	(0.170)	(0.212)	(0.177)	(0.172)	(0.173)	(0.237)	(0.176)	(0.168)	(0.169)	(0.246)	(0.179)	(0.171)	(0.171)
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
	Panel B																			
Post·Treat$_{low}$	0.336	**0.448****	**0.447*****	**0.401****	0.288	0.345*	**0.333****	**0.323****	0.294	**0.373****	**0.380****	**0.361****	0.391*	**0.373****	**0.325****	**0.328****	0.380	**0.408****	**0.371****	**0.377****
	(0.227)	(0.185)	(0.170)	(0.171)	(0.210)	(0.175)	(0.161)	(0.161)	(0.213)	(0.179)	(0.165)	(0.166)	(0.230)	(0.177)	(0.160)	(0.160)	(0.234)	(0.181)	(0.164)	(0.166)
Post·Treat$_{med}$	0.199	0.295	0.292	0.177	0.210	0.232	0.181	0.053	0.202	0.268	0.228	0.085	0.334	0.282	0.193	0.076	0.282	0.336*	0.239	0.116
	(0.234)	(0.190)	(0.182)	(0.184)	(0.219)	(0.177)	(0.167)	(0.166)	(0.231)	(0.186)	(0.170)	(0.170)	(0.238)	(0.178)	(0.166)	(0.165)	(0.252)	(0.188)	(0.170)	(0.171)
Post·Treat$_{high}$	0.244	0.239	0.109	-0.051	0.231	0.168	0.005	-0.145	0.281	0.195	0.042	-0.117	0.351	0.248	0.059	-0.070	0.378	0.292	0.088	-0.040
	(0.226)	(0.189)	(0.184)	(0.186)	(0.212)	(0.177)	(0.171)	(0.172)	(0.215)	(0.179)	(0.174)	(0.174)	(0.241)	(0.179)	(0.171)	(0.171)	(0.247)	(0.182)	(0.173)	(0.173)
Age groups	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Obs	1,084	2,326	3,057	3,514	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308
Obs in Control	276	609	796	913	276	609	796	913	270	588	759	870	276	609	796	913	270	588	759	870
Obs in Treat$_{low}$	276	577	754	877	276	577	754	877	258	556	717	828	276	577	754	877	258	556	717	828
Obs in Treat$_{med}$	254	574	762	884	254	574	762	884	234	526	703	809	254	574	762	884	234	526	703	809
Obs in Treat$_{high}$	278	566	745	840	278	566	745	840	266	549	717	801	278	566	762	840	266	549	717	801
Wives	542	733	779	792	542	733	779	792	514	706	753	765	542	733	779	792	514	706	753	765
Av. obs. per wife	2.0	3.2	3.9	4.4	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3

Notes: Control variables in all models: year fixed effects and age as a second order polynomial. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: $<$ 30, 30-34, ..., 60-64 years old. The number of minor children in different age groups (0-1, ..., 16-18 years old) who live in the same household is another control. Husband's income is a net value, allowable income without deductions. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment) and specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) includes 2001/03/05/07 (pre-treatment) and 2009/09/11/13 (post-treatment). Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Robust standard errors in parentheses, clustered at individual level; Data: SOEPlong v30

Table A.1.13: Fixed effects models for placebo treatment, wives' average working hours per day

	Dependent variable: Wives' working hours per day			
Sample restriction	2003 vs. 2005		2001-2007	
	(1)	(2)	(3)	(4)
$Post_{placebo} \cdot Treat_{low}$	-0.104	-0.176	-0.156	-0.147
	(0.212)	(0.218)	(0.194)	(0.186)
$Post_{placebo} \cdot Treat_{med}$	-0.386*	-0.488**	-0.401*	-0.565***
	(0.218)	(0.201)	(0.220)	(0.197)
$Post_{placebo} \cdot Treat_{high}$	-0.339	-0.446**	-0.764***	-0.818***
	(0.225)	(0.211)	(0.214)	(0.189)
Individual control variables	no	yes	no	yes
Obs	854	854	1,852	1,852
Obs in $Control$	240	240	508	508
Obs in $Treat_{low}$	202	202	460	460
Obs in $Treat_{med}$	222	222	457	457
Obs in $Treat_{high}$	190	190	427	427
Wives	427	427	560	560
Average obs. per wife	2.0	2.0	3.3	3.3
$Adj.\ R^2$	0.0055	0.1605	0.0117	0.1855

Notes: The table shows placebo difference-in-differences estimates; robust standard errors in parentheses, clustered at individual level. 2001 and 2003 constitute the pre-treatment years, while the years after 2005 are the post-treatment years. As controls in Columns (2) and (4), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.14: Fixed effects models for placebo treatment, wives' participation in the labor market

	Dependent variable: Wives' participation (0 = zero working hours; 1 = otherwise)			
Sample restriction	2003 vs. 2005		2001-2007	
	(1)	(2)	(3)	(4)
$Post_{placebo} \cdot Treat_{low}$	-0.014	-0.029	0.002	0.006
	(0.045)	(0.046)	(0.039)	(0.037)
$Post_{placebo} \cdot Treat_{med}$	-0.015	-0.031	-0.013	-0.040
	(0.043)	(0.039)	(0.041)	(0.037)
$Post_{placebo} \cdot Treat_{high}$	-0.044	-0.045	-0.093***	-0.089***
	(0.035)	(0.032)	(0.035)	(0.032)
Individual control variables	no	yes	no	yes
Obs	854	854	1,852	1,852
Obs in $Control$	240	240	508	508
Obs in $Treat_{low}$	202	202	460	460
Obs in $Treat_{med}$	222	222	457	457
Obs in $Treat_{high}$	190	190	427	427
Wives	427	427	560	560
Average obs. per wife	2.0	2.0	3.3	3.3
$Adj.\ R^2$	0.0004	0.0926	0.0135	0.1576

Notes: The table shows placebo difference-in-differences estimates; robust standard errors in parentheses, clustered at individual level. 2001 and 2003 constitute the pre-treatment years, while the years after 2005 are the post-treatment years. As controls in Columns (2) and (4), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.15: Granger-type test for causality, wives' participation in the labor market

Dependent variable:	**Wives' participation (0 = zero working hours; 1 = otherwise)**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	-0.054	-0.067	-0.068	-0.052
	(0.054)	(0.048)	(0.048)	(0.049)
$D_{2001} \cdot Treat_{med}$	0.009	0.042	0.041	0.054
	(0.060)	(0.053)	(0.053)	(0.053)
$D_{2001} \cdot Treat_{high}$	0.131**	0.110**	0.113**	0.127**
	(0.056)	(0.051)	(0.051)	(0.053)
$D_{2003} \cdot Treat_{low}$	-0.039	-0.022	-0.023	-0.012
	(0.050)	(0.045)	(0.045)	(0.045)
$D_{2003} \cdot Treat_{med}$	0.005	0.048	0.047	0.055
	(0.052)	(0.045)	(0.045)	(0.045)
$D_{2003} \cdot Treat_{high}$	0.084**	0.085**	0.087**	0.096**
	(0.042)	(0.039)	(0.039)	(0.041)
$D_{2005} \cdot Treat_{low}$	-0.079**	-0.067*	-0.067*	-0.062*
	(0.040)	(0.037)	(0.037)	(0.037)
$D_{2005} \cdot Treat_{med}$	0.001	0.011	0.010	0.011
	(0.042)	(0.037)	(0.037)	(0.036)
$D_{2005} \cdot Treat_{high}$	0.024	0.017	0.019	0.024
	(0.034)	(0.031)	(0.031)	(0.032)
$D_{2009} \cdot Treat_{low}$	0.041	0.044	0.045	0.041
	(0.039)	(0.036)	(0.036)	(0.036)
$D_{2009} \cdot Treat_{med}$	0.008	0.006	0.008	-0.000
	(0.044)	(0.040)	(0.040)	(0.040)
$D_{2009} \cdot Treat_{high}$	0.040	0.036	0.041	0.036
	(0.040)	(0.037)	(0.038)	(0.038)
$D_{2011} \cdot Treat_{low}$	0.030	0.007	0.007	0.002
	(0.042)	(0.039)	(0.040)	(0.040)
$D_{2011} \cdot Treat_{med}$	0.114**	0.098**	0.098**	0.088**
	(0.046)	(0.043)	(0.043)	(0.043)
$D_{2011} \cdot Treat_{high}$	0.106**	0.091**	0.093**	0.087**
	(0.044)	(0.041)	(0.042)	(0.041)
$D_{2013} \cdot Treat_{low}$	0.056	0.020	0.018	0.007
	(0.057)	(0.053)	(0.053)	(0.054)
$D_{2013} \cdot Treat_{med}$	0.109	0.059	0.057	0.048
	(0.086)	(0.080)	(0.080)	(0.079)
$D_{2013} \cdot Treat_{high}$	0.123	0.082	0.083	0.066
	(0.077)	(0.072)	(0.072)	(0.073)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,514	3,514	3,514	3,514
Wives	792	792	792	792
Avg. obs per wife	4.4	4.4	4.4	4.4
low: H_0 : leads = 0	$F_{3,791} = 1.40$	$F_{3,791} = 1.46$	$F_{3,791} = 1.47$	$F_{3,791} = 1.21$
	p-val = 0.2400	p-val = 0.2237	p-val = 0.2221	p-val = 0.3037
med: H_0 : leads = 0	$F_{3,791} = 0.01$	$F_{3,791} = 0.45$	$F_{3,791} = 0.45$	$F_{3,791} = 0.64$
	p-val = 0.9991	p-val = 0.7171	p-val = 0.7192	p-val = 0.5926
$high$: H_0 : leads = 0	$F_{3,791} = 2.29$	$F_{3,791} = 2.38$	$F_{3,791} = 2.46$	$F_{3,791} = 2.72$
	p-val = 0.0766	p-val = 0.0680	p-val = 0.0615	p-val = 0.0438
Adj. R^2	0.0270	0.1729	0.1725	0.1889

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: < 30, 30-34, ..., 60-64 years old. Year dummies are always included.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.16: Fixed effects models, wives' hours in education

	Dependent variable: Wives' hours in education per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	0.104		0.114		0.116		0.117	
Post·$Treat_{low}$	-0.014	-0.017	0.000	-0.013	-0.004	-0.016	-0.007	-0.018
	(0.049)	(0.053)	(0.031)	(0.033)	(0.032)	(0.033)	(0.033)	(0.034)
Post·$Treat_{med}$	0.091*	0.098**	0.063*	0.057	0.069**	0.060*	0.072**	0.063*
	(0.049)	(0.046)	(0.035)	(0.036)	(0.033)	(0.034)	(0.034)	(0.035)
Post·$Treat_{high}$	0.030	0.040	0.038	0.033	0.042	0.038	0.045	0.047
	(0.054)	(0.051)	(0.043)	(0.045)	(0.044)	(0.044)	(0.043)	(0.043)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,084	1,084	2,326	2,326	3,057	3,057	3,514	3,514
Obs in Control	276	276	609	609	796	796	913	913
Obs in $Treat_{low}$	276	276	577	577	754	754	877	877
Obs in $Treat_{med}$	254	254	574	574	762	762	884	884
Obs in $Treat_{high}$	278	278	566	566	745	745	840	840
Wives	542	542	733	733	779	779	792	792
Av. obs. per wife	2.0	2.0	3.2	3.2	3.9	3.9	4.4	4.4
Adj. R^2	0.0099	0.0172	0.0017	0.0113	0.0030	0.0116	0.0034	0.0121

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I included wife's age as a second order polynomial and the number of minors in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at Post = 0. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.17: Fixed effects models, wives' likelihood of being in education

	Dependent variable: Wives' likelihood of being in education (0 = zero hrs; 1 = otherwise)							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	0.123		0.140		0.140		0.135	
Post·Treat$_{low}$	0.029	0.027	0.016	0.005	0.014	0.004	0.005	-0.003
	(0.036)	(0.037)	(0.028)	(0.028)	(0.025)	(0.025)	(0.023)	(0.112)
Post·Treat$_{med}$	0.070*	0.072*	0.059**	0.055*	0.060**	0.053**	0.053**	0.045*
	(0.039)	(0.039)	(0.029)	(0.028)	(0.026)	(0.026)	(0.025)	(0.025)
Post·Treat$_{high}$	0.029	0.036	0.014	0.010	0.023	0.021	0.025	0.023
	(0.040)	(0.041)	(0.033)	(0.033)	(0.030)	(0.030)	(0.029)	(0.028)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,084	1,084	2,326	2,326	3,057	3,057	3,514	3,514
Obs in Control	276	276	609	609	796	796	913	913
Obs in Treat$_{low}$	276	276	577	577	754	754	877	877
Obs in Treat$_{med}$	254	254	574	574	762	762	884	884
Obs in Treat$_{high}$	278	278	566	566	745	745	840	840
Wives	542	542	733	733	779	779	792	792
Av. obs. per wife	2.0	2.0	3.2	3.2	3.9	3.9	4.4	4.4
Adj. R^2	0.0052	0.0187	0.0021	0.0157	0.0041	0.0139	0.0035	0.0172

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at Post = 0. The sample consists of wives living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.18: Fixed effects models for placebo treatment

	Dependent variable: Wives' daily hours in education			
Sample restriction	2003 vs. 2005		2001-2007	
	(1)	(2)	(3)	(4)
Post$_{placebo}$·Treat$_{low}$	-0.001	-0.015	0.021	0.013
	(0.060)	(0.062)	(0.053)	(0.053)
Post$_{placebo}$·Treat$_{med}$	0.059	0.050	0.040	0.036
	(0.046)	(0.046)	(0.041)	(0.041)
Post$_{placebo}$·Treat$_{high}$	0.001	-0.010	0.035	0.042
	(0.047)	(0.048)	(0.044)	(0.049)
Individual control variables	no	yes	no	yes
Obs	854	854	1,852	1,852
Obs in Control	240	240	508	508
Obs in Treat$_{low}$	202	202	460	460
Obs in Treat$_{med}$	222	222	457	457
Obs in Treat$_{high}$	190	190	427	427
Wives	427	427	560	560
Average obs. per wife	2.0	2.0	3.3	3.3
Adj. R^2	0.0083	0.0063	0.0012	0.0015

Notes: The table shows placebo difference-in-differences estimates; robust standard errors in parentheses, clustered at individual level. 2001 and 2003 constitute the pre-treatment years, while the years after 2005 are the post-treatment years. As controls in Columns (2) and (4), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.19: Fixed effects models for placebo treatment

	Dependent variable: Wives' probability of being in education			
Sample restriction	2003 vs. 2005		2001-2007	
	(1)	(2)	(3)	(4)
Post$_{placebo}$·Treat$_{low}$	0.010	0.000	0.003	-0.000
	(0.044)	(0.044)	(0.032)	(0.033)
Post$_{placebo}$·Treat$_{med}$	0.014	0.008	-0.013	-0.019
	(0.038)	(0.038)	(0.029)	(0.029)
Post$_{placebo}$·Treat$_{high}$	0.039	0.038	0.025	0.027
	(0.049)	(0.050)	(0.035)	(0.036)
Individual control variables	no	yes	no	yes
Obs	854	854	1,852	1,852
Obs in Control	240	240	508	508
Obs in Treat$_{low}$	202	202	460	460
Obs in Treat$_{med}$	222	222	457	457
Obs in Treat$_{high}$	190	190	427	427
Wives	427	427	560	560
Av. obs. per wife	2.0	2.0	3.3	3.3
Adj. R^2	0.0096	0.0085	0.0025	0.0072

Notes: The table shows placebo difference-in-differences estimates; robust standard errors in parentheses, clustered at individual level. 2001 and 2003 constitute the pre-treatment years, while the years after 2005 are the post-treatment years. As controls in Columns (2) and (4), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. The sample consists of wives living in West Germany. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.20: Granger-type test for causality, wives' education in hours per day

Dependent variable:	**Wives' education in hours**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	-0.028	-0.016	-0.016	-0.005
	(0.080)	(0.082)	(0.082)	(0.082)
$D_{2001} \cdot Treat_{med}$	-0.011	-0.001	0.001	0.007
	(0.063)	(0.062)	(0.062)	(0.060)
$D_{2001} \cdot Treat_{high}$	-0.030	-0.044	-0.045	-0.048
	(0.067)	(0.069)	(0.070)	(0.071)
$D_{2003} \cdot Treat_{low}$	-0.022	-0.010	-0.008	-0.000
	(0.058)	(0.058)	(0.058)	(0.059)
$D_{2003} \cdot Treat_{med}$	-0.003	0.005	0.008	0.012
	(0.039)	(0.039)	(0.040)	(0.040)
$D_{2003} \cdot Treat_{high}$	-0.018	-0.024	-0.026	-0.026
	(0.047)	(0.047)	(0.048)	(0.048)
$D_{2005} \cdot Treat_{low}$	-0.058	-0.050	-0.048	-0.043
	(0.045)	(0.046)	(0.046)	(0.046)
$D_{2005} \cdot Treat_{med}$	0.042	0.045	0.049	0.051
	(0.048)	(0.048)	(0.049)	(0.049)
$D_{2005} \cdot Treat_{high}$	-0.001	-0.007	-0.008	-0.008
	(0.050)	(0.049)	(0.050)	(0.050)
$D_{2009} \cdot Treat_{low}$	-0.030	-0.028	-0.028	-0.032
	(0.046)	(0.046)	(0.046)	(0.047)
$D_{2009} \cdot Treat_{med}$	0.094**	0.096**	0.095**	0.093**
	(0.046)	(0.046)	(0.046)	(0.046)
$D_{2009} \cdot Treat_{high}$	0.018	0.020	0.016	0.017
	(0.50)	(0.049)	(0.049)	(0.049)
$D_{2011} \cdot Treat_{low}$	-0.026	-0.035	-0.037	-0.044
	(0.037)	(0.038)	(0.038)	(0.039)
$D_{2011} \cdot Treat_{med}$	0.065**	0.058*	0.058*	0.052
	(0.032)	(0.032)	(0.032)	(0.033)
$D_{2011} \cdot Treat_{high}$	0.064	0.061	0.058	0.058
	(0.078)	(0.079)	(0.079)	(0.078)
$D_{2013} \cdot Treat_{low}$	-0.061	-0.075	-0.077	-0.082
	(0.055)	(0.053)	(0.053)	(0.052)
$D_{2013} \cdot Treat_{med}$	0.081*	0.059	0.059	0.059
	(0.047)	(0.047)	(0.048)	(0.046)
$D_{2013} \cdot Treat_{high}$	0.014	-0.003	-0.006	0.002
	(0.052)	(0.050)	(0.051)	(0.051)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,514	3,514	3,514	3,514
Wives	792	792	792	792
Avg. obs per wife	4.4	4.4	4.4	4.4
low: H_0 : leads $= 0$	$F_{3,791} = 0.56$	$F_{3,791} = 0.43$	$F_{3,791} = 0.39$	$F_{3,791} = 0.36$
	p-val $= 0.6446$	p-val $= 0.7336$	p-val $= 0.7589$	p-val $= 0.7806$
med: H_0 : leads $= 0$	$F_{3,791} = 0.36$	$F_{3,791} = 0.34$	$F_{3,791} = 0.36$	$F_{3,791} = 0.38$
	p-val $= 0.7809$	p-val $= 0.7995$	p-val $= 0.7806$	p-val $= 0.7669$
$high$: H_0 : leads $= 0$	$F_{3,791} = 0.10$	$F_{3,791} = 0.17$	$F_{3,791} = 0.18$	$F_{3,791} = 0.19$
	p-val $= 0.9590$	p-val $= 0.9197$	p-val $= 0.9112$	p-val $= 0.9024$
$Adj.\ R^2$	0.0014	0.0103	0.0098	0.0110

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: < 30, 30-34, ..., 60-64 years old. Year dummies are always included. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.21: Granger-type test for causality, wives' likelihood of being in education

Dependent variable:	**Wives' likelihood of being in education**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.003	0.007	0.008	0.014
	(0.044)	(0.045)	(0.045)	(0.046)
$D_{2001} \cdot Treat_{med}$	0.035	0.043	0.046	0.050
	(0.044)	(0.044)	(0.044)	(0.045)
$D_{2001} \cdot Treat_{high}$	-0.019	-0.025	-0.022	-0.019
	(0.046)	(0.046)	(0.046)	(0.049)
$D_{2003} \cdot Treat_{low}$	-0.010	-0.001	0.001	0.005
	(0.041)	(0.042)	(0.042)	(0.042)
$D_{2003} \cdot Treat_{med}$	0.019	0.026	0.029	0.032
	(0.040)	(0.040)	(0.040)	(0.041)
$D_{2003} \cdot Treat_{high}$	-0.010	-0.012	-0.010	-0.008
	(0.043)	(0.043)	(0.043)	(0.045)
$D_{2005} \cdot Treat_{low}$	-0.024	-0.017	-0.015	-0.012
	(0.036)	(0.036)	(0.037)	(0.037)
$D_{2005} \cdot Treat_{med}$	0.024	0.025	0.028	0.029
	(0.038)	(0.038)	(0.038)	(0.039)
$D_{2005} \cdot Treat_{high}$	0.031	0.026	0.028	0.030
	(0.040)	(0.040)	(0.040)	(0.041)
$D_{2009} \cdot Treat_{low}$	0.015	0.016	0.018	0.016
	(0.034)	(0.034)	(0.034)	(0.034)
$D_{2009} \cdot Treat_{med}$	0.082**	0.081**	0.082**	0.081**
	(0.036)	(0.036)	(0.036)	(0.035)
$D_{2009} \cdot Treat_{high}$	0.032	0.032	0.033	0.033
	(0.037)	(0.037)	(0.037)	(0.036)
$D_{2011} \cdot Treat_{low}$	-0.012	-0.019	-0.018	-0.022
	(0.036)	(0.036)	(0.036)	(0.037)
$D_{2011} \cdot Treat_{med}$	0.057	0.050	0.050	0.046
	(0.037)	(0.036)	(0.037)	(0.037)
$D_{2011} \cdot Treat_{high}$	0.026	0.021	0.020	0.018
	(0.041)	(0.041)	(0.041)	(0.042)
$D_{2013} \cdot Treat_{low}$	-0.052	-0.062	-0.062	-0.064
	(0.046)	(0.045)	(0.045)	(0.044)
$D_{2013} \cdot Treat_{med}$	0.076	0.060	0.058	0.057
	(0.058)	(0.060)	(0.060)	(0.060)
$D_{2013} \cdot Treat_{high}$	0.015	-0.001	-0.001	-0.001
	(0.065)	(0.064)	(0.064)	(0.063)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,514	3,514	3,514	3,514
Wives	792	792	792	792
Avg. obs per wife	4.4	4.4	4.4	4.4
low: H_0 : leads $= 0$	$F_{3,791} = 0.19$	$F_{3,791} = 0.12$	$F_{3,791} = 0.10$	$F_{3,791} = 0.13$
	p-val $= 0.9024$	p-val $= 0.9462$	p-val $= 0.9574$	p-val $= 0.9445$
med: H_0 : leads $= 0$	$F_{3,791} = 0.23$	$F_{3,791} = 0.34$	$F_{3,791} = 0.39$	$F_{3,791} = 0.44$
	p-val $= 0.8754$	p-val $= 0.7939$	p-val $= 0.7620$	p-val $= 0.7269$
$high$: H_0 : leads $= 0$	$F_{3,791} = 0.44$	$F_{3,791} = 0.42$	$F_{3,791} = 0.42$	$F_{3,791} = 0.40$
	p-val $= 0.7238$	p-val $= 0.7363$	p-val $= 0.7356$	p-val $= 0.7539$
Adj. R^2	0.0016	0.0156	0.0147	0.0141

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: $<$ 30, 30-34, ..., 60-64 years old. Year dummies are always included. Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

Table A.1.22: Fixed effects models, wives' daily hours spent on housework

	Dependent variable: Wives' average hours spent on housework per day																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
	Panel A																			
$\texttt{Post·Treat}_{low}$	-0.078	-0.033	-0.039	-0.029	-0.042	0.014	0.014	0.015	0.005	0.025	0.002	0.007	-0.019	-0.032	-0.001	0.022	0.033	-0.010	-0.004	0.012
	(0.117)	(0.093)	(0.085)	(0.087)	(0.114)	(0.092)	(0.085)	(0.087)	(0.119)	(0.095)	(0.088)	(0.089)	(0.120)	(0.099)	(0.090)	(0.089)	(0.125)	(0.102)	(0.094)	(0.092)
$\texttt{Post·Treat}_{med}$	0.015	-0.024	0.026	0.019	0.005	0.006	0.061	0.062	-0.014	0.023	0.053	0.036	0.013	-0.054	0.038	0.057	0.013	-0.026	0.044	0.033
	(0.129)	(0.098)	(0.094)	(0.090)	(0.127)	(0.097)	(0.093)	(0.089)	(0.128)	(0.100)	(0.096)	(0.092)	(0.135)	(0.112)	(0.103)	(0.096)	(0.138)	(0.118)	(0.107)	(0.100)
$\texttt{Post·Treat}_{high}$	0.034	0.187*	0.169*	0.162	0.027	0.203**	0.192*	0.181*	0.034	0.221**	0.174*	0.161	0.031	0.130	0.158	0.152	0.059	0.161	0.160	0.138
	(0.129)	(0.104)	(0.101)	(0.100)	(0.128)	(0.102)	(0.099)	(0.098)	(0.130)	(0.102)	(0.101)	(0.099)	(0.145)	(0.112)	(0.109)	(0.107)	(0.149)	(0.113)	(0.112)	(0.109)
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
	Panel B																			
$\texttt{Post·Treat}_{low}$	-0.051	-0.022	-0.030	-0.017	-0.014	0.022	0.014	0.018	0.033	0.031	0.004	0.012	0.020	-0.022	-0.000	0.022	0.064	-0.002	-0.002	0.016
	(0.120)	(0.093)	(0.086)	(0.087)	(0.117)	(0.092)	(0.085)	(0.086)	(0.120)	(0.095)	(0.088)	(0.089)	(0.122)	(0.098)	(0.089)	(0.088)	(0.126)	(0.100)	(0.093)	(0.092)
$\texttt{Post·Treat}_{med}$	0.045	-0.006	0.038	0.031	0.033	0.010	0.055	0.055	0.025	0.032	0.052	0.035	0.051	-0.049	0.032	0.041	0.045	-0.017	0.040	0.025
	(0.131)	(0.100)	(0.096)	(0.091)	(0.129)	(0.098)	(0.095)	(0.089)	(0.131)	(0.101)	(0.098)	(0.093)	(0.137)	(0.112)	(0.103)	(0.096)	(0.141)	(0.117)	(0.107)	(0.110)
$\texttt{Post·Treat}_{high}$	0.060	0.208*	0.181*	0.173*	0.054	0.211**	0.191*	0.180*	0.061	0.230**	0.175*	0.164*	0.067	0.136	0.152	0.136	0.079	0.169	0.155	0.129
	(0.131)	(0.106)	(0.102)	(0.101)	(0.129)	(0.103)	(0.100)	(0.098)	(0.132)	(0.104)	(0.102)	(0.099)	(0.144)	(0.112)	(0.110)	(0.107)	(0.148)	(0.113)	(0.113)	(0.110)
Age groups	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Obs	1,084	2,326	3,057	3,514	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308
Obs in $\texttt{Control}$	276	609	796	913	276	609	796	913	270	588	759	870	276	609	796	913	270	588	759	870
Obs in $\texttt{Treat}_{low}$	276	577	754	877	276	577	754	877	258	556	717	828	276	577	754	877	258	556	717	828
Obs in $\texttt{Treat}_{med}$	254	574	762	884	254	574	762	884	234	526	703	809	254	574	762	884	234	526	703	809
Obs in $\texttt{Treat}_{high}$	278	566	745	840	278	566	745	840	266	549	717	801	278	566	745	840	266	549	717	801
Wives	542	733	779	792	542	733	779	792	514	706	753	765	542	733	779	792	514	706	753	765
Av. obs. per wife	2.0	3.2	3.9	4.4	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3

Notes: Dependent variable covers washing, cooking, and cleaning, 7-day week; Control variables in all models: year fixed effects and age as a second order polynomial. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: $<$ 30, 30-34, ..., 60-64 years old. The number of minor children in different age groups (0-1, ..., 16-18 years old) who live in the same household is another control. Husband's income is a net value, allowable income without deductions. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment), specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) 2001/03/05/07 (pre-treatment) and 2009/11/13 (post-treatment).
Significance levels: * 10%; ** 5%; *** 1%; Robust standard errors in parentheses, clustered at individual level; Data: SOEPlong v30

Table A.1.23: Granger-type test for causality, wives' daily housework hours

Dependent variable:	**Wives' housework in hrs**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.037	0.048	0.045	0.045
	(0.164)	(0.165)	(0.163)	(0.163)
$D_{2001} \cdot Treat_{med}$	0.016	-0.016	-0.003	0.014
	(0.160)	(0.158)	(0.158)	(0.159)
$D_{2001} \cdot Treat_{high}$	-0.039	-0.051	-0.033	0.028
	(0.170)	(0.164)	(0.164)	(0.173)
$D_{2003} \cdot Treat_{low}$	0.050	0.019	0.030	0.032
	(0.130)	(0.127)	(0.128)	(0.129)
$D_{2003} \cdot Treat_{med}$	-0.110	-0.148	-0.124	-0.108
	(0.132)	(0.129)	(0.129)	(0.128)
$D_{2003} \cdot Treat_{high}$	-0.009	-0.041	-0.016	0.022
	(0.118)	(0.115)	(0.115)	(0.120)
$D_{2005} \cdot Treat_{low}$	-0.078	-0.086	-0.080	-0.081
	(0.134)	(0.132)	(0.132)	(0.132)
$D_{2005} \cdot Treat_{med}$	-0.026	-0.030	-0.026	-0.020
	(0.140)	(0.137)	(0.137)	(0.137)
$D_{2005} \cdot Treat_{high}$	-0.162	-0.152	-0.135	-0.116
	(0.134)	(0.132)	(0.133)	(0.132)
$D_{2009} \cdot Treat_{low}$	-0.069	-0.053	-0.046	-0.043
	(0.114)	(0.114)	(0.114)	(0.115)
$D_{2009} \cdot Treat_{med}$	0.003	0.022	0.026	0.018
	(0.121)	(0.121)	(0.121)	(0.122)
$D_{2009} \cdot Treat_{high}$	0.099	0.117	0.130	0.114
	(0.120)	(0.121)	(0.122)	(0.123)
$D_{2011} \cdot Treat_{low}$	-0.028	0.009	0.019	0.021
	(0.141)	(0.140)	(0.140)	(0.142)
$D_{2011} \cdot Treat_{med}$	-0.085	-0.057	-0.050	-0.059
	(0.125)	(0.125)	(0.125)	(0.131)
$D_{2011} \cdot Treat_{high}$	0.122	0.153	0.169	0.139
	(0.157)	(0.157)	(0.157)	(0.161)
$D_{2013} \cdot Treat_{low}$	0.198	0.246	0.240	0.238
	(0.192)	(0.196)	(0.195)	(0.198)
$D_{2013} \cdot Treat_{med}$	0.222	0.273	0.260	0.243
	(0.247)	(0.249)	(0.251)	(0.255)
$D_{2013} \cdot Treat_{high}$	-0.065	0.023	0.025	-0.031
	(0.229)	(0.233)	(0.231)	(0.242)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,514	3,514	3,514	3,514
Wives	792	792	792	792
Avg. obs per wife	4.4	4.4	4.4	4.4
low: H_0 : leads $= 0$	$F_{3,791} = 0.32$	$F_{3,791} = 0.29$	$F_{3,791} = 0.28$	$F_{3,791} = 0.29$
	p-val $= 0.8075$	p-val $= 0.8325$	p-val $= 0.8421$	p-val $= 0.8344$
med: H_0 : leads $= 0$	$F_{3,791} = 0.37$	$F_{3,791} = 0.58$	$F_{3,791} = 0.43$	$F_{3,791} = 0.37$
	p-val $= 0.7775$	p-val $= 0.6313$	p-val $= 0.7328$	p-val $= 0.7742$
$high$: H_0 : leads $= 0$	$F_{3,791} = 0.58$	$F_{3,791} = 0.45$	$F_{3,791} = 0.38$	$F_{3,791} = 0.40$
	p-val $= 0.6273$	p-val $= 0.7181$	p-val $= 0.7685$	p-val $= 0.7538$
$Adj.\ R^2$	0.0215	0.0479	0.0514	0.0533

Notes: See Appendix Table A.1.21. Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

A.1.3 Results for husbands' labor supply

Table A.1.24: Fixed effects models, husbands' daily working hours

	Dependent variable: Husbands' working hours per day					
Sample restriction	2007 vs. 2009			2005-2011		
	(1)	(2)	(3)	(4)	(5)	(6)
Mean in $Control$	6.937			6.909		
$Post{\cdot}Treat_{low}$	0.128	-0.033	-0.019	0.137	-0.006	0.020
	(0.226)	(0.209)	(0.218)	(0.190)	(0.175)	(0.184)
$Post{\cdot}Treat_{med}$	0.119	-0.025	-0.038	0.212	0.059	0.099
	(0.228)	(0.209)	(0.230)	(0.171)	(0.159)	(0.174)
$Post{\cdot}Treat_{high}$	0.604***	0.400**	0.363	0.190	0.035	0.089
	(0.217)	(0.199)	(0.234)	(0.178)	(0.166)	(0.182)
Ind. control var.	yes	yes	yes	yes	yes	yes
Age group	yes	yes	yes	yes	yes	yes
Work experience	no	yes	yes	no	yes	yes
Wife's work experience	no	no	yes	no	no	yes
Obs	1,140	1,140	1,140	2,384	2,384	2,384
Obs in $Control$	292	292	292	611	611	611
Obs in $Treat_{low}$	286	286	286	589	589	589
Obs in $Treat_{med}$	274	274	274	599	599	599
Obs in $Treat_{high}$	288	288	288	585	585	585
Husbands	570	570	570	747	747	747
Av. obs. per husband	2.0	2.0	2.0	3.2	3.2	3.2
$Adj.\ R^2$	0.0658	0.1602	0.1598	0.0407	0.1008	0.0998

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. Individual control variables include husband's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Indicators are included for the following age groups: $<$ 30, 30-34, ..., 60-64. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Means are reported at $Post = 0$. Quartiles from wives' alimony distribution are used to classify husbands into different groups.
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

Table A.1.25: Fixed effects models, husbands' daily working hours

	Dependent variable: Husbands' working hours per day							
Sample restriction	2007 vs. 2009		2005/07-09/11		2003-13		2001-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	6.937		6.901		6.809		6.866	
	Panel A							
Post·Treat$_{low}$	0.153	0.135	0.198	0.156	0.059	-0.008	0.154	0.103
	(0.234)	(0.231)	(0.192)	(0.191)	(0.188)	(0.187)	(0.185)	(0.185)
Post·Treat$_{med}$	0.091	0.105	0.198	0.221	0.072	0.101	0.168	0.193
	(0.229)	(0.229)	(0.170)	(0.171)	(0.172)	(0.172)	(0.169)	(0.169)
Post·Treat$_{high}$	0.431**	0.579**	0.089	0.187	-0.035	0.089	0.035	0.161
	(0.212)	(0.224)	(0.182)	(0.180)	(0.182)	(0.178)	(0.177)	(0.173)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Adj. R^2	0.0444	0.0635	0.0228	0.0396	0.0161	0.0355	0.0184	0.0369
	Panel B							
Post·Treat$_{low}$	0.137	-0.021	0.151	0.215	-0.006	-0.116	0.100	-0.027
	(0.228)	(0.210)	(0.191)	(0.171)	(0.187)	(0.174)	(0.185)	(0.174)
Post·Treat$_{med}$	0.113	-0.030	0.215	0.060	0.106	-0.021	0.198	0.035
	(0.228)	(0.210)	(0.171)	(0.159)	(0.172)	(0.160)	(0.169)	(0.159)
Post·Treat$_{high}$	0.593***	0.387*	0.188	0.032	0.103	0.002	0.181	0.010
	(0.216)	(0.197)	(0.178)	(0.165)	(0.178)	(0.170)	(0.172)	(0.167)
Ind. control var.	yes	yes	yes	yes	yes	yes	yes	yes
Age group	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	yes	no	yes	no	yes	no	yes
Adj. R^2	0.0654	0.1596	0.0407	0.1008	0.0366	0.0739	0.0391	0.0821
Obs	1,140	1,140	2,384	2,384	3,148	3,148	3,630	3,630
Obs in Control	292	292	609	609	811	811	938	938
Obs in Treat$_{low}$	282	282	583	583	773	773	901	901
Obs in Treat$_{med}$	274	274	600	600	785	785	908	908
Obs in Treat$_{high}$	292	292	592	592	779	779	883	883
Husbands	570	570	747	747	786	786	794	794
Av. obs. per husband	2.0	2.0	3.2	3.2	4.0	4.0	4.6	4.6

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. Individual control variables include husband's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Indicators for age groups are constructed for the following steps: <30, 30-34, ..., 60-64. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Means are reported at Post = 0. Quartiles from husbands' alimony distribution are used to classify husbands into different groups.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.26: Granger-type test for causality, husbands' daily working hours

Dependent variable:	**Husbands' working hours per day**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	-0.286	-0.294	-0.297	-0.109
	(0.241)	(0.240)	(0.239)	(0.237)
$D_{2001} \cdot Treat_{med}$	-0.284	-0.322	-0.338	-0.107
	(0.235)	(0.234)	(0.232)	(0.230)
$D_{2001} \cdot Treat_{high}$	-0.130	-0.277	-0.281	-0.032
	(0.236)	(0.234)	(0.231)	(0.228)
$D_{2003} \cdot Treat_{low}$	0.197	0.225	0.219	0.339
	(0.235)	(0.231)	(0.231)	(0.239)
$D_{2003} \cdot Treat_{med}$	0.327	0.304	0.296	0.429*
	(0.220)	(0.214)	(0.217)	(0.223)
$D_{2003} \cdot Treat_{high}$	0.297	0.179	0.180	0.302
	(0.226)	(0.221)	(0.221)	(0.228)
$D_{2005} \cdot Treat_{low}$	-0.050	-0.027	-0.027	0.036
	(0.196)	(0.195)	(0.197)	(0.198)
$D_{2005} \cdot Treat_{med}$	-0.069	-0.083	-0.097	-0.011
	(0.182)	(0.183)	(0.184)	(0.185)
$D_{2005} \cdot Treat_{high}$	0.114	0.052	0.049	0.147
	(0.174)	(0.174)	(0.175)	(0.175)
$D_{2009} \cdot Treat_{low}$	0.255	0.246	0.240	0.170
	(0.222)	(0.220)	(0.219)	(0.211)
$D_{2009} \cdot Treat_{med}$	0.093	0.120	0.115	0.046
	(0.222)	(0.220)	(0.220)	(0.210)
$D_{2009} \cdot Treat_{high}$	0.522**	0.582***	0.600***	0.510**
	(0.208)	(0.207)	(0.207)	(0.197)
$D_{2011} \cdot Treat_{low}$	0.089	0.034	0.024	0.002
	(0.230)	(0.228)	(0.231)	(0.221)
$D_{2011} \cdot Treat_{med}$	0.304	0.322	0.319	0.275
	(0.199)	(0.199)	(0.201)	(0.196)
$D_{2011} \cdot Treat_{high}$	-0.283	-0.206	-0.180	-0.234
	(0.270)	(0.262)	(0.263)	(0.258)
$D_{2013} \cdot Treat_{low}$	-0.317	-0.473	-0.467	-0.423
	(0.405)	(0.414)	(0.412)	(0.418)
$D_{2013} \cdot Treat_{med}$	-0.071	-0.171	-0.174	-0.268
	(0.368)	(0.366)	(0.363)	(0.371)
$D_{2013} \cdot Treat_{high}$	-0.541	-0.530	-0.511	-0.636
	(0.454)	(0.447)	(0.440)	(0.451)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,630	3,630	3,630	3,630
Husbands	794	794	794	794
Avg. obs per husband	4.6	4.6	4.6	4.6
low: H_0 : leads = 0	$F_{3,793} = 1.06$	$F_{3,793} = 1.22$	$F_{3,793} = 1.23$	$F_{3,793} = 1.05$
	p-val = 0.3639	p-val = 0.3001	p-val = 0.2989	p-val = 0.3687
med: H_0 : leads = 0	$F_{3,793} = 2.09$	$F_{3,793} = 2.22$	$F_{3,793} = 2.32$	$F_{3,793} = 2.01$
	p-val = 0.0999	p-val = 0.0840	p-val = 0.0737	p-val = 0.1105
high: H_0 : leads = 0	$F_{3,793} = 1.05$	$F_{3,793} = 1.11$	$F_{3,793} = 1.13$	$F_{3,793} = 0.81$
	p-val = 0.3684	p-val = 0.3438	p-val = 0.3347	p-val = 0.4871
Adj. R^2	0.0260	0.0448	0.0469	0.0895

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. For control variables see Appendix Table A.1.25. Quartiles from wives' alimony distribution are used to classify husbands into different groups. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.1.4 Results for spouses' hours invested in childcare

Table A.1.27: Granger-type test for causality, wives' childcare in hours per day

Dependent variable:	**Wives' childcare in hrs**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.610	0.623*	0.631*	0.473
	(0.439)	(0.337)	(0.336)	(0.342)
$D_{2001} \cdot Treat_{med}$	-0.075	-0.446	-0.451	-0.613*
	(0.423)	(0.326)	(0.327)	(0.335)
$D_{2001} \cdot Treat_{high}$	-0.106	0.069	0.066	-0.244
	(0.478)	(0.322)	(0.321)	(0.347)
$D_{2003} \cdot Treat_{low}$	0.776**	0.491*	0.488*	0.348
	(0.347)	(0.291)	(0.292)	(0.294)
$D_{2003} \cdot Treat_{med}$	0.111	-0.248	-0.266	-0.414
	(0.388)	(0.300)	(0.300)	(0.302)
$D_{2003} \cdot Treat_{high}$	0.249	0.194	0.192	-0.027
	(0.374)	(0.278)	(0.277)	(0.287)
$D_{2005} \cdot Treat_{low}$	0.660***	0.526**	0.525**	0.465**
	(0.248)	(0.228)	(0.229)	(0.232)
$D_{2005} \cdot Treat_{med}$	0.110	0.035	0.018	-0.042
	(0.322)	(0.270)	(0.271)	(0.273)
$D_{2005} \cdot Treat_{high}$	0.436	0.608**	0.600**	0.488*
	(0.286)	(0.255)	(0.255)	(0.259)
$D_{2009} \cdot Treat_{low}$	-0.439*	-0.332	-0.326	-0.290
	(0.251)	(0.219)	(0.220)	(0.220)
$D_{2009} \cdot Treat_{med}$	-0.596**	-0.536**	-0.532**	-0.469**
	(0.250)	(0.216)	(0.219)	(0.221)
$D_{2009} \cdot Treat_{high}$	-0.250	-0.178	-0.168	-0.093
	(0.249)	(0.207)	(0.207)	(0.209)
$D_{2011} \cdot Treat_{low}$	-0.570*	-0.187	-0.165	-0.098
	(0.316)	(0.267)	(0.268)	(0.272)
$D_{2011} \cdot Treat_{med}$	-0.962***	-0.707***	-0.696***	-0.571**
	(0.297)	(0.245)	(0.247)	(0.254)
$D_{2011} \cdot Treat_{high}$	-0.508	-0.266	-0.248	-0.112
	(0.321)	(0.259)	(0.259)	(0.267)
$D_{2013} \cdot Treat_{low}$	-1.173**	-0.621	-0.587	-0.563
	(0.481)	(0.414)	(0.415)	(0.418)
$D_{2013} \cdot Treat_{med}$	-1.316**	-0.699	-0.670	-0.625
	(0.593)	(0.494)	(0.497)	(0.502)
$D_{2013} \cdot Treat_{high}$	-1.504**	-0.696	-0.670	-0.488
	(0.629)	(0.455)	(0.452)	(0.471)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,514	3,514	3,514	3,514
Wives	792	792	792	792
Avg. obs per wife	4.4	4.4	4.4	4.4
low: H_0 : leads $= 0$	$F_{3,791} = 2.81$	$F_{3,791} = 2.16$	$F_{3,791} = 2.17$	$F_{3,791} = 1.46$
	p-val $= 0.0388$	p-val $= 0.0910$	p-val $= 0.0906$	p-val $= 0.2238$
med: H_0 : leads $= 0$	$F_{3,791} = 0.11$	$F_{3,791} = 0.95$	$F_{3,791} = 0.94$	$F_{3,791} = 1.58$
	p-val $= 0.9556$	p-val $= 0.4146$	p-val $= 0.4189$	p-val $= 0.1927$
$high$: H_0 : leads $= 0$	$F_{3,791} = 0.99$	$F_{3,791} = 1.99$	$F_{3,791} = 1.94$	$F_{3,791} = 1.93$
	p-val $= 0.3962$	p-val $= 0.1136$	p-val $= 0.1222$	p-val $= 0.1228$
$Adj.\ R^2$	0.1322	0.4339	0.4341	0.4387

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: < 30, 30-34, ..., 60-64 years old. Year dummies are always included. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.28: Fixed effects models, wives' daily hours spent on childcare

	Dependent variable: Wives' hours spent on childcare																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
	Panel A																			
$\texttt{Post}\cdot\texttt{Treat}_{low}$	-0.346	-0.879***	-1.040***	-1.023***	-0.210	-0.556***	-0.635***	-0.683***	-0.156	-0.559***	-0.642***	-0.673***	-0.092	-0.488**	-0.524***	-0.568***	-0.041	-0.493**	-0.524**	-0.557***
	(0.254)	(0.241)	(0.243)	(0.256)	(0.223)	(0.199)	(0.191)	(0.198)	(0.233)	(0.203)	(0.196)	(0.205)	(0.239)	(0.205)	(0.197)	(0.204)	(0.251)	(0.210)	(0.203)	(0.210)
$\texttt{Post}\cdot\texttt{Treat}_{med}$	-0.335	-0.743***	-0.892***	-0.864***	-0.369*	-0.566***	-0.555***	-0.489**	-0.391*	-0.629***	-0.607***	-0.473**	-0.219	-0.476**	-0.425**	-0.339	-0.234	-0.537**	-0.463**	-0.314
	(0.244)	(0.239)	(0.257)	(0.266)	(0.222)	(0.191)	(0.204)	(0.207)	(0.234)	(0.199)	(0.211)	(0.213)	(0.243)	(0.200)	(0.210)	(0.216)	(0.259)	(0.209)	(0.219)	(0.225)
$\texttt{Post}\cdot\texttt{Treat}_{high}$	-0.078	-0.669***	-0.779***	-0.710***	-0.068	-0.523***	-0.514***	-0.492***	-0.056	-0.526***	-0.520***	-0.478**	0.144	-0.410*	-0.352*	-0.275	0.156	-0.416**	-0.351*	-0.251
	(0.274)	(0.243)	(0.249)	(0.257)	(0.225)	(0.192)	(0.184)	(0.184)	(0.241)	(0.195)	(0.190)	(0.188)	(0.272)	(0.204)	(0.200)	(0.203)	(0.292)	(0.209)	(0.207)	(0.209)
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
	Panel B																			
$\texttt{Post}\cdot\texttt{Treat}_{low}$	-0.292	-0.804***	-0.922***	-0.905***	-0.182	-0.550***	-0.628***	-0.670***	-0.127	-0.552***	-0.639***	-0.663***	-0.054	-0.479**	-0.518***	-0.552***	-0.003	-0.483**	-0.520**	-0.543**
	(0.265)	(0.237)	(0.235)	(0.245)	(0.228)	(0.200)	(0.191)	(0.197)	(0.243)	(0.204)	(0.196)	(0.204)	(0.247)	(0.206)	(0.197)	(0.203)	(0.266)	(0.211)	(0.204)	(0.210)
$\texttt{Post}\cdot\texttt{Treat}_{med}$	-0.292	-0.630***	-0.736***	-0.692***	-0.349	-0.536***	-0.542***	-0.472**	-0.358	-0.603***	-0.599***	-0.459**	-0.186	-0.437**	-0.414**	-0.317	-0.182	-0.503**	-0.453*	-0.295
	(0.252)	(0.233)	(0.253)	(0.264)	(0.229)	(0.190)	(0.203)	(0.208)	(0.243)	(0.198)	(0.211)	(0.215)	(0.257)	(0.200)	(0.210)	(0.217)	(0.276)	(0.210)	(0.220)	(0.227)
$\texttt{Post}\cdot\texttt{Treat}_{high}$	-0.075	-0.585**	-0.667***	-0.609**	-0.055	-0.493***	-0.500***	-0.475**	-0.042	-0.500**	-0.512***	-0.465**	0.175	-0.364*	-0.338*	-0.251	0.194	-0.375*	-0.340	-0.231
	(0.275)	(0.237)	(0.242)	(0.247)	(0.228)	(0.189)	(0.184)	(0.183)	(0.243)	(0.193)	(0.189)	(0.187)	(0.281)	(0.203)	(0.200)	(0.203)	(0.299)	(0.207)	(0.207)	(0.210)
Age groups	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Minors in the hh	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Husband's income	no	no	no	no	no	no	no	no	yes	yes	yes	yes	no	no	no	no	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Obs	1,084	2,326	3,057	3,514	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308	1,084	2,326	3,057	3,514	1,028	2,219	2,896	3,308
Obs in $\texttt{Control}$	276	609	796	913	276	609	796	913	270	588	759	870	276	609	796	913	270	588	759	870
Obs in $\texttt{Treat}_{low}$	276	577	754	877	276	577	754	877	258	556	717	828	276	577	754	877	258	556	717	828
Obs in $\texttt{Treat}_{med}$	254	574	762	884	254	574	762	884	234	526	703	809	254	574	762	884	234	526	703	809
Obs in $\texttt{Treat}_{high}$	278	566	745	840	278	566	745	840	266	549	717	801	278	566	745	840	266	549	717	801
Wives	542	733	779	792	542	733	779	792	514	706	753	765	542	733	779	792	514	706	753	765
Av. obs. per wive	2.0	3.2	3.9	4.4	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3	2.0	3.2	3.9	4.4	2.0	3.1	3.8	4.3

Notes: Control variables in all models: year fixed effects and age as a second order polynomial. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: $<$ 30, 30-34, ..., 60-64 years old. The number of minor children in different age groups (0-1, ..., 16-18 years old) who live in the same household is another control. Husband's income is a net value, allowable income without deductions. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment), specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) 2001/03/05/07 (pre-treatment) and 2009/11/13 (post-treatment). Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Robust standard errors in parentheses, clustered at individual level; Data: SOEPlong v30

Table A.1.29: Fixed effects models, husbands' daily childcare hours

	Dependent variable: Husbands' childcare hours per day							
Sample restriction	2007 vs. 2009		2005/07-09/11		2003-13		2001-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	0.979		0.864		0.858		0.917	
	Panel A							
Post·Treat$_{low}$	-0.110	-0.078	-0.300***	-0.213**	-0.327***	-0.187**	-0.299***	-0.161*
	(0.118)	(0.116)	(0.107)	(0.097)	(0.105)	(0.092)	(0.108)	(0.091)
Post·Treat$_{med}$	0.054	0.056	-0.052	-0.013	-0.076	0.039	-0.058	0.050
	(0.108)	(0.104)	(0.096)	(0.084)	(0.096)	(0.078)	(0.104)	(0.083)
Post·Treat$_{high}$	0.107	0.081	-0.026	-0.007	-0.078	0.004	-0.053	0.013
	(0.107)	(0.106)	(0.099)	(0.089)	(0.101)	(0.082)	(0.103)	(0.081)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Adj. R^2	0.0152	0.0682	0.0407	0.1493	0.0492	0.2170	0.0548	0.2432
	Panel B							
Post·Treat$_{low}$	-0.070	-0.065	-0.203**	-0.198**	-0.183**	-0.169*	-0.156*	-0.142
	(0.118)	(0.121)	(0.097)	(0.096)	(0.091)	(0.091)	(0.091)	(0.089)
Post·Treat$_{med}$	0.059	0.061	-0.005	0.008	0.051	0.061	0.058	0.066
	(0.103)	(0.106)	(0.084)	(0.085)	(0.079)	(0.079)	(0.083)	(0.082)
Post·Treat$_{high}$	0.089	0.086	-0.002	0.031	0.003	0.003	0.006	0.007
	(0.107)	(0.106)	(0.088)	(0.087)	(0.081)	(0.081)	(0.080)	(0.080)
Ind. control var.	yes	yes	yes	yes	yes	yes	yes	yes
Age groups	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	yes	no	yes	no	yes	no	yes
Adj. R^2	0.0680	0.0650	0.1511	0.1539	0.2183	0.2186	0.2449	0.2459
Obs	1,140	1,140	2,384	2,384	3,148	3,148	3,630	3,630
Obs in Control	292	292	611	611	813	813	940	940
Obs in Treat$_{low}$	286	286	589	589	781	781	910	910
Obs in Treat$_{med}$	274	274	599	599	784	784	908	908
Obs in Treat$_{high}$	288	288	585	585	770	770	872	872
Husbands	570	570	747	747	786	786	794	794
Av. obs. per husband	2.0	2.0	3.2	3.2	4.0	4.0	4.6	4.6

Notes: See Appendix Table A.1.25. Quartiles from wives' alimony distribution are used to classify husbands into different groups.

Table A.1.30: Granger-type test for causality, husbands' daily childcare hours

Dependent variable:	**Husbands' childcare hours per day**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.092	0.044	0.058	0.043
	(0.194)	(0.173)	(0.173)	(0.169)
$D_{2001} \cdot Treat_{med}$	0.107	0.031	0.047	0.041
	(0.190)	(0.168)	(0.169)	(0.167)
$D_{2001} \cdot Treat_{high}$	-0.043	-0.008	-0.001	-0.002
	(0.203)	(0.174)	(0.175)	(0.173)
$D_{2003} \cdot Treat_{low}$	0.163	0.037	0.036	0.023
	(0.140)	(0.126)	(0.126)	(0.127)
$D_{2003} \cdot Treat_{med}$	0.168	0.000	-0.003	-0.007
	(0.149)	(0.127)	(0.131)	(0.132)
$D_{2003} \cdot Treat_{high}$	0.072	-0.000	-0.001	-0.003
	(0.154)	(0.127)	(0.130)	(0.130)
$D_{2005} \cdot Treat_{low}$	0.333**	0.284**	0.284**	0.273*
	(0.145)	(0.142)	(0.142)	(0.142)
$D_{2005} \cdot Treat_{med}$	0.143	0.109	0.115	0.113
	(0.121)	(0.117)	(0.116)	(0.115)
$D_{2005} \cdot Treat_{high}$	0.146	0.158	0.159	0.153
	(0.127)	(0.126)	(0.125)	(0.124)
$D_{2009} \cdot Treat_{low}$	-0.169	-0.123	-0.111	-0.105
	(0.115)	(0.112)	(0.112)	(0.112)
$D_{2009} \cdot Treat_{med}$	0.048	0.067	0.078	0.079
	(0.108)	(0.103)	(0.103)	(0.103)
$D_{2009} \cdot Treat_{high}$	0.019	0.054	0.053	0.054
	(0.108)	(0.102)	(0.103)	(0.104)
$D_{2011} \cdot Treat_{low}$	-0.061	0.032	0.036	0.040
	(0.134)	(0.118)	(0.118)	(0.118)
$D_{2011} \cdot Treat_{med}$	0.056	0.101	0.112	0.123
	(0.115)	(0.100)	(0.101)	(0.101)
$D_{2011} \cdot Treat_{high}$	0.075	0.108	0.099	0.095
	(0.132)	(0.111)	(0.111)	(0.112)
$D_{2013} \cdot Treat_{low}$	-0.410	-0.171	-0.168	-0.162
	(0.273)	(0.247)	(0.246)	(0.246)
$D_{2013} \cdot Treat_{med}$	0.010	0.157	0.180	0.179
	(0.215)	(0.180)	(0.179)	(0.180)
$D_{2013} \cdot Treat_{high}$	-0.379	-0.140	-0.151	-0.167
	(0.253)	(0.212)	(0.210)	(0.211)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	3,630	3,630	3,630	3,630
Husbands	794	794	794	794
Avg. obs per husband	4.6	4.6	4.6	4.6
low: H_0 : leads = 0	$F_{3,793} = 1.82$	$F_{3,793} = 1.54$	$F_{3,793} = 1.56$	$F_{3,793} = 1.50$
	p-val = 0.1416	p-val = 0.2020	p-val = 0.1987	p-val = 0.2125
med: H_0 : leads = 0	$F_{3,793} = 0.63$	$F_{3,793} = 0.35$	$F_{3,793} = 0.41$	$F_{3,793} = 0.41$
	p-val = 0.5938	p-val = 0.7928	p-val = 0.7481	p-val = 0.7484
high: H_0 : leads = 0	$F_{3,793} = 0.54$	$F_{3,793} = 0.67$	$F_{3,793} = 0.71$	$F_{3,793} = 0.66$
	p-val = 0.6566	p-val = 0.5691	p-val = 0.5488	p-val = 0.5753
Adj. R^2	0.0549	0.2426	0.2443	0.2452

Notes: See Appendix Table A.1.27. Quartiles from wives' alimony distribution are used to classify husbands into different groups. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.1.5 Alternative control group

Table A.1.31: Fixed effects models with husbands as an alternative control group

	Dependent variable: Working hours per day							
Sample restriction	2007 vs. 2009		2005/07-09/11		2003-13		2001-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in $Control_{alt}$	6.937		6.909		6.814		6.870	
$Post{\cdot}Treat_{low}$	0.849***	0.786***	0.877***	0.739***	0.867***	0.691***	0.993***	0.853***
	(0.236)	(0.231)	(0.187)	(0.188)	(0.180)	(0.179)	(0.179)	(0.181)
$Post{\cdot}Treat_{med}$	0.686***	0.688***	0.707***	0.636***	0.710***	0.577***	0.781***	0.631***
	(0.246)	(0.243)	(0.194)	(0.190)	(0.193)	(0.189)	(0.192)	(0.189)
$Post{\cdot}Treat_{high}$	0.691***	0.765***	0.602***	0.601***	0.478**	0.430**	0.496**	0.443**
	(0.230)	(0.236)	(0.192)	(0.189)	(0.194)	(0.190)	(0.194)	(0.191)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,100	1,100	2,328	2,328	3,074	3,074	3,541	3,541
Obs in $Control_{alt}$	292	292	611	611	813	813	940	940
Obs in $Treat_{low}$	276	276	577	577	754	754	877	877
Obs in $Treat_{med}$	254	254	574	574	762	762	884	884
Obs in $Treat_{high}$	278	278	566	566	745	745	840	840
Individuals	550	550	733	733	782	782	794	794
Av. obs. per ind.	2.0	2.0	3.2	3.2	3.9	3.9	4.5	4.5
Adj. R^2	0.0271	0.0685	0.0215	0.0699	0.0223	0.0832	0.0214	0.1029

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at $Post = 0$. The sample consists of individuals living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.32: Fixed effects models with husbands as an alternative control group

	Dependent variable: Childcare in hours per day							
Sample restriction	2007 vs. 2009		2005/07-09/11		2003-13		2001-13	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in $Control_{alt}$	0.979		0.864		0.858		0.917	
$Post{\cdot}Treat_{low}$	-0.526**	-0.419**	-1.033***	-0.735***	-1.370***	-0.936***	-1.460***	-1.097***
	(0.203)	(0.188)	(0.175)	(0.159)	(0.175)	(0.152)	(0.191)	(0.162)
$Post{\cdot}Treat_{med}$	-0.491**	-0.535***	-0.868***	-0.737***	-1.191***	-0.874***	-1.278***	-0.936***
	(0.196)	(0.194)	(0.176)	(0.153)	(0.197)	(0.169)	(0.208)	(0.173)
$Post{\cdot}Treat_{high}$	-0.172	-0.237	-0.738***	-0.704***	-0.996***	-0.827	-1.058***	-0.912***
	(0.203)	(0.200)	(0.183)	(0.161)	(0.188)	(0.154)	(0.197)	(0.155)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	1,100	1,100	2,328	2,328	3,074	3,074	3,541	3,541
Obs in $Control_{alt}$	292	292	611	611	813	813	940	940
Obs in $Treat_{low}$	276	276	577	577	754	754	877	877
Obs in $Treat_{med}$	254	254	574	574	762	762	884	884
Obs in $Treat_{high}$	278	278	566	566	745	745	840	840
Individuals	550	550	733	733	782	782	794	794
Av. obs. per ind.	2.0	2.0	3.2	3.2	3.9	3.9	4.5	4.5
Adj. R^2	0.0514	0.2096	0.1076	0.2845	0.1389	0.3710	0.1388	0.3979

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at $Post = 0$. The sample consists of individuals living in West Germany.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.1.6 Age restrictions

Table A.1.33: Descriptive statistics for 30-54 years old wives

	Before 2008		**After 2008**	
	Mean	Std. Dev.	Mean	Std. Dev.
Control group				
Working hours	4.896	2.560	4.701	2.600
Participation (dummy)	0.867	0.339	0.866	0.341
Education in hrs	0.093	0.317	0.078	0.367
Education (dummy)	0.105	0.306	0.091	0.288
Housework in hrs	2.377	1.222	2.223	1.210
Childcare in hrs	2.451	3.346	1.822	2.992
Caregiving in hrs	0.036	0.297	0.040	0.225
Running errands in hrs	1.001	0.486	0.987	0.504
Hobbies in hrs	2.133	1.496	2.116	1.374
Year	2004.428	2.210	2010.181	1.362
Age	40.916	5.804	45.496	5.801
No. of children, age 0-1	0.028	0.165	0.031	0.196
No. of children, age 2-4	0.144	0.389	0.047	0.230
No. of children, age 5-7	0.181	0.409	0.091	0.314
No. of children, age 8-10	0.207	0.449	0.169	0.416
No. of children, age 11-12	0.149	0.363	0.134	0.353
No. of children, age 13-15	0.253	0.496	0.228	0.474
No. of children, age 16-18	0.181	0.420	0.248	0.508
N		430		254
Wives		154		154
Low-intensity treatment group				
Working hours	2.916	2.189	3.482	2.195
Participation (dummy)	0.751	0.433	0.849	0.358
Education in hrs	0.077	0.337	0.028	0.144
Education (dummy)	0.076	0.265	0.044	0.206
Housework in hrs	2.924	1.263	2.700	1.170
Childcare in hrs	3.899	3.864	2.294	3.243
Caregiving in hrs	0.054	0.354	0.093	0.477
Running errands in hrs	1.111	0.465	1.065	0.492
Hobbies in hrs	2.097	1.687	2.065	1.520
Year	2004.403	2.211	2010.243	1.374
Age	40.431	5.243	45.239	5.451
No. of children, age 0-1	0.033	0.179	0.018	0.135
No. of children, age 2-4	0.118	0.352	0.055	0.259
No. of children, age 5-7	0.206	0.439	0.103	0.304
No. of children, age 8-10	0.336	0.543	0.162	0.398
No. of children, age 11-12	0.232	0.455	0.169	0.404
No. of children, age 13-15	0.344	0.554	0.257	0.463
No. of children, age 16-18	0.265	0.512	0.404	0.562
N		422		272
Wives		163		163
Medium-intensity treatment group				
Working hours	2.458	2.308	2.759	2.244
Participation (dummy)	0.653	0.476	0.720	0.450
Education in hrs	0.047	0.205	0.097	0.327
Education (dummy)	0.077	0.266	0.106	0.309
Housework in hrs	2.979	1.317	2.778	1.207
Childcare in hrs	3.976	4.043	2.575	3.376
Caregiving in hrs	0.057	0.273	0.132	0.526
Running errands in hrs	1.071	0.509	1.082	0.502
Hobbies in hrs	2.075	1.634	2.055	1.612
Year	2004.228	2.206	2010.182	1.339
Age	40.653	5.417	45.670	5.206
No. of children, age 0-1	0.063	0.261	0.015	0.122
No. of children, age 2-4	0.186	0.435	0.045	0.209
No. of children, age 5-7	0.270	0.517	0.129	0.378
No. of children, age 8-10	0.267	0.493	0.193	0.432
No. of children, age 11-12	0.165	0.378	0.182	0.415
No. of children, age 13-15	0.223	0.459	0.326	0.551
No. of children, age 16-18	0.223	0.465	0.246	0.489
N		430		264
Wives		160		160
High-intensity treatment group				
Working hours	2.259	2.565	2.480	2.333
Participation (dummy)	0.539	0.499	0.650	0.478
Education in hrs	0.116	0.394	0.142	0.632
Education (dummy)	0.133	0.340	0.143	0.351
Housework in hrs	3.037	1.413	3.021	1.502
Childcare in hrs	3.807	3.830	2.317	3.168
Caregiving in hrs	0.086	0.470	0.112	0.524
Running errands in hrs	1.121	0.563	1.113	0.558
Hobbies in hrs	2.269	1.689	2.309	1.765
Year	2004.441	2.182	2010.226	1.398
Age	42.170	5.421	47.396	4.894
No. of children, age 0-1	0.055	0.240	0.009	0.096
No. of children, age 2-4	0.190	0.421	0.065	0.297
No. of children, age 5-7	0.205	0.432	0.138	0.359
No. of children, age 8-10	0.248	0.495	0.166	0.373
No. of children, age 11-12	0.182	0.408	0.143	0.351
No. of children, age 13-15	0.251	0.490	0.249	0.484
No. of children, age 16-18	0.202	0.436	0.336	0.563
N		347		217
Wives		135		135

Notes: Included time frame: 2001-2013; 612 wives, 2,636 observations; Data: SOEPlong v30

Table A.1.34: Balancing tests at pre-treatment (2005/2007) for the 30-54 years old treatment and control groups

	Mean				Difference between Control and ...		
Variable	Control	$Treat_{low}$	$Treat_{med}$	$Treat_{high}$	$Treat_{low}$	$Treat_{med}$	$Treat_{high}$
Age	41.929	41.651	42.207	43.694	0.278	-0.278	-1.765***
Migration background (first generation)	0.114	0.108	0.073	0.031	0.006	0.041	0.084***
Husbands' age	44.004	44.095	44.763	46.347	-0.091	-0.759	-2.343***
Husbands' migration background	0.102	0.087	0.056	0.005	0.015	0.046*	0.097***
Age difference (0=wife is younger; 1=equal/older)	0.319	0.307	0.259	0.286	0.012	0.060	0.033
Both with migration background	0.098	0.079	0.052	0.000	0.020	0.047**	0.098***
Marriage duration (exact and estimated)	15.457	15.473	15.276	16.352	-0.016	0.181	-0.895
Education (CASMIN)	4.980	4.679	5.172	6.026	0.301*	-0.192	-1.045*
Husbands' education (CASMIN)	4.814	4.378	5.609	7.273	0.436**	-0.794***	-2.459***
Educational qualifications (0=wife is less educated;1=otherwise)	0.764	0.726	0.659	0.495	0.038	0.104**	0.269***
No. of children, age 0-1	0.020	0.029	0.030	0.041	-0.009	-0.010	-0.021
No. of children, age 2-4	0.130	0.112	0.151	0.143	0.018	-0.021	-0.013
No. of children, age 5-7	0.161	0.158	0.211	0.179	0.004	-0.050	-0.017
No. of children, age 8-10	0.217	0.249	0.302	0.194	-0.032	-0.085 *	0.023
No. of children, age 11-12	0.146	0.220	0.190	0.184	-0.074 **	-0.044	-0.038
No. of children, age 13-15	0.228	0.423	0.228	0.291	-0.195***	-0.000	-0.062
No. of children, age 16-18	0.193	0.320	0.228	0.173	-0.1267***	-0.036	0.019
No. of pre-school children	0.260	0.228	0.297	0.306	0.032	-0.038	-0.046
No. of children, age 0-18	1.047	1.407	1.267	1.163	-0.359 ***	-0.220**	-0.116
No. of children, age 0-20	1.181	1.573	1.427	1.291	-0.392***	-0.246**	-0.110
Experience: full-time employment (in yrs)	11.854	7.621	7.603	8.099	4.232***	4.250***	3.754***
Experience: part-time employment (in yrs)	5.263	6.977	6.701	5.594	-1.713***	-1.438**	-0.330
Experience: full-time and part-time (in yrs)	17.117	14.598	14.305	13.693	2.519***	2.812***	3.423***
Husbands' experience: full-time employment (in yrs)	21.297	22.898	22.424	21.921	-1.601**	-1.127	-0.624
Husbands' experience: part-time employment (in yrs)	0.338	0.236	0.454	0.446	0.102	-0.116	-0.108
Husbands' experience: full- and part-time employment (in yrs)	21.635	23.134	22.878	22.367	-1.499**	-1.243*	-0.732
Experience in full-time employment (0=husband has more yrs of experience; 1=otherwise)	0.181	0.012	0.043	0.071	0.169***	0.138***	0.110***
Allowable income (in €)	1108.68	544.68	452.88	442.04	564.00***	655.81***	666.65***
Employed (0=no;1=yes)	0.884	0.788	0.713	0.549	0.096***	0.171***	0.335***
Husbands' allowable income (in €)	1938.11	2109.06	2542.13	4230.47	-170.95***	-604.01***	-2292.36***
Husbands employed (0=no;1=yes)	0.980	0.991	1.000	0.995	-0.012	-0.020**	-0.015
Household labor income (in €)	3,231.49	2,932.09	3,297.76	4,987.03	299.40***	-66.27	-1,755.54***
Working hours (per day)	4.934	3.049	2.504	2.235	1.884***	2.429***	2.699***
Education in hrs (per day)	0.100	0.061	0.038	0.118	0.039	0.063***	-0.018
Housework in hrs (per day)	2.362	2.798	2.966	2.949	-0.436***	-0.603 ***	-0.587***
Childcare in hrs (per day)	2.243	3.443	3.817	3.240	-1.200***	-1.574 ***	-0.997***
Caregiving in hrs (per day)	0.044	0.077	0.068	0.103	-0.033	-0.024	-0.058
Running errands in hrs (per day)	0.985	1.121	1.036	1.152	-0.136***	-0.051	-0.166***
Hobbies in hrs (per day)	2.215	2.105	2.074	2.314	0.110	0.141	-0.099
Husbands: working hours (per day)	7.035	7.188	7.159	7.595	-0.153	-0.124	-0.560***
Husbands: education in hrs (per day)	0.106	0.078	0.095	0.176	0.028	0.011	-0.071**
Husbands: housework in hrs (per day)	0.772	0.544	0.562	0.513	0.228***	0.210***	0.258***
Husbands: childcare in hrs (per day)	0.966	1.291	1.071	1.074	-0.324**	-0.105	-0.107
Husbands: caregiving in hrs (per day)	0.001	0.026	0.048	0.019	-0.025**	-0.047 ***	-0.018*
Husbands: running errands in hrs (per day)	0.630	0.583	0.509	0.492	0.047	0.121***	0.138***
Husbands: hobbies in hrs (per day)	2.066	2.068	1.977	2.184	-0.002	0.090	-0.118
Housework (0=wife spent more hrs;1=otherwise)	0.110	0.091	0.078	0.051	0.019	0.033	0.059**
Childcare (0=wife spent more hrs;1=otherwise)	0.614	0.444	0.418	0.423	0.170***	0.196***	0.191***

Notes: Balancing tests at Post = 0 (pre-treatment 2005/07); West German wives. 923 person-year observations are included, except for household income (905 obs), employment (887 obs), allowable income (without deductions; 887 obs), education (920 obs), husbands' empoyment (892 obs), husbands' education (918 obs), husbands' allowable income (without deductions; 892 obs), husbands' time spending in hours (882 obs). The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.35: Fixed effects models, 30-54 years old wives, daily working hours

	Dependent variable: Wives' working hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	4.955		4.934		4.950		4.897	
Post·Treat$_{low}$	0.428*	0.324	0.500**	0.381**	0.507***	0.346**	0.482**	0.344**
	(0.234)	(0.210)	(0.193)	(0.180)	(0.185)	(0.174)	(0.185)	(0.172)
Post·Treat$_{med}$	0.356	0.314	0.383*	0.269	0.387*	0.210	0.282	0.094
	(0.263)	(0.238)	(0.217)	(0.201)	(0.214)	(0.196)	(0.210)	(0.188)
Post·Treat$_{high}$	0.553**	0.444*	0.417*	0.323	0.272	0.117	0.139	-0.017
	(0.252)	(0.227)	(0.223)	(0.202)	(0.215)	(0.196)	(0.218)	(0.196)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	864	864	1,776	1,776	2,306	2,306	2,636	2,636
Obs in Control	236	236	476	476	600	600	684	684
Obs in Treat$_{low}$	230	230	471	471	606	606	694	694
Obs in Treat$_{med}$	210	210	452	452	599	599	694	694
Obs in Treat$_{high}$	188	188	377	377	501	501	564	564
Wives	432	432	564	564	601	601	612	612
Av. obs. per wive	2.0	2.0	3.1	3.1	3.8	3.8	4.3	4.3
Adj. R^2	0.0222	0.1682	0.0209	0.1445	0.0292	0.1624	0.0271	0.1929

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at Post = 0. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.36: Granger-type test for causality, 30-54 years old wives

Dependent variable:	**Wives' working hours**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.042	0.002	0.014	0.064
	(0.303)	(0.269)	(0.269)	(0.270)
$D_{2001} \cdot Treat_{med}$	0.561*	0.688**	0.694**	0.737**
	(0.335)	(0.293)	(0.293)	(0.295)
$D_{2001} \cdot Treat_{high}$	1.193***	1.079***	1.084***	1.069***
	(0.395)	(0.319)	(0.319)	(0.325)
$D_{2003} \cdot Treat_{low}$	0.065	0.208	0.227	0.254
	(0.294)	(0.282)	(0.283)	(0.284)
$D_{2003} \cdot Treat_{med}$	0.358	0.550*	0.559*	0.569*
	(0.333)	(0.291)	(0.291)	(0.292)
$D_{2003} \cdot Treat_{high}$	0.927***	0.916***	0.918***	0.916***
	(0.313)	(0.273)	(0.274)	(0.281)
$D_{2005} \cdot Treat_{low}$	0.124	0.115	0.131	0.140
	(0.224)	(0.209)	(0.210)	(0.212)
$D_{2005} \cdot Treat_{med}$	0.212	0.267	0.276	0.277
	(0.252)	(0.212)	(0.213)	(0.215)
$D_{2005} \cdot Treat_{high}$	0.518**	0.404*	0.403*	0.391*
	(0.231)	(0.224)	(0.224)	(0.227)
$D_{2009} \cdot Treat_{low}$	0.484**	0.428**	0.445**	0.422**
	(0.224)	(0.208)	(0.208)	(0.209)
$D_{2009} \cdot Treat_{med}$	0.333	0.269	0.272	0.253
	(0.251)	(0.226)	(0.227)	(0.228)
$D_{2009} \cdot Treat_{high}$	0.531**	0.401*	0.409*	0.401*
	(0.235)	(0.215)	(0.217)	(0.217)
$D_{2011} \cdot Treat_{low}$	0.581**	0.391	0.415	0.354
	(0.286)	(0.268)	(0.270)	(0.269)
$D_{2011} \cdot Treat_{med}$	0.698**	0.557**	0.557*	0.540*
	(0.307)	(0.283)	(0.284)	(0.285)
$D_{2011} \cdot Treat_{high}$	0.772**	0.516*	0.507*	0.507*
	(0.308)	(0.288)	(0.289)	(0.289)
$D_{2013} \cdot Treat_{low}$	0.661	0.512	0.528	0.439
	(0.427)	(0.406)	(0.405)	(0.395)
$D_{2013} \cdot Treat_{med}$	0.851*	0.601	0.608	0.572
	(0.474)	(0.421)	(0.420)	(0.409)
$D_{2013} \cdot Treat_{high}$	1.162***	0.677	0.696	0.678*
	(0.446)	(0.417)	(0.413)	(0.406)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
low: H_0 : leads = 0	$F_{3,611} = 0.11$	$F_{3,611} = 0.27$	$F_{3,611} = 0.31$	$F_{3,611} = 0.32$
	p-val = 0.9531	p-val = 0.8471	p-val = 0.8194	p-val = 0.8136
med: H_0 : leads = 0	$F_{3,611} = 0.94$	$F_{3,611} = 2.04$	$F_{3,611} = 2.06$	$F_{3,611} = 2.25$
	p-val = 0.4201	p-val = 0.1078	p-val = 0.1039	p-val = 0.0818
high: H_0 : leads = 0	$F_{3,611} = 4.00$	$F_{3,611} = 5.09$	$F_{3,611} = 5.12$	$F_{3,611} = 4.75$
	p-val = 0.0078	p-val = 0.0017	p-val = 0.0017	p-val = 0.0028
Adj. R^2	0.0340	0.1995	0.1989	0.2106

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: 30-34, ..., 50-54 years old. Year dummies are always included. The sample consists of 2,636 observations. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.37: Fixed effects models for placebo treatment, 30-54 years old wives, daily working hours

	Dependent variable: Wives' working hours per day			
Sample restriction	2003 vs. 2005		2001-2007	
	(1)	(2)	(3)	(4)
$Post_{placebo} \cdot Treat_{low}$	-0.040	-0.125	-0.101	-0.153
	(0.209)	(0.217)	(0.201)	(0.195)
$Post_{placebo} \cdot Treat_{med}$	-0.300	-0.359 *	-0.280	-0.395*
	(0.212)	(0.193)	(0.221)	(0.201)
$Post_{placebo} \cdot Treat_{high}$	-0.370	-0.395 *	-0.755***	-0.739***
	(0.238)	(0.218)	(0.238)	(0.200)
Individual control variables	no	yes	no	yes
Obs	768	768	1,606	1,606
Obs in $Control$	208	208	428	428
Obs in $Treat_{low}$	180	180	399	399
Obs in $Treat_{med}$	206	206	415	415
Obs in $Treat_{high}$	174	174	364	364
Wives	384	384	492	492
Average obs. per wife	2.0	2.0	3.3	3.3
$Adj.\ R^2$	0.0072	0.1539	0.0142	0.1750

Notes: The table shows placebo difference-in-differences estimates; robust standard errors in parentheses, clustered at individual level. 2001 and 2003 constitute the pre-treatment years, while the years after 2005 are the post-treatment years. As controls in Columns (2) and (4), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.38: Fixed effects models, 30-54 years old wives, LFP

	Dependent variable: Wives' participation							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in $Control$	0.898		0.878		0.876		0.867	
Mean in $Treat_{low}$	0.791		0.784		0.765		0.751	
Mean in $Treat_{med}$	0.724		0.681		0.668		0.653	
Mean in $Treat_{high}$	0.564		0.551		0.552		0.539	
$Post \cdot Treat_{low}$	0.069	0.048	0.070**	0.060*	0.077**	0.058*	0.077**	0.060*
	(0.044)	(0.040)	(0.033)	(0.031)	(0.032)	(0.030)	(0.034)	(0.031)
$Post \cdot Treat_{med}$	0.034	0.031	0.054	0.029	0.064	0.025	0.060	0.020
	(0.052)	(0.047)	(0.041)	(0.037)	(0.040)	(0.036)	(0.041)	(0.036)
$Post \cdot Treat_{high}$	0.098*	0.079*	0.098**	0.076*	0.085**	0.056	0.076*	0.048
	(0.051)	(0.046)	(0.043)	(0.039)	(0.039)	(0.037)	(0.040)	(0.038)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	864	864	1,776	1,776	2,306	2,306	2,636	2,636
Obs in $Control$	236	236	476	476	600	600	684	684
Obs in $Treat_{low}$	230	230	471	471	606	606	694	694
Obs in $Treat_{med}$	210	210	452	452	599	599	694	694
Obs in $Treat_{high}$	188	188	377	377	501	501	564	564
Wives	432	432	564	564	601	601	612	612
Av. obs. per wive	2.0	2.0	3.1	3.1	3.8	3.8	4.3	4.3
$Adj.\ R^2$	0.0060	0.1804	0.0228	0.1749	0.0343	0.1687	0.0385	0.1824

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at $Post = 0$. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.39: Fixed effects models, 30-54 years old wives, including 2005/2007 (pre-treatment years) and 2009/2011 (post-treatment years)

	Dependent variable: Wives' working hours												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
$Post \cdot Treat_{low}$	0.420**	0.428**	0.399**	0.375**	0.471**	0.452**	0.414**	0.444**	0.424**	0.386**	0.498***	0.433**	0.486***
	(0.184)	(0.184)	(0.182)	(0.181)	(0.189)	(0.180)	(0.185)	(0.186)	(0.186)	(0.183)	(0.186)	(0.187)	(0.186)
$Post \cdot Treat_{med}$	0.352*	0.314	0.264	0.259	0.416*	0.371*	0.346	0.306	0.306	0.249	0.430*	0.291	0.414*
	(0.208)	(0.213)	(0.203)	(0.203)	(0.223)	(0.206)	(0.211)	(0.217)	(0.214)	(0.205)	(0.222)	(0.217)	(0.224)
$Post \cdot Treat_{high}$	0.435**	0.358*	0.318	0.307	0.485**	0.441**	0.420**	0.346	0.347*	0.294	0.483**	0.328	0.463**
	(0.206)	(0.207)	(0.205)	(0.205)	(0.213)	(0.205)	(0.211)	(0.210)	(0.210)	(0.207)	(0.212)	(0.213)	(0.215)
Work experience	yes	no	no	no	yes	yes	yes	no	no	no	yes	no	yes
Husband's income	no	yes	no	no	yes	no	no	yes	yes	no	yes	yes	yes
Divorce number	no	no	yes	no	no	yes	no	yes	no	yes	yes	yes	yes
Age group	no	no	no	yes	no	no	yes	no	yes	yes	no	yes	yes
Obs	1,776	1,687	1,699	1,776	1,687	1,699	1,776	1,611	1,687	1,699	1,611	1,611	1,611
Wives	564	541	537	564	541	537	564	514	541	537	514	514	514
Avg. obs per wife	3.1	3.1	3.2	3.1	3.1	3.2	3.1	3.1	3.1	3.2	3.1	3.1	3.1
$Adj.\ R^2$	0.1506	0.1410	0.1486	0.1445	0.1478	0.1592	0.1504	0.1449	0.1409	0.1493	0.1560	0.1455	0.1563

Notes: Dependent variable covers work and apprenticeship (including travel time to and from work), 7-day week. The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. Models include only 2005/2007 (pre-treatment) and 2009/2011 (post-treatment). Control variables in all models: year fixed effects, age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Marriage duration specific divorce number refers to marriages in West Germany: $\frac{\text{No. of divorces in calendar year y}}{\text{No. of marriages in calendar year y}} \cdot 1{,}000$ (Federal Office of Statistics 2015, pp. 5, 36). It is used to assess the risk of divorce depending on marriage duration. Here, I control for it in a sample with exact, i.e. not estimated, marriage duration. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Husband's income is a net value, allowable income without deductions. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.40: Fixed effects models, 30-54 years old wives, including 2005/2007 (pre-treatment years) and 2009/2011 (post-treatment years)

	Dependent variable: Wives' working hours											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$Post \cdot Treat_{low}$	0.415**	0.385**	0.458**	0.453**	0.410**	0.384**	0.412**	0.484**	0.412**	0.454**	0.450**	0.482**
	(0.188)	(0.191)	(0.191)	(0.193)	(0.189)	(0.192)	(0.198)	(0.200)	(0.199)	(0.192)	(0.194)	(0.201)
$Post \cdot Treat_{med}$	0.293	0.328	0.381*	0.430*	0.285	0.321	0.348*	0.454**	0.341	0.377*	0.424*	0.448**
	(0.202)	(0.210)	(0.208)	(0.220)	(0.203)	(0.212)	(0.211)	(0.221)	(0.212)	(0.212)	(0.224)	(0.224)
$Post \cdot Treat_{high}$	0.292	0.332*	0.424**	0.466**	0.277	0.321	0.305	0.454**	0.294	0.410*	0.455**	0.443**
	(0.204)	(0.199)	(0.211)	(0.210)	(0.206)	(0.203)	(0.202)	(0.212)	(0.206)	(0.215)	(0.211)	(0.217)
Work experience	no	no	yes	yes	no	no	no	yes	no	yes	yes	yes
Husband's work experience	yes	no	yes	no	yes	no	yes	yes	yes	yes	no	yes
Husband's childcare in hrs	no	yes	no	yes	no	yes	yes	yes	yes	no	yes	yes
Age group	no	no	no	no	yes	yes	no	no	yes	yes	yes	yes
Obs	1,776	1,666	1,776	1,666	1,776	1,666	1,666	1,666	1,666	1,776	1,666	1,666
Wives	564	545	564	545	564	545	545	545	545	564	545	545
Avg. obs per wife	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
$Adj.\ R^2$	0.1479	0.1399	0.1534	0.1438	0.1482	0.1390	0.1417	0.1453	0.1410	0.1534	0.1427	0.1445

Notes: Dependent variable covers work and apprenticeship (including travel time to and from work), 7-day week. The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. Models include only 2005/2007 (pre-treatment) and 2009/2011 (post-treatment). Control variables in all models: year fixed effects, age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.41: Granger-type test for causality, 30-54 years old wives

Dependent variable:	**Wives' labor force participation**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	-0.050	-0.053	-0.051	-0.019
	(0.061)	(0.054)	(0.054)	(0.056)
$D_{2001} \cdot Treat_{med}$	-0.000	0.030	0.030	0.063
	(0.067)	(0.060)	(0.060)	(0.061)
$D_{2001} \cdot Treat_{high}$	0.095	0.082	0.081	0.124**
	(0.066)	(0.058)	(0.058)	(0.061)
$D_{2003} \cdot Treat_{low}$	-0.037	-0.014	-0.011	0.011
	(0.058)	(0.054)	(0.054)	(0.054)
$D_{2003} \cdot Treat_{med}$	0.023	0.071	0.072	0.089*
	(0.061)	(0.053)	(0.053)	(0.053)
$D_{2003} \cdot Treat_{high}$	0.111**	0.115**	0.116**	0.144***
	(0.050)	(0.048)	(0.048)	(0.049)
$D_{2005} \cdot Treat_{low}$	-0.016	-0.019	-0.016	-0.008
	(0.043)	(0.039)	(0.040)	(0.040)
$D_{2005} \cdot Treat_{med}$	0.026	0.039	0.039	0.043
	(0.048)	(0.042)	(0.042)	(0 .042)
$D_{2005} \cdot Treat_{high}$	0.067*	0.054	0.053	0.067*
	(0.040)	(0.038)	(0.038)	(0.038)
$D_{2009} \cdot Treat_{low}$	0.063	0.059	0.063	0.053
	(0.041)	(0.038)	(0.038)	(0.039)
$D_{2009} \cdot Treat_{med}$	0.031	0.021	0.023	0.010
	(0.049)	(0.045)	(0.045)	(0.045)
$D_{2009} \cdot Treat_{high}$	0.096**	0.075*	0.077*	0.066
	(0.047)	(0.043)	(0.044)	(0.044)
$D_{2011} \cdot Treat_{low}$	0.055	0.031	0.037	0.016
	(0.044)	(0.041)	(0.042)	(0.043)
$D_{2011} \cdot Treat_{med}$	0.115**	0.089*	0.092*	0.076
	(0.054)	(0.050)	(0.050)	(0.050)
$D_{2011} \cdot Treat_{high}$	0.176***	0.130**	0.132**	0.113**
	(0.054)	(0.051)	(0.052)	(0.051)
$D_{2013} \cdot Treat_{low}$	0.033	0.013	0.017	-0.004
	(0.068)	(0.062)	(0.062)	(0.063)
$D_{2013} \cdot Treat_{med}$	0.128	0.074	0.079	0.059
	(0.101)	(0.094)	(0.094)	(0.093)
$D_{2013} \cdot Treat_{high}$	0.198**	0.133	0.137	0.108
	(0.096)	(0.091)	(0.092)	(0.092)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	2,636	2,636	2,636	2,636
Wives	612	612	612	612
Avg. obs per wife	4.3	4.3	4.3	4.3
low: H_0 : leads = 0	$F_{3,611} = 0.24$ p-val = 0.8694	$F_{3,611} = 0.36$ p-val = 0.7793	$F_{3,611} = 0.35$ p-val = 0.7861	$F_{3,611} = 0.13$ p-val = 0.9400
med: H_0 : leads = 0	$F_{3,611} = 0.15$ p-val = 0.9305	$F_{3,611} = 0.65$ p-val = 0.5832	$F_{3,611} = 0.67$ p-val = 0.5679	$F_{3,611} = 0.94$ p-val = 0.4185
$high$: H_0 : leads = 0	$F_{3,611} = 1.86$ p-val = 0.1348	$F_{3,611} = 2.02$ p-val = 0.1104	$F_{3,611} = 2.03$ p-val = 0.1089	$F_{3,611} = 3.17$ p-val = 0.0240
$Adj.\ R^2$	0.0405	0.1842	0.1837	0.2089

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for the following steps: 30-34, ..., 50-54 years old. Year dummies are always included.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.42: Fixed effects models, 30-54 years old wives, daily housework hours

	Dependent variable: Wives' housework in hrs per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in $Control$	2.314		2.362		2.347		2.377	
Mean in $Treat_{low}$	2.848		2.798		2.870		2.924	
Mean in $Treat_{med}$	2.807		2.966		2.932		2.979	
Mean in $Treat_{high}$	2.945		2.949		2.969		3.037	
$Post \cdot Treat_{low}$	-0.067	0.014	0.031	0.087	-0.000	0.066	-0.011	0.049
	(0.129)	(0.127)	(0.102)	(0.100)	(0.095)	(0.093)	(0.099)	(0.097)
$Post \cdot Treat_{med}$	0.029	0.025	0.026	0.049	0.072	0.097	0.038	0.068
	(0.141)	(0.138)	(0.105)	(0.104)	(0.102)	(0.101)	(0.098)	(0.097)
$Post \cdot Treat_{high}$	0.097	0.084	0.303**	0.308**	0.250**	0.277**	0.227*	0.249**
	(0.141)	(0.137)	(0.125)	(0.119)	(0.117)	(0.112)	(0.117)	(0.112)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	864	864	1,776	1,776	2,306	2,306	2,636	2,636
Obs in $Control$	236	236	476	476	600	600	684	684
Obs in $Treat_{low}$	230	230	471	471	606	606	694	694
Obs in $Treat_{med}$	210	210	452	452	599	599	694	694
Obs in $Treat_{high}$	188	188	377	377	501	501	564	564
Wives	432	432	564	564	601	601	612	612
Av. obs. per wive	2.0	2.0	3.1	3.1	3.8	3.8	4.3	4.3
$Adj.\ R^2$	0.0019	0.0305	0.0116	0.0357	0.0141	0.0401	0.0209	0.0507

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at $Post = 0$. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.43: Fixed effects models, 30-54 years old wives, daily childcare hours

	Dependent variable: Wives' childcare hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mean in Control	2.172		2.243		2.266		2.451	
Mean in $Treat_{low}$	3.363		3.443		3.674		3.899	
Mean in $Treat_{med}$	3.457		3.817		3.975		3.976	
Mean in $Treat_{high}$	2.834		3.240		3.602		3.807	
$Post{\cdot}Treat_{low}$	-0.468	-0.278	-1.014***	-0.716***	-1.178***	-0.781***	-1.137***	-0.780***
	(0.292)	(0.260)	(0.278)	(0.238)	(0.282)	(0.230)	(0.295)	(0.235)
$Post{\cdot}Treat_{med}$	-0.401	-0.398	-0.820***	-0.653***	-0.888***	-0.595**	-0.779**	-0.471*
	(0.287)	(0.255)	(0.280)	(0.236)	(0.305)	(0.249)	(0.308)	(0.245)
$Post{\cdot}Treat_{high}$	-0.083	-0.014	-0.719**	-0.583**	-0.846***	-0.582**	-0.790**	-0.556**
	(0.331)	(0.279)	(0.317)	(0.249)	(0.325)	(0.242)	(0.329)	(0.239)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	864	864	1,776	1,776	2,306	2,306	2,636	2,636
Obs in Control	236	236	476	476	600	600	684	684
Obs in $Treat_{low}$	230	230	471	471	606	606	694	694
Obs in $Treat_{med}$	210	210	452	452	599	599	694	694
Obs in $Treat_{high}$	188	188	377	377	501	501	564	564
Wives	432	432	564	564	601	601	612	612
Av. obs. per wive	2.0	2.0	3.1	3.1	3.8	3.8	4.3	4.3
Adj. R^2	0.0564	0.2832	0.1303	0.3010	0.1766	0.3997	0.1930	0.4314

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at Post = 0. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.44: Fixed effects models, daily working hours

	Dependent variable: Wives' working hours per day							
Sample restriction	2007 vs. 2009		2005-2011		2003-2013		2001-2013	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Panel A: Wives younger than 45 years of age							
Mean in Control	4.279		4.214		4.227		4.111	
$Post{\cdot}Treat_{low}$	0.534	0.441	0.789***	0.614**	0.828***	0.609**	0.751***	0.590**
	(0.350)	(0.300)	(0.288)	(0.254)	(0.274)	(0.240)	(0.277)	(0.241)
$Post{\cdot}Treat_{med}$	0.345	0.411	0.416	0.338	0.486	0.266	0.325	0.053
	(0.386)	(0.344)	(0.333)	(0.305)	(0.315)	(0.288)	(0.320)	(0.287)
$Post{\cdot}Treat_{high}$	0.727*	0.545	0.747**	0.548*	0.461	0.273	0.083	-0.034
	(0.436)	(0.374)	(0.357)	(0.323)	(0.340)	(0.312)	(0.349)	(0.310)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	458	458	900	900	1,153	1,153	1,331	1,331
Obs in Control	134	134	258	258	325	325	367	367
Obs in $Treat_{low}$	142	142	273	273	348	348	408	408
Post = 0/Post = 1	71/71	71/71	145/128	145/128	205/143	205/143	261/147	261/147
Obs in $Treat_{med}$	106	106	224	224	299	299	351	351
Post = 0/Post = 1	53/53	53/53	119/105	119/105	174/125	174/125	221/130	221/130
Obs in $Treat_{high}$	76	76	145	145	181	181	205	205
Post = 0/Post = 1	38/38	38/38	76/69	76/69	107/74	107/74	131/74	131/74
Wives	229	229	293	293	310	310	317	317
Av. obs. per wive	2.0	2.0	3.1	3.1	3.7	3.7	4.2	4.2
Adj. R^2	0.0145	0.2063	0.0344	0.2129	0.0334	0.2487	0.0219	0.2729
	Panel B: Wives older than 45 years of age							
Mean in Control	5.480		5.480		5.403		5.305	
$Post{\cdot}Treat_{low}$	0.288	0.256	0.144	0.100	0.160	0.126	0.095	0.073
	(0.325)	(0.335)	(0.277)	(0.281)	(0.251)	(0.252)	(0.265)	(0.263)
$Post{\cdot}Treat_{med}$	0.084	-0.024	0.200	0.100	0.190	0.102	0.121	0.041
	(0.331)	(0.326)	(0.253)	(0.246)	(0.237)	(0.227)	(0.238)	(0.224)
$Post{\cdot}Treat_{high}$	-0.016	0.060	-0.038	-0.077	-0.078	-0.130	-0.155	-0.196
	(0.276)	(0.282)	(0.254)	(0.251)	(0.258)	(0.252)	(0.260)	(0.252)
Ind. control var.	no	yes	no	yes	no	yes	no	yes
Obs	530	530	1,183	1,183	1,479	1,479	1,577	1,577
Obs in Control	122	122	285	285	363	363	388	388
Obs in $Treat_{low}$	110	110	244	244	299	299	319	319
Post = 0/Post = 1	55/55	55/55	108/136	108/136	138/161	138/161	158/161	158/161
Obs in $Treat_{med}$	116	116	287	287	349	349	370	370
Post = 0/Post = 1	58/58	58/58	127/160	127/160	165/184	165/184	186/184	186/184
Obs in $Treat_{high}$	182	182	367	367	468	468	500	500
Post = 0/Post = 1	91/91	91/91	173/194	173/194	231/237	231/237	262/238	262/238
Wives	265	265	402	402	428	428	429	429
Av. obs. per wive	2.0	2.0	2.9	2.9	3.5	3.5	3.7	3.7
Adj. R^2	0.0009	0.0418	0.0005	0.0271	0.0004	0.0281	0.0011	0.0273

Notes: The table shows DiD estimates; robust standard errors in parentheses, clustered at individual level. 2001 to 2007 constitute the pre-treatment years, while the years after 2009 are the post-treatment years. As controls in Columns (2), (4), (6), and (8), I include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household; year fixed effects are always controlled for. Means are reported at Post = 0. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.1.7 Ownership of assets

Table A.1.45: Descriptive statistics, assets, West German wives

	Mean	Std. Dev.	Min	Max	Obs	Wives
Control group						
Ownership of house/apartment	0.6126	0.4874	0	1	906	194
Ownership of house/apartment/property	0.6336	0.4821	0	1	906	194
Debt-free ownership of house/apartment/property	0.1751	0.3803	0	1	845	180
Sole ownership of house/apartment/property	0.3452	0.4757	0	1	898	192
Financial assets	0.6368	0.4812	0	1	906	194
Low-intensity treatment group						
Ownership of house/apartment	0.5681	0.4956	0	1	852	190
Ownership of house/apartment/property	0.5681	0.4956	0	1	852	190
Debt-free ownership of house/apartment/property	0.2184	0.4134	0	1	815	182
Sole ownership of house/apartment/property	0.3615	0.4807	0	1	841	187
Financial assets	0.5129	0.5001	0	1	850	189
Medium-intensity treatment group						
Ownership of house/apartment	0.6531	0.4763	0	1	859	190
Ownership of house/apartment/property	0.6764	0.4681	0	1	859	190
Debt-free ownership of house/apartment/property	0.2732	0.4459	0	1	831	183
Sole ownership of house/apartment/property	0.3853	0.4869	0	1	841	185
Financial assets	0.6019	0.4897	0	1	859	190
High-intensity treatment group						
Ownership of house/apartment	0.8270	0.3785	0	1	815	191
Ownership of house/apartment/property	0.8429	0.3641	0	1	815	191
Debt-free ownership of house/apartment/property	0.3727	0.4839	0	1	786	183
Sole ownership of house/apartment/property	0.5918	0.4918	0	1	806	189
Financial assets	0.7866	0.4100	0	1	820	192

Notes: Given numbers are based on information provided in 2002 or/and 2007. Data: SOEPlong v30

Table A.1.46: Descriptive statistics, assets, 30-54 years old West German wives

	Mean	Std. Dev.	Min	Max	Obs	Wives
Control group						
Ownership of house/apartment	0.6141	0.4871	0	1	679	152
Ownership of house/apartment/property	0.6318	0.4827	0	1	679	152
Debt-free ownership of house/apartment/property	0.1669	0.3732	0	1	623	139
Sole ownership of house/apartment/property	0.3607	0.4805	0	1	671	150
Financial assets	0.6539	0.4761	0	1	679	152
Low-intensity treatment group						
Ownership of house/apartment	0.5861	0.4929	0	1	674	156
Ownership of house/apartment/property	0.5861	0.4929	0	1	674	156
Debt-free ownership of house/apartment/property	0.1742	0.3796	0	1	643	149
Sole ownership of house/apartment/property	0.3707	0.4834	0	1	669	154
Financial assets	0.5119	0.5002	0	1	672	155
Medium-intensity treatment group						
Ownership of house/apartment	0.6494	0.4775	0	1	676	154
Ownership of house/apartment/property	0.6775	0.4678	0	1	676	154
Debt-free ownership of house/apartment/property	0.2593	0.4386	0	1	648	147
Sole ownership of house/apartment/property	0.3875	0.4875	0	1	658	149
Financial assets	0.6050	0.4892	0	1	676	154
High-intensity treatment group						
Ownership of house/apartment	0.8137	0.3897	0	1	553	132
Ownership of house/apartment/property	0.8282	0.3775	0	1	553	132
Debt-free ownership of house/apartment/property	0.2976	0.4576	0	1	531	126
Sole ownership of house/apartment/property	0.5919	0.4919	0	1	544	130
Financial assets	0.7992	0.4009	0	1	553	132

Notes: Given numbers are based on information provided in 2002 or/and 2007. Data: SOEPlong v30

Table A.1.47: Fixed effects models including three-way interactions and lower order effects, ownership of property

	Dependent variable: Wives' working hours per day																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
$D_{prop}{\cdot}Post{\cdot}Treat_{low}$	-0.089	-0.132	-0.219	-0.253	-0.576	-0.468	-0.422	-0.332	-0.598	-0.484	-0.439	-0.349	-0.574	-0.514	-0.501	-0.400	-0.535	-0.529	-0.534	-0.420
	(0.494)	(0.398)	(0.363)	(0.365)	(0.502)	(0.383)	(0.346)	(0.347)	(0.499)	(0.385)	(0.347)	(0.349)	(0.494)	(0.384)	(0.345)	(0.346)	(0.497)	(0.392)	(0.350)	(0.350)
$D_{prop}{\cdot}Post{\cdot}Treat_{med}$	-0.710	-0.515	-0.415	-0.225	-0.976*	-0.643	-0.450	-0.243	-0.960*	-0.674*	-0.475	-0.265	-1.011*	-0.769*	-0.579	-0.371	-0.903*	-0.779*	-0.597	-0.377
	(0.528)	(0.426)	(0.400)	(0.406)	(0.525)	(0.400)	(0.369)	(0.373)	(0.523)	(0.400)	(0.366)	(0.372)	(0.522)	(0.403)	(0.368)	(0.373)	(0.528)	(0.402)	(0.369)	(0.375)
$D_{prop}{\cdot}Post{\cdot}Treat_{high}$	-0.229	-0.576	-0.564	-0.619	-0.700	-0.773**	-0.609*	-0.611*	-0.679	-0.805**	-0.641*	-0.649*	-0.645	-0.780**	-0.605*	-0.582	-0.584	-0.831**	-0.630*	-0.576
	(0.475)	(0.392)	(0.391)	(0.421)	(0.431)	(0.355)	(0.343)	(0.369)	(0.440)	(0.358)	(0.342)	(0.368)	(0.441)	(0.355)	(0.344)	(0.364)	(0.467)	(0.364)	(0.348)	(0.365)
$Post{\cdot}Treat_{low}$	0.459	0.592*	0.639**	0.623**	0.682	0.657*	0.605**	0.549*	0.663	0.655*	0.618**	0.562*	0.746*	0.697**	0.638**	0.590*	0.735	0.730**	0.673**	0.601*
	(0.422)	(0.344)	(0.307)	(0.307)	(0.434)	(0.337)	(0.300)	(0.302)	(0.425)	(0.339)	(0.301)	(0.303)	(0.442)	(0.343)	(0.304)	(0.309)	(0.449)	(0.354)	(0.312)	(0.315)
$Post{\cdot}Treat_{med}$	0.708	0.636*	0.595*	0.360	0.895**	0.642*	0.467	0.200	0.857*	0.650*	0.486	0.220	0.991**	0.752**	0.551*	0.301	0.912*	0.776**	0.577*	0.307
	(0.446)	(0.361)	(0.331)	(0.340)	(0.454)	(0.343)	(0.310)	(0.319)	(0.449)	(0.344)	(0.308)	(0.318)	(0.463)	(0.347)	(0.312)	(0.324)	(0.473)	(0.348)	(0.314)	(0.328)
$Post{\cdot}Treat_{high}$	0.363	0.633**	0.524	0.420	0.746**	0.742**	0.454	0.325	0.721*	0.754**	0.483*	0.363	0.824**	0.796***	0.481*	0.361	0.746*	0.818***	0.500*	0.361
	(0.399)	(0.322)	(0.325)	(0.358)	(0.374)	(0.293)	(0.278)	(0.310)	(0.378)	(0.297)	(0.278)	(0.311)	(0.394)	(0.292)	(0.280)	(0.307)	(0.427)	(0.303)	(0.284)	(0.308)
Ind. control variables	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age group	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Husband's work exp.	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes
Obs	1,084	2,287	2,989	3,432	1,084	2,287	2,989	3,432	1,084	2,287	2,989	3,432	1,084	2,287	2,989	3,432	1,084	2,287	2,989	3,432
Obs in $Control$	276	607	789	906	276	607	789	906	276	607	789	906	276	607	789	906	276	607	789	906
Obs in $Treat_{low}$	276	566	736	852	276	566	736	852	276	566	736	852	276	566	736	852	276	566	736	852
$D_{prop} = 0 / D_{prop} = 1$	120/156	245/321	315/421	368/484	120/156	245/321	315/421	368/484	120/156	245/321	315/421	368/484	120/156	245/321	315/421	368/484	120/156	245/321	315/421	368/484
Obs in $Treat_{med}$	254	561	741	859	254	561	741	859	254	561	741	859	254	561	741	859	254	561	741	859
$D_{prop} = 0 / D_{prop} = 1$	74/180	174/387	233/508	278/581	74/180	174/387	233/508	278/581	74/180	174/387	233/508	278/581	74/180	174/387	233/508	278/581	74/180	174/387	233/508	278/581
Obs in $Treat_{high}$	278	553	723	815	278	553	723	815	278	553	723	815	278	553	723	815	278	553	723	815
$D_{prop} = 0 / D_{prop} = 1$	34/244	85/468	111/612	128/687	34/244	85/468	111/612	128/687	34/244	85/468	111/612	128/687	34/244	85/468	111/612	128/687	34/244	85/468	111/612	128/687
Wives	542	715	754	765	542	715	754	765	542	715	754	765	542	715	754	765	542	715	754	765
Av. obs. per wife	2.0	3.2	4.0	4.5	2.0	3.2	4.0	4.5	2.0	3.2	4.0	4.5	2.0	3.2	4.0	4.5	2.0	3.2	4.0	4.5
Adj. R^2	0.0094	0.0124	0.0162	0.0152	0.1273	0.1272	0.1502	0.1729	0.1313	0.1283	0.1501	0.1728	0.1378	0.1355	0.1585	0.1807	0.1435	0.1366	0.1582	0.1803

Notes: Dependent variable covers work and apprenticeship (including travel time to and from work); 7-day week. Robust standard errors are displayed in parentheses, clustered at individual level. D_{prop} is zero when wife has no house/apartment/property in pre-treatment; 1 otherwise. Main effect of $Post$ and the interaction term of $Post{\cdot}D_{prop}$ are not displayed. Control variables in all models: year fixed effects. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Indicators for age groups are constructed for the following steps: $<$ 30, 30-34, ..., 60-64 years old. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment) and specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) includes 2001/03/05/07 (pre-treatment) 2009/11/13 (post-treatment).
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

A.1.8 The 2009 crisis

Table A.1.48: Fixed effects models, 30-54 years old wives without those who have experienced short-time work, daily working hours

	Dependent variable: Wives' working hours per day																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
$Post{\cdot}Treat_{low}$	0.441*	0.523***	0.526***	0.499***	0.339	0.401**	0.366 **	0.366**	0.319	0.396**	0.376 **	0.377**	0.365	0.437**	0.363**	0.358**	0.402*	0.473**	0.365**	0.339*
	(0.238)	(0.197)	(0.188)	(0.189)	(0.214)	(0.184)	(0.177)	(0.175)	(0.214)	(0.185)	(0.178)	(0.176)	(0.232)	(0.188)	(0.180)	(0.175)	(0.231)	(0.195)	(0.184)	(0.179)
$Post{\cdot}Treat_{med}$	0.327	0.356	0.359*	0.266	0.273	0.241	0.184	0.076	0.256	0.234	0.188	0.076	0.300	0.322	0.214	0.097	0.292	0.351	0.221	0.086
	(0.266)	(0.221)	(0.217)	(0.213)	(0.242)	(0.205)	(0.200)	(0.192)	(0.245)	(0.207)	(0.202)	(0.193)	(0.271)	(0.217)	(0.209)	(0.198)	(0.274)	(0.217)	(0.211)	(0.200)
$Post{\cdot}Treat_{high}$	0.550**	0.410*	0.261	0.129	0.446*	0.317	0.109	-0.023	0.427*	0.304	0.113	-0.020	0.478*	0.416*	0.167	0.046	0.407	0.404*	0.151	0.014
	(0.255)	(0.227)	(0.218)	(0.221)	(0.230)	(0.205)	(0.199)	(0.199)	(0.233)	(0.208)	(0.201)	(0.201)	(0.263)	(0.213)	(0.205)	(0.203)	(0.268)	(0.217)	(0.211)	(0.207)
Ind. control var.	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age group	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Husband's work exp.	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes
Obs	844	1,729	2,248	2,572	844	1,729	2,248	2,572	844	1,729	2,248	2,572	844	1,729	2,248	2,572	844	1,729	2,248	2,572
Obs in $Control$	232	466	589	672	232	466	589	672	232	466	589	672	232	466	589	672	232	466	589	672
Obs in $Treat_{low}$	226	459	592	679	226	459	592	679	226	459	592	679	226	459	592	679	226	459	592	679
Obs in $Treat_{med}$	200	433	574	666	200	433	574	666	200	433	574	666	200	433	574	666	200	433	574	666
Obs in $Treat_{high}$	186	371	493	555	186	371	493	555	186	371	493	555	186	371	493	555	186	371	493	555
Wives	422	549	586	597	422	549	586	597	422	549	586	597	422	549	586	597	422	549	586	597
Av. obs. per wife	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3
Adj. R^2	0.0209	0.0200	0.0280	0.0267	0.1580	0.1403	0.1584	0.1900	0.1594	0.1399	0.1576	0.1894	0.1617	0.1460	0.1673	0.2022	0.1760	0.1491	0.1674	0.2025

Notes: Robust standard errors are displayed in parentheses, clustered at individual level. Control variables in all models: year fixed effects. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment) and specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) includes 2001/03/05/07 (pre-treatment) 2009/11/13 (post-treatment). Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.49: Fixed effects models, 30-54 years old wives without those who work in industries affected by the 2009 crisis

	Dependent variable: Wives' working hours per day																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
$Post{\cdot}Treat_{low}$	0.461*	0.548**	0.532**	0.486**	0.387*	0.441**	0.419**	0.422**	0.359	0.438**	0.424**	0.429**	0.397*	0.477**	0.417**	0.394**	0.414*	0.493**	0.405**	0.359*
	(0.244)	(0.216)	(0.209)	(0.212)	(0.221)	(0.199)	(0.193)	(0.195)	(0.220)	(0.200)	(0.193)	(0.195)	(0.228)	(0.198)	(0.190)	(0.188)	(0.226)	(0.206)	(0.196)	(0.193)
$Post{\cdot}Treat_{med}$	0.342	0.514**	0.517**	0.369	0.323	0.390*	0.352	0.219	0.337	0.402*	0.359	0.221	0.361	0.482**	0.386*	0.227	0.337	0.491**	0.377*	0.200
	(0.296)	(0.245)	(0.237)	(0.236)	(0.267)	(0.223)	(0.214)	(0.209)	(0.266)	(0.226)	(0.218)	(0.212)	(0.284)	(0.232)	(0.221)	(0.211)	(0.287)	(0.233)	(0.222)	(0.213)
$Post{\cdot}Treat_{high}$	0.541**	0.453*	0.306	0.115	0.500**	0.399*	0.211	0.039	0.506**	0.403*	0.216	0.042	0.567**	0.519**	0.278	0.098	0.508**	0.504**	0.255	0.070
	(0.255)	(0.237)	(0.239)	(0.244)	(0.232)	(0.216)	(0.216)	(0.218)	(0.233)	(0.220)	(0.219)	(0.220)	(0.249)	(0.220)	(0.218)	(0.217)	(0.251)	(0.224)	(0.225)	(0.223)
Ind. control var.	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age groups	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Husbands' work exp.	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes
Obs	690	1,407	1,818	2,079	690	1,407	1,818	2,079	690	1,407	1,818	2,079	690	1,407	1,818	2,079	690	1,407	1,818	2,079
Obs in $Control$	172	344	438	502	172	344	438	502	172	344	438	502	172	344	438	502	172	344	438	502
Obs in $Treat_{low}$	186	374	469	535	186	374	469	535	186	374	469	535	186	374	469	535	186	374	469	535
Obs in $Treat_{med}$	170	364	479	555	170	364	479	555	170	364	479	555	170	364	479	555	170	364	479	555
Obs in $Treat_{high}$	162	325	432	487	162	325	432	487	162	325	432	487	162	325	432	487	162	325	432	487
Wives	345	449	476	486	345	449	476	486	345	449	476	486	345	449	476	486	345	449	476	486
Av. obs. per wife	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3	2.0	3.1	3.8	4.3
$Adj.\ R^2$	0.0170	0.0152	0.0259	0.0242	0.1422	0.1377	0.1668	0.1951	0.1459	0.1368	0.1653	0.1941	0.1502	0.1407	0.1754	0.2094	0.1548	0.1417	0.1749	0.2101

Notes: Robust standard errors are displayed in parentheses, clustered at individual level. Control variables in all models: year fixed effects. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment) and specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) includes 2001/03/05/07 (pre-treatment) 2009/11/13 (post-treatment). Significance levels: * 10%; ** 5%; *** 1%; Robust standard errors in parenthesis, clustered at individual level; Data: SOEPlong v30

Table A.1.50: Granger-type test for causality, 30-54 years old wives without those who work in industries affected by the 2009 crisis

Dependent variable:	**Wives' working hours**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	0.227	0.055	0.060	0.130
	(0.350)	(0.312)	(0.311)	(0.305)
$D_{2001} \cdot Treat_{med}$	0.635	0.659*	0.662*	0.704**
	(0.403)	(0.351)	(0.352)	(0.347)
$D_{2001} \cdot Treat_{high}$	1.443***	1.273***	1.265***	1.237***
	(0.447)	(0.363)	(0.362)	(0.364)
$D_{2003} \cdot Treat_{low}$	0.219	0.253	0.266	0.302
	(0.335)	(0.308)	(0.310)	(0.307)
$D_{2003} \cdot Treat_{med}$	0.298	0.430	0.436	0.462
	(0.389)	(0.332)	(0.333)	(0.332)
$D_{2003} \cdot Treat_{high}$	0.978***	0.877***	0.877***	0.883***
	(0.357)	(0.307)	(0.307)	(0.315)
$D_{2005} \cdot Treat_{low}$	0.160	0.135	0.145	0.163
	(0.244)	(0.223)	(0.224)	(0.225)
$D_{2005} \cdot Treat_{med}$	0.078	0.158	0.169	0.179
	(0.281)	(0.235)	(0.237)	(0.237)
$D_{2005} \cdot Treat_{high}$	0.591**	0.448*	0.447*	0.436*
	(0.259)	(0.247)	(0.248)	(0.252)
$D_{2009} \cdot Treat_{low}$	0.521**	0.481**	0.493**	0.465**
	(0.237)	(0.217)	(0.216)	(0.216)
$D_{2009} \cdot Treat_{med}$	0.336	0.276	0.281	0.254
	(0.285)	(0.257)	(0.258)	(0.259)
$D_{2009} \cdot Treat_{high}$	0.546**	0.421*	0.425*	0.408*
	(0.242)	(0.226)	(0.227)	(0.227)
$D_{2011} \cdot Treat_{low}$	0.663*	0.491	0.502	0.449
	(0.338)	(0.305)	(0.306)	(0.306)
$D_{2011} \cdot Treat_{med}$	0.817**	0.704**	0.713**	0.713**
	(0.366)	(0.330)	(0.333)	(0.333)
$D_{2011} \cdot Treat_{high}$	0.894**	0.711**	0.705**	0.714**
	(0.361)	(0.330)	(0.333)	(0.333)
$D_{2013} \cdot Treat_{low}$	1.027**	0.976**	0.984**	0.937**
	(0.474)	(0.446)	(0.445)	(0.420)
$D_{2013} \cdot Treat_{med}$	0.907	0.659	0.666	0.625
	(0.601)	(0.542)	(0.544)	(0.530)
$D_{2013} \cdot Treat_{high}$	1.240**	0.892*	0.900*	0.877*
	(0.524)	(0.491)	(0.490)	(0.484)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	2,079	2,079	2,079	2,079
Wives	486	486	486	486
Avg. obs per wife	4.3	4.3	4.3	4.3
low: H_0 : leads $= 0$	$F_{3,485} = 0.21$	$F_{3,485} = 0.28$	$F_{3,485} = 0.30$	$F_{3,485} = 0.35$
	p-val $= 0.8896$	p-val $= 0.8431$	p-val $= 0.8236$	p-val $= 0.7878$
med: H_0 : leads $= 0$	$F_{3,485} = 0.95$	$F_{3,485} = 1.28$	$F_{3,485} = 1.28$	$F_{3,485} = 1.48$
	p-val $= 0.4155$	p-val $= 0.2795$	p-val $= 0.2809$	p-val $= 0.2193$
$high$: H_0 : leads $= 0$	$F_{3,485} = 4.07$	$F_{3,485} = 4.71$	$F_{3,485} = 4.67$	$F_{3,485} = 4.39$
	p-val $= 0.0072$	p-val $= 0.0030$	p-val $= 0.0032$	p-val $= 0.0046$
Adj. R^2	0.0333	0.2036	0.2024	0.2171

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Year dummies are always included.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.51: Fixed effects models, 30-54 years old wives, without couples who were affected by the 2009 crisis

	Dependent variable: Wives' working hours per day																			
Sample restriction	1(a)	2(b)	3(c)	4(d)	5(a)	6(b)	7(c)	8(d)	9(a)	10(b)	11(c)	12(d)	13(a)	14(b)	15(c)	16(d)	17(a)	18(b)	19(c)	20(d)
$Post{\cdot}Treat_{low}$	0.385	0.562*	0.477*	0.490*	0.354	0.481*	0.348	0.356	0.317	0.483*	0.346	0.357	0.389	0.483*	0.295	0.258	0.436	0.506*	0.267	0.204
	(0.336)	(0.296)	(0.283)	(0.284)	(0.315)	(0.278)	(0.263)	(0.261)	(0.316)	(0.278)	(0.264)	(0.261)	(0.328)	(0.268)	(0.254)	(0.251)	(0.325)	(0.277)	(0.261)	(0.256)
$Post{\cdot}Treat_{med}$	0.190	0.581*	0.522	0.445	0.255	0.361	0.211	0.126	0.277	0.367	0.213	0.130	0.374	0.422	0.177	0.038	0.372	0.428	0.165	0.012
	(0.410)	(0.327)	(0.316)	(0.316)	(0.379)	(0.295)	(0.279)	(0.272)	(0.377)	(0.299)	(0.285)	(0.275)	(0.387)	(0.298)	(0.285)	(0.277)	(0.394)	(0.298)	(0.287)	(0.279)
$Post{\cdot}Treat_{high}$	0.486	0.466	0.309	0.121	0.554*	0.379	0.194	0.034	0.574*	0.380	0.194	0.036	0.795**	0.488*	0.208	0.010	0.745**	0.482	0.199	-0.015
	(0.344)	(0.323)	(0.326)	(0.323)	(0.315)	(0.293)	(0.287)	(0.279)	(0.321)	(0.296)	(0.290)	(0.279)	(0.345)	(0.290)	(0.285)	(0.276)	(0.344)	(0.295)	(0.294)	(0.285)
Ind. control var.	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Age group	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Work experience	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Husband's work exp.	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	yes	yes	yes	yes
Obs	424	872	1,119	1,279	424	872	1,119	1,279	424	872	1,119	1,279	424	872	1,119	1,279	424	872	1,119	1,279
Obs in $Control$	106	216	272	312	106	216	272	312	106	216	272	312	106	216	272	312	106	216	272	312
Obs in $Treat_{low}$	106	219	270	309	106	219	270	309	106	219	270	309	106	219	270	309	106	219	270	309
$Post = 0/Post = 1$	53/53	114/105	153/117	189/120	53/53	114/105	153/117	189/120	53/53	114/105	153/117	189/120	53/53	114/105	153/117	189/120	53/53	114/105	153/117	189/120
Obs in $Treat_{med}$	100	223	291	337	100	223	291	337	100	223	291	337	100	223	291	337	100	223	291	337
$Post = 0/Post = 1$	50/50	115/108	166/125	210/127	50/50	115/108	166/125	210/127	50/50	115/108	166/125	210/127	50/50	115/108	166/125	210/127	50/50	115/108	166/125	210/127
Obs in $Treat_{high}$	112	214	286	321	112	214	286	321	112	214	286	321	112	214	286	321	112	214	286	321
$Post = 0/Post = 1$	56/56	114/100	167/119	200/121	56/56	114/100	167/119	200/121	56/56	114/100	167/119	200/121	56/56	114/100	167/119	200/121	56/56	114/100	167/119	200/121
Wives	212	279	297	303	212	279	297	303	212	279	297	303	212	279	297	303	212	279	297	303
Av. obs. per wife	2.0	3.1	3.8	4.2	2.0	3.1	3.8	4.2	2.0	3.1	3.8	4.2	2.0	3.1	3.8	4.2	2.0	3.1	3.8	4.2
Adj. R^2	0.0132	0.0123	0.0112	0.0096	0.1192	0.1528	0.1917	0.2277	0.1211	0.1493	0.1889	0.2270	0.1282	0.1518	0.1933	0.2382	0.1330	0.1497	0.1918	0.2384

Notes: Robust standard errors are displayed in parentheses, clustered at individual level. Control variables in all models: year fixed effects. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Specification (a) includes 2007 (pre-treatment) and 2009 (post-treatment), specification (b) includes 2005/07 (pre-treatment) and 2009/11 (post-treatment) and specification (c) 2003/05/07 (pre-treatment) and 2009/11/13 (post-treatment), and specification (d) includes 2001/03/05/07 (pre-treatment) 2009/11/13 (post-treatment). Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.1.52: Granger-type test for causality, 30-54 years old wives, without couples who were affected by the 2009 crisis

Dependent variable:	**Wives' working hours per day**			
	(1)	(2)	(3)	(4)
$D_{2001} \cdot Treat_{low}$	-0.193	-0.132	-0.129	0.075
	(0.449)	(0.410)	(0.407)	(0.405)
$D_{2001} \cdot Treat_{med}$	0.147	0.316	0.314	0.534
	(0.548)	(0.466)	(0.465)	(0.466)
$D_{2001} \cdot Treat_{high}$	1.455**	1.295***	1.273***	1.381***
	(0.592)	(0.455)	(0.448)	(0.454)
$D_{2003} \cdot Treat_{low}$	0.372	0.476	0.479	0.608
	(0.443)	(0.403)	(0.406)	(0.401)
$D_{2003} \cdot Treat_{med}$	0.328	0.510	0.492	0.666
	(0.537)	(0.443)	(0.446)	(0.445)
$D_{2003} \cdot Treat_{high}$	1.167**	0.896**	0.894**	1.011**
	(0.477)	(0.387)	(0.388)	(0.395)
$D_{2005} \cdot Treat_{low}$	0.094	0.118	0.134	0.186
	(0.342)	(0.314)	(0.318)	(0.320)
$D_{2005} \cdot Treat_{med}$	-0.035	0.216	0.232	0.290
	(0.373)	(0.302)	(0.306)	(0.307)
$D_{2005} \cdot Treat_{high}$	0.650**	0.525*	0.530*	0.571*
	(0.326)	(0.309)	(0.311)	(0.316)
$D_{2009} \cdot Treat_{low}$	0.406	0.416	0.419	0.369
	(0.314)	(0.300)	(0.299)	(0.301)
$D_{2009} \cdot Treat_{med}$	0.215	0.220	0.220	0.153
	(0.389)	(0.357)	(0.359)	(0.363)
$D_{2009} \cdot Treat_{high}$	0.497	0.463	0.458	0.410
	(0.320)	(0.309)	(0.310)	(0.310)
$D_{2011} \cdot Treat_{low}$	0.717	0.576	0.583	0.490
	(0.449)	(0.417)	(0.417)	(0.414)
$D_{2011} \cdot Treat_{med}$	0.906*	0.637	0.638	0.570
	(0.500)	(0.446)	(0.449)	(0.448)
$D_{2011} \cdot Treat_{high}$	0.967**	0.706	0.704	0.614
	(0.473)	(0.435)	(0.435)	(0.433)
$D_{2013} \cdot Treat_{low}$	0.760	0.316	0.309	0.201
	(0.687)	(0.585)	(0.585)	(0.556)
$D_{2013} \cdot Treat_{med}$	0.544	-0.365	-0.362	-0.455
	(0.912)	(0.752)	(0.756)	(0.747)
$D_{2013} \cdot Treat_{high}$	1.606**	0.647	0.646	0.501
	(0.813)	(0.719)	(0.716)	(0.701)
Ind. control variables	no	yes	yes	yes
Age group	no	no	yes	yes
Work experience	no	no	no	yes
Obs	1,279	1,279	1,279	1,279
Wives	303	303	303	303
Avg. obs per wife	4.2	4.2	4.2	4.2
low: H_0 : leads = 0	$F_{3,302} = 0.69$	$F_{3,302} = 0.84$	$F_{3,302} = 0.84$	$F_{3,302} = 0.93$
	p-val = 0.5598	p-val = 0.4712	p-val = 0.4707	p-val = 0.4242
med: H_0 : leads = 0	$F_{3,302} = 0.24$	$F_{3,302} = 0.44$	$F_{3,302} = 0.41$	$F_{3,302} = 0.79$
	p-val = 0.8685	p-val = 0.7228	p-val = 0.7441	p-val = 0.4982
$high$: H_0 : leads = 0	$F_{3,302} = 2.79$	$F_{3,302} = 3.17$	$F_{3,302} = 3.14$	$F_{3,302} = 3.60$
	p-val = 0.0408	p-val = 0.0245	p-val = 0.0257	p-val = 0.0140
Adj. R^2	0.0214	0.2344	0.2332	0.2444

Notes: Fixed effects models; robust standard errors in parentheses, clustered at individual level. Year 2007 marks the baseline year. Individual control variables include wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old) in the household. Work experience includes years of full-time work as a second order polynomial and years of part-time work as a second order polynomial. Indicators for age groups are constructed for 5-year steps: 30-34, ..., 50-54 years old. Year dummies are always included.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.1.9 Response rate

Table A.1.53: Proportion of wives giving information about their time use

$Control$	$Treat_{low}$	$Treat_{med}$	$Treat_{high}$
Of the wives who answered at least once before 2008 ... % responded in 2009			
82.74 (163 wives)	82.91 (165 wives)	82.83 (164 wives)	83.33 (165 wives)
Of the wives who answered at least once before 2008 ... % responded in 2011			
65.48 (129 wives)	65.83 (131 wives)	71.21 (141 wives)	63.64 (126 wives)
Of the wives who answered at least once before 2008 ... % responded in 2013			
24.87 (49 wives)	20.60 (41 wives)	17.68 (35 wives)	20.20 (40 wives)
Difference in % between $Control$ and ...			
2009:	-0.17	-0.09	-0.59
2011:	-0.35	-5.73	1.85
2013:	4.27	7.20*	4.67

Notes: Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.2 CHAPTER 3 TABLES

Table A.2.1: Literature overview: Relationship between child support and non-resident fathers' labor supply

Reference	Country	Source of variation	Outcome	Method	Results
Klawitter 1994	U.S.	changes in child support policy in Wisconsin	earnings of divorced noncustodial fathers with support awards	OLS, probit analysis	no significant effects of child support on the earnings of divorced noncustodial fathers in the first few years following the award of child support
Freeman and Waldfogel 1998	U.S.	state-level child support enforcement policy	noncustodial 18-55 years old fathers' LFP and working hours	DiD	little positive effect of more stringent enforcement policy on noncustodial fathers' employment (few statistically significant results); never-married noncustodial fathers: less likely to be working in casual or self-employment
Holzer et al. 2005	U.S.	state-level child support enforcement activities	employment rates and LFP of 16-34 years old black men with high school education and less and who are not enrolled in school	OLS, DiD	a negative relationship between child support mandates and labor supply of 25-34 years old black men (mainly statistically insignificant at 0.10 level) ; positive and statistically significant effects on labor supply of black men aged 16-24
Rich et al. 2007	U.S.	city-level child support enforcement strength	unmarried fathers' formal and informal (shadow economy) employment and hours	OLS, DiD	among fathers combining work in the regular and underground sectors: stricter child support enforcement is associated with fewer hours of underground employment; little evidence that stronger enforcement is more generally associated with employment or hours in the regular sector
Cancian, Heinrich, et al. 2013	U.S.	varying childbirth costs charged in unmarried mothers' Medicaid-covered childbirths across counties as exogenous source of variation in fathers' child support debt	low-income fathers' labor supply	OLS, GLM, IV	greater debt (through birth costs charges) has a negative effect on fathers' formal earnings
Rossin-Slater and Wüst 2017	Denmark	changes in Danish child support formula	labor market responses of fathers	simulated IV	no significant effects of child support obligations on non-resident fathers' labor market outcomes

Notes: In an unpublished manuscript, Bitler (1998) finds that stronger child support enforcement may lead to an increase of noncustodial parents' working hours. However, the results were sensitive to model specification (U.S. setting; Bitler 1998). Source: Own compilation

Table A.2.2: Examples of variation over time in monthly child support obligations for two children

	Allowable net income:											
	€2,500			€2,300			€2,100			€1,900		
	1. child	2. child	∑	1. child	2. child	∑	1. child	2. child	∑	1. child	2. child	∑
03/1997	age: 3 €207	age: 1 €207	€414	age: 3 €207	age: 1 €207	€414	age: 3 €187	age: 1 €187	€374	age: 3 €187	age: 1 €187	€374
03/1998	age: 4 €207	age: 2 €207	€414	age: 4 €207	age: 2 €207	€414	age: 4 €187	age: 2 €187	€374	age: 4 €187	age: 2 €187	€374
03/1999	age: 5 €204	age: 3 €204	€408	age: 5 €190	age: 3 €190	€380	age: 5 €177	age: 3 €177	€354	age: 5 €165	age: 3 €165	€330
03/2000	age: 6 €262	age: 4 €203	€465	age: 6 €244	age: 4 €189	€433	age: 6 €229	age: 4 €176	€405	age: 6 €213	age: 4 €164	€377
03/2001	age: 7 €262	age: 5 €203	€465	age: 7 €244	age: 5 €189	€433	age: 7 €229	age: 5 €176	€405	age: 7 €229	age: 5 €176	€405
03/2002	age: 8 €247	age: 6 €247	€494	age: 8 €231	age: 6 €231	€462	age: 8 €231	age: 6 €231	€462	age: 8 €231	age: 6 €231	€462
03/2003	age: 9 €247	age: 7 €247	€494	age: 9 €231	age: 7 €231	€462	age: 9 €231	age: 7 €231	€462	age: 9 €231	age: 7 €231	€462
03/2004	age: 10 €266	age: 8 €266	€532	age: 10 €249	age: 8 €249	€498	age: 10 €249	age: 8 €249	€498	age: 10 €249	age: 8 €249	€498
03/2005	age: 11 €266	age: 9 €266	€532	age: 11 €249	age: 9 €249	€498	age: 11 €249	age: 9 €249	€498	age: 11 €249	age: 9 €249	€498
03/2006	age: 12 €337	age: 10 €274	€611	age: 12 €316	age: 10 €257	€573	age: 12 €316	age: 10 €257	€573	age: 12 €316	age: 10 €257	€573
03/2007	age: 13 €337	age: 11 €274	€611	age: 13 €316	age: 11 €257	€573	age: 13 €316	age: 11 €257	€573	age: 13 €316	age: 11 €257	€573
03/2008	age: 14 €343	age: 12 €343	€686	age: 14 €325	age: 12 €325	€650	age: 14 €325	age: 12 €325	€650	age: 14 €307	age: 12 €307	€614
03/2009	age: 15 €352	age: 13 €352	€704	age: 15 €333	age: 13 € 333	€666	age: 15 €333	age: 13 €333	€666	age: 15 €314	age: 13 €314	€628
03/2010	age: 16 €398	age: 14 €398	€796	age: 16 €377	age: 14 €377	€754	age: 16 €377	age: 14 €377	€754	age: 16 €356	age: 14 €356	€712
03/2011	age: 17 €398	age: 15 €398	€796	age: 17 €377	age: 15 €377	€754	age: 17 €377	age: 15 €377	€754	age: 17 €356	age: 15 €356	€712
03/2012	age: 18 €378	age: 16 €398	€776	age: 18 €353	age: 16 €377	€730	age: 18 €353	age: 16 €377	€730	age: 18 €329	age: 16 € 356	€685
03/2013	age: 19 €378	age: 17 €398	€776	age: 19 €353	age: 17 €377	€730	age: 19 €353	age: 17 €377	€730	age: 19 €329	age: 17 € 356	€685

Notes: The presented values are not adjusted for inflation and rounded to full amounts. These are monthly payments, after deduction of the corresponding share of the child benefit. Allowable net income that is held constant is the average monthly income. The date in these examples could be different but in the first half of the year.
Source: Gnann 1995, p. 64; Suhrkamp Verlag 1998, pp. 257-260; Higher Regional Court Düsseldorf 1999a, p. 1; Higher Regional Court Düsseldorf 2002, p. 1; Higher Regional Court Düsseldorf 2003a, p. 1; Higher Regional Court Düsseldorf 2005a, p. 1; Higher Regional Court Düsseldorf 2007a, p. 1; Higher Regional Court Düsseldorf 2008a, p. 1; Higher Regional Court Düsseldorf 2009, p. 1; Higher Regional Court Düsseldorf 2010a, p. 1; Higher Regional Court Düsseldorf 2011, p. 1; Higher Regional Court Düsseldorf 2013, p. 1

Table A.2.3: Differences between response and nonresponse of paid child support

	Mean		Difference	N	
	Response	Nonresponse		Response	Nonresponse
Survey year	2002.494	2003.45	-0.956***	1,080	1,506
Gender (1=female; 0=male)	0.026	0.027	-0.001	1,080	1,506
Individual's age	42.159	41.738	0.421	1,080	1,506
Highest educational attainment (CASMIN)	4.762	4.399	0.363***	1,080	1,506
Living in East Germany (1=yes;0=no)	0.184	0.195	-0.011	1,080	1,506
Migration background (1=yes;0=no)	0.129	0.193	-0.064***	1,080	1,506
Labor force participation (1=yes;0=no)	0.933	0.802	0.131***	1,080	1,506
Full-time employed (1=yes;0=no)	0.916	0.766	0.149***	1,080	1,506
Experience in full-time employment (in yrs)	19.942	18.475	1.467***	1,080	1,506
Experience in part-time employment (in yrs)	0.368	0.468	-0.100*	1,080	1,506
No. of children in household (< 1 yrs old)	0.026	0.035	-0.009	1,080	1,506
No. of children in household (2-4 yrs old)	0.057	0.062	-0.005	1,080	1,506
No. of children in household (5-7 yrs old)	0.035	0.060	-0.025***	1,080	1,506
No. of children in household (8-10 yrs old)	0.031	0.043	-0.012	1,080	1,506
No. of children in household (11-12 yrs old)	0.016	0.042	-0.026***	1,080	1,506
No. of children in household (13-15 yrs old)	0.031	0.052	-0.021**	1,080	1,506
No. of children in household (16-18 yrs old)	0.030	0.040	-0.010	1,080	1,506
Partner's age	36.895	35.968	0.927	409	564
Partner's CASMIN	4.488	4.341	0.147	336	463
Hours spent on childcare (average weekday)	0.423	0.702	-0.280 ***	977	1,367
Time spent with children (0=no; 1=yes)	0.209	0.254	-0.045**	977	1,367
Hours spent on childcare (av. weekend day)	1.980	2.099	-0.119	435	679
Time spent with children (0=no; 1=yes)	0.382	0.401	-0.019	435	679
No. of entitled children (0-17 yrs old)	1.120	1.050	0.070***	1,080	1,506
No. of entitled children (0-20 yrs old)	1.335	1.319	0.016	1,080	1,506
No. of entitled children (< 1 yrs old)	0.005	0.003	0.002	1,080	1,506
No. of entitled children (2-4 yrs old)	0.074	0.086	-0.012	1,080	1,506
No. of entitled children (5-7 yrs old)	0.166	0.176	-0.010	1,080	1,506
No. of entitled children (8-10 yrs old)	0.231	0.215	0.015	1,080	1,506
No. of entitled children (11-12 yrs old)	0.189	0.157	0.032**	1,080	1,506
No. of entitled children (13-15 yrs old)	0.279	0.245	0.034*	1,080	1,506
No. of entitled children (16-18 yrs old)	0.256	0.260	-0.004	1,080	1,506
No. of entitled children (19-20 yrs old)	0.137	0.179	-0.042 ***	1,080	1,506
Child support obligation *Obl*	311.891	265.006	46.885***	1,080	1,506
Instrument for child support obl. *Obl_IV*	300.282	254.108	46.174 ***	1,080	1,506
Recourse rate (proxy for enforcement)	0.206	0.206	0.000	878	1,218
(Re)marriage (1=married; 0=otherwise)	0.196	0.217	-0.020	1,014	1,445
No. of new bio children	0.141	0.155	-0.014	1,080	1,506
New bio children (1=yes; 0=no)	0.106	0.108	-0.003	1,080	1,506

Notes: All sums of money are in year 2000 real €. Significance levels: ∗ 10%; ∗∗ 5%; ∗ ∗ ∗ 1%; Data: SOEPlong v30

A.2.1 Self-reported average amount of child support

Table A.2.4: Descriptive statistics, sample used in Tables A.2.5 and A.2.6

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
Survey year	2002.39	1985	2012	6.37	5.89	2.91	1,021
Gender (1=female; 0=male)	0.03	0	1	0.16	0.16	0	1,021
Individual's age	42.30	22	67	7.57	7.42	2.91	1,021
Highest educational attainment (CASMIN)	4.79	1	9	2.28	2.21	0.23	1,021
Living in East Germany (1=yes;0=no)	0.18	0	1	0.39	0.41	0.06	1,021
Migration background (1=yes;0=no)	0.13	0	1	0.33	0.32	0	1,021
Labor force participation (1=yes;0=no)	0.94	0	1	0.24	0.22	0.16	1,021
Full-time employed (1=yes;0=no)	0.92	0	1	0.27	0.25	0.16	1,021
Experience in full-time employment (in yrs)	20.15	0	43.1	7.84	7.84	2.74	1,021
Experience in part-time employment (in yrs)	0.37	0	12.2	1.23	1.45	0.25	1,021
No. of children in household (< 1 yrs old)	0.03	0	2	0.17	0.09	0.15	1,021
No. of children in household (2-4 yrs old)	0.06	0	2	0.25	0.17	0.19	1,021
No. of children in household (5-7 yrs old)	0.04	0	1	0.19	0.09	0.16	1,021
No. of children in household (8-10 yrs old)	0.03	0	1	0.18	0.12	0.14	1,021
No. of children in household (11-12 yrs old)	0.02	0	1	0.13	0.06	0.11	1,021
No. of children in household (13-15 yrs old)	0.03	0	1	0.18	0.13	0.14	1,021
No. of children in household (16-18 yrs old)	0.03	0	2	0.19	0.12	0.14	1,021
Partner's age	36.90	20	64	9.07	9.08	3.12	400
Partner's CASMIN	4.47	1	9	1.72	1.81	0.25	329
No. of entitled children (0-17 yrs old)	1.11	0	2	0.61	0.55	0.37	1,021
No. of entitled children (0-20 yrs old)	1.33	0	2	0.47	0.43	0.21	1,021
No. of entitled children (< 1 yrs old)	0.00	0	1	0.05	0.03	0.05	1,021
No. of entitled children (2-4 yrs old)	0.06	0	1	0.24	0.20	0.19	1,021
No. of entitled children (5-7 yrs old)	0.16	0	2	0.39	0.28	0.31	1,021
No. of entitled children (8-10 yrs old)	0.23	0	2	0.44	0.28	0.37	1,021
No. of entitled children (11-12 yrs old)	0.19	0	2	0.40	0.24	0.35	1,021
No. of entitled children (13-15 yrs old)	0.29	0	2	0.48	0.31	0.40	1,021
No. of entitled children (16-18 yrs old)	0.26	0	2	0.45	0.29	0.38	1,021
No. of entitled children (19-20 yrs old)	0.14	0	2	0.35	0.27	0.27	1,021
Child support obligation *Obl*	313.78	0	952.71	175.05	160.48	87.68	1,021
Instrument for child support obl. *Obl_IV*	301.65	0	908.47	194.97	190.32	65.91	1,021
Recourse rate (proxy for enforcement)	0.21	0.04	0.36	0.06	0.05	0.03	828
(Re)marriage (1=married; 0=otherwise)	0.20	0	1	0.40	0.30	0.24	957
No. of new bio children	0.15	0	2	0.45	0.33	0.24	1,021
New bio children (1=yes; 0=no)	0.11	0	1	0.31	0.22	0.18	1,021
Self-reported child support	335.40	27.58	1,386.92	185.50	168.68	100.40	1,021
Reporting to pay ⩾ obligation (1=yes;0=no)	0.53	0	1	0.50	0.34	0.39	1,021

Notes: See Appendix Table A.2.3.

Table A.2.5: FE-IV (2SLS) regressions for self-reported average child support payment per month

	Average child support payment per month				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	0.242***	0.150	0.093	0.095	0.080
	(0.092)	(0.092)	(0.088)	(0.088)	(0.094)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	33.540	33.540	33.540	32.979	33.201
Fst. stage coef.	0.847***	0.856***	0.859***	0.855***	0.848***
Fst. stage F-stat.	380.52***	427.06***	378.58***	301.78***	306.13***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	37.47***	39.23***	39.27***	34.86***	33.97***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	392.46***	441.34***	391.63***	314.31***	320.08***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	6.86***	2.66	1.10	1.14	0.70
AR Wald test χ^2	7.07***	2.75*	1.14	1.19	0.74
SW LM S stat. χ^2	8.12***	3.64*	1.45	1.66	1.09
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.707	0.011	0.523	0.245	0.176
N	1,021	1,021	1,021	924	866
Av. obs per parent	5.2	5.2	5.2	5.0	4.9
Non-resident parents	198	198	198	185	177
	Panel B: Less educated parents				
Child support *Obl*	0.290**	0.230**	0.198*	0.234**	0.217**
	(0.115)	(0.107)	(0.105)	(0.102)	(0.109)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	31.042	31.042	31.042	31.019	31.237
Fst. stage coef.	0.785***	0.785***	0.796***	0.819***	0.816***
Fst. stage F-stat.	170.73***	180.12***	174.27***	164.74***	178.58***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	22.49***	22.73***	23.37***	22.10***	21.03***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	178.21***	188.54***	182.68***	174.34***	189.89***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	5.87**	4.39**	3.34*	4.87**	3.66*
AR Wald test χ^2	6.13**	4.59**	3.50*	5.15**	3.89**
SW LM S stat. χ^2	6.96***	6.26**	5.18**	–	–
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	1.863	0.918	0.454	–	–
N	737	737	737	667	632
Av. obs per parent	5.1	5.1	5.1	4.9	4.8
Non-resident parents	145	145	145	135	131

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference. Standard errors and model tests in Columns (4) and (5) of Panel B should be interpreted with caution.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.6: FE-IV (2SLS) regressions for the likelihood of reporting to pay the amount of the obligation or more

	Reporting to pay the amount of the obligation or more (1 = yes; 0 = no)				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	-0.0134***	-0.0159***	-0.0162***	-0.0179***	-0.0181***
	(0.0029)	(0.0029)	(0.0029)	(0.0032)	(0.0034)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.5328	0.5328	0.5328	0.5249	0.5196
Fst. stage coef.	0.847***	0.856***	0.859***	0.855***	0.848***
Fst. stage F-stat.	380.52***	427.06***	378.58***	301.78***	306.13***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	37.47***	39.23***	39.27***	34.86***	33.97***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	392.46***	441.34***	391.63***	314.31***	320.08***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	19.73***	29.09***	28.47***	30.56***	26.85***
AR Wald test χ^2	20.35***	30.06***	29.45***	31.83***	28.08***
SW LM S stat. χ^2	16.10***	21.82***	21.57***	22.21***	21.21***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	2.499	0.645	0.474	0.006	0.092
N	1,021	1,021	1,021	924	866
Av. obs per parent	5.2	5.2	5.2	5.0	4.9
Non-resident parents	198	198	198	185	177
	Panel B: Less educated parents				
Child support *Obl*	-0.0134***	-0.0143***	-0.0141***	-0.0143***	-0.0157***
	(0.0043)	(0.0042)	(0.0042)	(0.0042)	(0.0045)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.5156	0.5156	0.5156	0.5112	0.5127
Fst. stage coef.	0.785***	0.785***	0.796***	0.819***	0.816***
Fst. stage F-stat.	170.73***	180.12***	174.27***	164.74***	178.58***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	22.49***	22.73***	23.37***	22.10***	21.03***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	178.21***	188.54***	182.68***	174.34***	189.89***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	9.42***	11.02***	10.75***	11.46***	11.79***
AR Wald test χ^2	9.83***	11.54***	11.27***	12.13***	12.54***
SW LM S stat. χ^2	11.73***	12.40***	12.61***	–	–
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	1.210	0.789	0.856	–	–
N	737	737	737	667	632
Av. obs per parent	5.1	5.1	5.1	4.9	4.8
Non-resident parents	145	145	145	135	131

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference. Standard errors and model tests in Columns (4) and (5) of Panel B should be interpreted with caution.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.7: FE regressions for self-reported average child support payments per month, less educated parents

	Average child support payment per month					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Child support *Obl*	0.154***	0.143***	0.140***	0.135***	0.109**	0.103**
	(0.051)	(0.047)	(0.047)	(0.046)	(0.050)	(0.052)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	31.042	31.042	31.042	31.019	31.237	31.237
N	737	737	737	667	632	632
Av. obs per parent	5.1	5.1	5.1	4.9	4.8	4.8
Non-resident parents	145	145	145	135	131	131
$Adj.\ R^2$	0.0208	0.0748	0.0848	0.1051	0.0995	0.0987

Notes: Standard errors are clustered at individual level. Singletons are excluded. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.8: FE regressions for the likelihood to pay the amount of the obligation or more, less educated parents

	Reporting to pay the amount of the obligation or more (1 = yes; 0 = no)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Child support *Obl*	-0.0173***	-0.0173***	-0.0173***	-0.0170***	-0.0183***	-0.0185***
	(0.0022)	(0.0021)	(0.0021)	(0.0022)	(0.0022)	(0.0023)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.5156	0.5156	0.5156	0.5112	0.5127	0.5127
N	737	737	737	667	632	632
Av. obs per parent	5.1	5.1	5.1	4.9	4.8	4.8
Non-resident parents	145	145	145	135	131	131
$Adj.\ R^2$	0.2061	0.2211	0.2201	0.2219	0.2287	0.2280

Notes: Standard errors are clustered at individual level. Singletons are excluded. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.9: FE and FE-IV regressions for the likelihood to pay the amount of the obligation or more, more educated parents

	Reporting to pay the amount of the obligation or more (1 = yes; 0 = no)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	Panel A: FE models					
Child support *Obl*	-0.0161***	-0.0194***	-0.0207***	-0.0234***	-0.0230***	-0.0229***
	(0.0031)	(0.0032)	(0.0033)	(0.0038)	(0.0039)	(0.0041)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Adj. R^2	0.2217	0.2737	0.2772	0.3275	0.3337	0.3304
	Panel B: FE-IV models					
Child support *Obl*	-0.0137***	-0.0198***	-0.0215***	-0.0280***	-0.0263***	-0.0263***
	(0.0038)	(0.0041)	(0.0045)	(0.0047)	(0.0049)	(0.0049)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.5775	0.5775	0.5775	0.5603	0.5385	0.5385
Fst. stage coef.	0.916***	0.952***	0.916***	0.842***	0.830***	0.839***
Fst. stage F-stat.	316.58***	506.65***	425.84***	179.90***	173.84***	167.68***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	16.80***	17.50***	15.20***	11.91***	11.56***	11.65***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	355.18***	572.90***	483.41***	209.71***	206.93***	200.59***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	13.05***	22.93***	23.68***	30.60***	27.16***	26.52***
AR Wald test χ^2	14.64***	25.93***	26.88***	35.67***	32.33***	31.73***
SW LM S stat. χ^2	–	–	–	–	–	–
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	–	–	–	–	–	–
N	284	284	284	257	234	234
Av. obs per parent	5.3	5.3	5.3	5.0	5.0	5.0
Non-resident parents	54	54	54	51	47	47

Notes: Standard errors are clustered at individual level. Singletons are excluded. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference. Note, in Panel B Columns (1)-(6) the estimated matrix of moment conditions is not of full rank. Standard errors and model tests should be interpreted with caution.
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

A.2.2 (Re)marriage

Table A.2.10: Descriptive statistics, 1985-2013-sample used in Table A.2.11

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
Survey year	2003.30	1985	2013	6.55	6.08	3.03	2,452
Gender (1=female; 0=male)	0.03	0	1	0.16	0.20	0	2,452
Individual's age	41.90	22	84	7.87	7.69	3.03	2,452
Highest educational attainment (CASMIN)	4.56	1	9	2.14	2.13	0.23	2,452
Living in East Germany (1=yes;0=no)	0.20	0	1	0.40	0.40	0.06	2,452
Migration background (1=yes;0=no)	0.16	0	1	0.37	0.38	0	2,449
Labor force participation (1=yes;0=no)	0.85	0	1	0.35	0.29	0.22	2,452
Full-time employed (1=yes;0=no)	0.82	0	1	0.38	0.32	0.23	2,452
Experience in full-time employment (in yrs)	18.98	0	42	8.17	8.22	2.63	2,452
Experience in part-time employment (in yrs)	0.43	0	16.8	1.48	1.71	0.29	2,452
No. of children in household ($<$ 1 yrs old)	0.03	0	2	0.18	0.08	0.16	2,452
No. of children in household (2-4 yrs old)	0.06	0	2	0.26	0.13	0.21	2,452
No. of children in household (5-7 yrs old)	0.05	0	2	0.23	0.13	0.19	2,452
No. of children in household (8-10 yrs old)	0.04	0	2	0.20	0.11	0.17	2,452
No. of children in household (11-12 yrs old)	0.03	0	2	0.18	0.10	0.15	2,452
No. of children in household (13-15 yrs old)	0.04	0	3	0.22	0.14	0.18	2,452
No. of children in household (16-18 yrs old)	0.04	0	2	0.19	0.11	0.16	2,452
Partner's age	36.43	18	64	8.51	8.15	3.33	914
Partner's CASMIN	4.43	1	9	1.70	1.86	0.36	753
No. of entitled children (0-17 yrs old)	1.08	0	2	0.63	0.56	0.42	2,452
No. of entitled children (0-20 yrs old)	1.33	1	2	0.47	0.43	0.22	2,452
No. of entitled children ($<$ 1 yrs old)	0.00	0	2	0.07	0.04	0.06	2,452
No. of entitled children (2-4 yrs old)	0.08	0	2	0.29	0.27	0.22	2,452
No. of entitled children (5-7 yrs old)	0.17	0	2	0.39	0.29	0.32	2,452
No. of entitled children (8-10 yrs old)	0.22	0	2	0.44	0.27	0.37	2,452
No. of entitled children (11-12 yrs old)	0.17	0	2	0.38	0.21	0.35	2,452
No. of entitled children (13-15 yrs old)	0.26	0	2	0.46	0.28	0.39	2,452
No. of entitled children (16-18 yrs old)	0.26	0	2	0.46	0.28	0.39	2,452
No. of entitled children (19-20 yrs old)	0.16	0	2	0.37	0.27	0.31	2,452
Child support obligation *Obl*	284.77	0	1,084.38	187.69	168.68	90.33	2,452
Instrument for child support obligation *Obl_IV*	273.34	0	1,084.38	196.77	186.93	63.31	2,452
Recourse rate (proxy for enforcement)	0.21	0.04	0.36	0.06	0.05	0.03	2,016
(Re)marriage (1=married; 0=otherwise)	0.21	0	1	0.41	0.29	0.25	2,452
No. of new bio children	0.15	0	3	0.48	0.30	0.29	2,452
New bio children (1=yes:0=no)	0.11	0	1	0.31	0.20	0.19	2,452
Self-reported child support	334.39	27.58	1386.92	188.49	178.75	97.10	1,012
Reporting to pay $\geqslant$ obligation (1=yes;0=no)	0.53	0	1	0.50	0.39	0.37	1,012

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.11: FE-IV (2SLS) regressions for (re)marriage, 1985-2013

	(Re)marriage (1 = (re)married after separation; 0 = otherwise)								
Sample restriction				More educated			Less educated		
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**
Child support *Obl*	0.0035*	0.0021	0.0017	0.0053	0.0039	0.0039	0.0028	0.0012	0.0010
	(0.0020)	(0.0019)	(0.0019)	(0.0036)	(0.0033)	(0.0032)	(0.0023)	(0.0022)	(0.0023)
Control variables	no	yes	yes	no	yes	yes	no	yes	yes
No. of children	no	no	yes	no	no	yes	no	no	yes
Mean, dependent variable	0.2076	0.2076	0.2076	0.1864	0.1864	0.1864	0.2138	0.2138	0.2138
First stage coefficient	0.714***	0.697***	0.6927***	0.851***	0.854***	0.849***	0.643***	0.627***	0.624***
First stage F-statistic	156.89***	150.38***	139.71***	130.88***	154.05***	160.34***	78.21***	75.98***	69.79***
Underidentification tests	H_0: equation is underidentified; H_a: identified								
Kleibergen-Paap rk LM statistic	55.32***	56.46***	55.14***	17.95***	19.39***	19.37***	37.68***	37.89***	36.66***
	H_0: endogenous regressor *Obl* is unidentified								
Sanderson-Windmeijer first stage χ^2	159.19***	152.71***	141.94***	139.62***	164.96***	172.02***	79.70***	77.51***	71.24***
Weak-instrument-robust inference	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid								
Anderson-Rubin Wald test F-stat.	3.24*	1.22	0.98	2.28	1.43	1.59	1.46	0.30	0.17
Anderson-Rubin Wald test χ^2	3.29*	1.24	0.99	2.43	1.53	1.70	1.49	0.30	0.18
Stock-Wright LM S statistic χ^2	4.22**	1.59	1.29	–	–	–	2.00	0.41	0.24
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous								
Endogeneity test statistic χ^2	1.347	0.356	0.241	–	–	–	0.305	0.000	0.017
N	2,452	2,452	2,452	558	558	558	1,894	1,894	1,894
Av. obs per parent	6.6	6.6	6.6	6.2	6.2	6.2	6.6	6.6	6.6
Non-resident parents	374	374	374	90	90	90	287	287	287

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5. Note, in Columns (4)-(6) the estimated matrix of moment conditions is not of full rank. Standard errors and model tests should be interpreted with caution.
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

Table A.2.12: Descriptive statistics for the time after the *2001 Law on the Proscription of Violence in Upbringing and Modification of Child Support*, sample used in Tables 3.3 and A.2.14

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
Survey year	2007.05	2001	2013	3.50	3.11	2.32	1,664
Gender (1=female; 0=male)	0.03	0	1	0.18	0.21	0	1,664
Individual's age	43.04	22	84	7.78	7.74	2.32	1,664
Highest educational attainment (CASMIN)	4.79	1	9	2.14	2.14	0.07	1,664
Living in East Germany (1=yes;0=no)	0.22	0	1	0.42	0.42	0.05	1,664
Migration background (1=yes;0=no)	0.15	0	1	0.36	0.38	0	1,664
Labor force participation (1=yes;0=no)	0.85	0	1	0.36	0.31	0.20	1,664
Full-time employed (1=yes;0=no)	0.82	0	1	0.38	0.35	0.20	1,664
Experience in full-time employment (in yrs)	19.49	0	42	8.33	8.44	2.07	1,664
Experience in part-time employment (in yrs)	0.58	0	16.8	1.74	1.92	0.23	1,664
No. of children in household (< 1 yrs old)	0.03	0	2	0.17	0.08	0.15	1,664
No. of children in household (2-4 yrs old)	0.07	0	2	0.27	0.18	0.20	1,664
No. of children in household (5-7 yrs old)	0.06	0	2	0.25	0.15	0.20	1,664
No. of children in household (8-10 yrs old)	0.04	0	2	0.21	0.12	0.17	1,664
No. of children in household (11-12 yrs old)	0.03	0	2	0.19	0.12	0.15	1,664
No. of children in household (13-15 yrs old)	0.05	0	3	0.24	0.14	0.19	1,664
No. of children in household (16-18 yrs old)	0.04	0	2	0.20	0.12	0.16	1,664
Partner's age	38.24	18	64	8.29	8.16	2.84	603
Partner's CASMIN	4.66	2	9	1.65	1.85	0.14	505
No. of entitled children (0-17 yrs old)	1.06	0	2	0.65	0.58	0.40	1,664
No. of entitled children (0-20 yrs old)	1.34	1	2	0.47	0.43	0.22	1,664
No. of entitled children (< 1 yrs old)	0.00	0	1	0.05	0.03	0.05	1,664
No. of entitled children (2-4 yrs old)	0.07	0	2	0.28	0.26	0.20	1,664
No. of entitled children (5-7 yrs old)	0.14	0	2	0.37	0.26	0.28	1,664
No. of entitled children (8-10 yrs old)	0.20	0	2	0.42	0.29	0.34	1,664
No. of entitled children (11-12 yrs old)	0.17	0	2	0.38	0.21	0.34	1,664
No. of entitled children (13-15 yrs old)	0.27	0	2	0.47	0.29	0.39	1,664
No. of entitled children (16-18 yrs old)	0.29	0	2	0.48	0.30	0.39	1,664
No. of entitled children (19-20 yrs old)	0.19	0	2	0.40	0.31	0.31	1,664
Child support obligation *Obl*	303.65	0	1,084.38	198.10	174.96	92.87	1,664
Instrument for child support obligation *Obl_IV*	293.31	0	1,084.38	208.28	197.45	66.07	1,664
Recourse rate (proxy for enforcement)	0.21	0.10	0.36	0.06	0.06	0.02	1,664
(Re)marriage (1=married; 0=otherwise)	0.19	0	1	0.39	0.32	0.20	1,664
No. of new bio children	0.17	0	3	0.49	0.41	0.23	1,664
New bio children (1=yes:0=no)	0.12	0	1	0.33	0.26	0.16	1,664
Self-reported child support	349.67	48.35	1,386.92	198.26	189.56	92.67	668
Reporting to pay ⩾ obligation (1=yes;0=no)	0.49	0	1	0.50	0.41	0.34	668

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.13: Descriptive statistics for the time after the *2001 Law on the Proscription of Violence in Upbringing and Modification of Child Support*, sample used in Table 3.3

Variable	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
	Panel A: Non-resident parents with CASMIN $\leqslant 5$						
Survey year	2006.80	2001	2013	3.53	3.17	2.35	1,228
Gender (1=female; 0=male)	0.03	0	1	0.17	0.21	0	1,228
Individual's age	42.47	22	68	7.58	7.49	2.35	1,228
Highest educational attainment (CASMIN)	3.69	1	5	1.13	1.14	0	1,228
Living in East Germany (1=yes;0=no)	0.21	0	1	0.41	0.41	0.07	1,228
Migration background (1=yes;0=no)	0.14	0	1	0.35	0.38	0	1,228
No. of children in household ($<$ 1 yrs old)	0.00	0	1	0.06	0.03	0.05	1,228
No. of children in household (2-4 yrs old)	0.07	0	2	0.28	0.26	0.20	1,228
No. of children in household (5-7 yrs old)	0.14	0	2	0.36	0.24	0.29	1,228
No. of children in household (8-10 yrs old)	0.20	0	2	0.42	0.27	0.34	1,228
No. of children in household (11-12 yrs old)	0.17	0	2	0.19	0.13	0.15	1,228
No. of children in household (13-15 yrs old)	0.04	0	2	0.21	0.13	0.17	1,228
No. of children in household (16-18 yrs old)	0.04	0	2	0.21	0.13	0.16	1,228
Partner's age	37.97	18	64	8.34	8.20	3.02	472
Partner's CASMIN	4.45	2	9	1.58	1.81	0.16	405
No. of entitled children (0-17 yrs old)	1.06	0	2	0.66	0.60	0.41	1,228
No. of entitled children (0-20 yrs old)	1.35	1	2	0.48	0.43	0.23	1,228
No. of entitled children ($<$ 1 yrs old)	0.00	0	1	0.06	0.03	0.05	1,228
No. of entitled children (2-4 yrs old)	0.07	0	2	0.28	0.26	0.20	1,228
No. of entitled children (5-7 yrs old)	0.14	0	2	0.36	0.24	0.29	1,228
No. of entitled children (8-10 yrs old)	0.20	0	2	0.42	0.27	0.34	1,228
No. of entitled children (11-12 yrs old)	0.17	0	2	0.38	0.22	0.34	1,228
No. of entitled children (13-15 yrs old)	0.28	0	2	0.46	0.29	0.38	1,228
No. of entitled children (16-18 yrs old)	0.30	0	2	0.48	0.29	0.40	1,228
No. of entitled children (19-20 yrs old)	0.20	0	2	0.40	0.31	0.32	1,228
Child support obligation *Obl*	282.26	0	826.07	189.80	161.52	92.65	1,228
Instrument for child support obligation *Obl_IV*	272.23	0	879.13	199.75	186.00	62.46	1,228
Recourse rate (proxy for enforcement)	0.21	0.10	0.36	0.06	0.06	0.02	1,228
(Re)marriage (1=married;0=otherwise)	0.19	0	1	0.39	0.33	0.18	1,228
	Panel B: Non-resident parents with CASMIN > 5						
Survey year	2007.76	2001	2013	3.32	2.77	2.24	436
Gender (1=female; 0=male)	0.05	0	1	0.21	0.22	0	436
Individual's age	44.63	24	84	8.14	8.21	2.24	436
Highest educational attainment (CASMIN)	7.89	6	9	0.98	0.98	0.14	436
Living in East Germany (1=yes;0=no)	0.25	0	1	0.43	0.43	0	436
Migration background (1=yes;0=no)	0.17	0	1	0.38	0.39	0	436
No. of children in household ($<$ 1 yrs old)	0.03	0	1	0.16	0.07	0.14	436
No. of children in household (2-4 yrs old)	0.04	0	1	0.20	0.12	0.16	436
No. of children in household (5-7 yrs old)	0.03	0	1	0.17	0.12	0.12	436
No. of children in household (8-10 yrs old)	0.02	0	1	0.14	0.06	0.12	436
No. of children in household (11-12 yrs old)	0.03	0	2	0.19	0.08	0.17	436
No. of children in household (13-15 yrs old)	0.07	0	3	0.31	0.18	0.25	436
No. of children in household (16-18 yrs old)	0.04	0	1	0.19	0.11	0.15	436
Partner's age	39.21	23	57	8.04	8.16	2.05	131
Partner's CASMIN	5.49	2	9	1.65	1.80	0	100
No. of entitled children (0-17 yrs old)	1.05	0	2	0.62	0.55	0.37	436
No. of entitled children (0-20 yrs old)	1.30	1	2	0.46	0.42	0.19	436
No. of entitled children ($<$ 1 yrs old)	0.00	0	1	0.05	0.01	0.05	436
No. of entitled children (2-4 yrs old)	0.07	0	2	0.27	0.24	0.19	436
No. of entitled children (5-7 yrs old)	0.16	0	2	0.38	0.29	0.27	436
No. of entitled children (8-10 yrs old)	0.21	0	2	0.43	0.32	0.33	436
No. of entitled children (11-12 yrs old)	0.17	0	1	0.37	0.18	0.33	436
No. of entitled children (13-15 yrs old)	0.26	0	2	0.47	0.30	0.39	436
No. of entitled children (16-18 yrs old)	0.26	0	2	0.47	0.31	0.38	436
No. of entitled children (19-20 yrs old)	0.17	0	2	0.39	0.32	0.29	436
Child support obligation *Obl*	363.90	0	1,084.38	208.56	193.65	93.59	436
Instrument for child support obligation *Obl_IV*	352.70	0	1,084.38	220.26	211.12	75.42	436
Recourse rate (proxy for enforcement)	0.20	0.11	0.36	0.06	0.05	0.02	436
(Re)marriage (1=married;0=otherwise)	0.19	0	1	0.40	0.30	0.23	436

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.14: FE-IV (2SLS) regressions for (re)marriage, after the *2001 Law on the Proscription of Violence in Upbringing and Modification of Child Support*

	(Re)marriage (1 = married after separation; 0 = otherwise)									
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
Child support *Obl*	0.0048***	0.0048**	0.0048**	0.0048**	0.0048**	0.0043**	0.0048**	0.0044**	0.0048**	0.0044**
	(0.0018)	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0017)	(0.0019)	(0.0017)	(0.0019)	(0.0017)
Year fixed effects	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
Education (CASMIN)	no	no	yes	yes	yes	yes	yes	yes	yes	yes
Recourse rate	no	no	no	yes	yes	yes	yes	yes	yes	yes
Employed (1=no;0=yes)	no	no	no	no	yes	no	no	yes	yes	yes
Real allowable net income	no	no	no	no	yes	no	no	yes	yes	yes
New children living in the hh	no	no	no	no	no	yes	no	yes	no	yes
Living in East Germany	no	no	no	no	no	no	yes	no	yes	yes
Mean, dependent var.	0.1911	0.1911	0.1911	0.1911	0.1858	0.1911	0.1911	0.1858	0.1858	0.1858
Fst. stage coef.	0.740***	0.719***	0.719***	0.718***	0.725***	0.717***	0.722***	0.725***	0.727***	0.727***
Fst. stage F-stat.	129.98***	111.73***	111.53***	111.76***	131.54***	110.68***	111.93***	130.13***	130.91***	129.11***
Fst. stage t-stat.	11.40	10.57	10.56	10.57	11.47	10.52	10.58	11.41	11.44	11.36
Underidentification tests	H_0: equation is underidentified; H_a: identified									
Kleibergen-Paap rk LM stat.	47.00***	43.24***	43.25***	43.33***	44.99***	43.43***	43.29***	45.09***	44.90***	44.99***
	H_0: endogenous regressor *Obl* is unidentified									
Sanderson-Windmeijer fst. stage χ^2	130.58***	112.98***	112.85***	113.15***	133.37***	112.54***	113.39***	132.51***	132.81***	131.55***
Weak-instrument-robust inference	H_0: coef. of endogenous regressor *Obl* in the main equation is zero									
Anderson-Rubin Wald test F-stat.	7.43***	6.67**	6.69**	6.70**	6.82***	6.66**	6.87***	6.90***	6.94***	7.07***
Anderson-Rubin Wald test χ^2	7.46***	6.75***	6.77***	6.78***	6.91***	6.77***	6.96***	7.02***	7.04***	7.21***
Stock-Wright LM S stat. χ^2	7.96***	10.09***	10.12***	10.16***	10.73***	13.45***	10.34***	14.61***	10.86***	14.88***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous									
Endogeneity test stat. χ^2	4.164**	3.978**	3.942**	3.944**	5.275**	3.919**	4.347**	5.633**	5.628**	6.259**
N	1,664	1,664	1,664	1,664	1,636	1,664	1,664	1,636	1,636	1,636
Av. obs per parent	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Non-resident parents	300	300	300	300	298	300	300	298	298	298

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Control variables include the individual's age as a second order polynomial, highest educational attainment (CASMIN-classification) and year fixed effects. New children living in the household means the number of minor children in each age group (0-1, ..., 16-18 years old) in individual's household who are not entitled to child support from this individual. The recourse rate is the ratio of total government expenditure to the repayments of maintenance debtors at the federal state level. This measure is available for 1995 and since 2000 for all federal states. Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.15: FE regressions for (re)marriage, after the *2001 Law on the Proscription of Violence in Upbringing and Modification of Child Support*

	(Re)marriage (1 = married after separation; 0 = otherwise)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	Panel A: All non-resident parents					
Child support *Obl*	0.0018**	0.0012	0.0010	0.0009	0.0010	0.0011
	(0.0009)	(0.0008)	(0.0008)	(0.0007)	(0.0007)	(0.0007)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	yes	yes
Work experience	no	no	no	no	no	yes
Mean, dep. var.	0.1911	0.1911	0.1911	0.1805	0.1805	0.1805
N	1,664	1,664	1,664	1,529	1,529	1,529
Av. obs per parent	5.5	5.5	5.5	5.5	5.5	5.5
Non-resident parents	300	300	300	280	280	280
Adj. R^2	0.1237	0.1375	0.1418	0.2348	0.2345	0.2351
	Panel B: More educated parents					
Child support *Obl*	0.0024	0.0013	0.0013	-0.0007	-0.0006	-0.0006
	(0.0021)	(0.0019)	(0.0018)	(0.0016)	(0.0017)	(0.0016)
Control variables	no	yes	yes	yes	yes	yes
No. of non-resident children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	yes	yes
Work experience	no	no	no	no	no	yes
Mean, dep. var.	0.1950	0.1950	0.1950	0.1811	0.1811	0.1811
N	436	436	436	381	381	381
Av. obs per parent	5.6	5.6	5.6	5.3	5.3	5.3
Non-resident parents	78	78	78	72	72	72
Adj. R^2	0.1876	0.21763	0.2166	0.40783	0.4092	0.4092

Notes: Standard errors are clustered at individual level. Singletons are excluded. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification), youngest non-resident child's age as a second order polynomial and recourse rate. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN $>$ 5, less educated as CASMIN $\leqslant$ 5.
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

A.2.3 New children

Table A.2.16: Descriptive statistics, sample used in Tables A.2.17, A.2.19, and A.2.20

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
Survey year	2003.05	1985	2013	6.73	6.33	3.06	2,586
Gender (1=female; 0=male)	0.03	0	1	0.16	0.20	0	2,586
Individual's age	41.91	22	84	7.98	7.81	3.06	2,586
Highest educational attainment (CASMIN)	4.55	1	9	2.14	2.12	0.23	2,586
Living in East Germany (1=yes;0=no)	0.19	0	1	0.39	0.40	0.06	2,586
Migration background (1=yes;0=no)	0.17	0	1	8.57	8.12	3.50	2,586
Labor force participation (1=yes;0=no)	0.86	0	1	0.35	0.29	0.22	2,586
Full-time employed (1=yes;0=no)	0.83	0	1	0.38	0.32	0.23	2,586
Experience in full-time employment (in yrs)	19.09	0	44	8.27	8.33	2.66	2,586
Experience in part-time employment (in yrs)	0.43	0	16.8	1.47	1.69	0.29	2,586
No. of children in household (< 1 yrs old)	0.03	0	2	0.18	0.08	0.16	2,586
No. of children in household (2-4 yrs old)	0.06	0	2	0.26	0.13	0.21	2,586
No. of children in household (5-7 yrs old)	0.05	0	2	0.23	0.12	0.19	2,586
No. of children in household (8-10 yrs old)	0.04	0	2	0.20	0.11	0.17	2,586
No. of children in household (11-12 yrs old)	0.03	0	2	0.18	0.10	0.15	2,586
No. of children in household (13-15 yrs old)	0.04	0	3	0.22	0.14	0.18	2,586
No. of children in household (16-18 yrs old)	0.04	0	2	0.19	0.10	0.16	2,586
No. of children in household (0-18 yrs old)	0.28	0	4	0.63	0.44	0.42	2,586
Having minor children in household	0.20	0	1	0.40	0.28	0.27	2,586
Partner's age	36.36	18	64	8.57	8.12	3.50	973
Partner's CASMIN	4.40	1	9	1.72	1.84	0.38	799
No. of entitled children (0-17 yrs old)	1.08	0	2	0.63	0.56	0.42	2,586
No. of entitled children (0-20 yrs old)	1.33	1	2	0.47	0.43	0.22	2,586
No. of entitled children (< 1 yrs old)	0.00	0	2	0.07	0.04	0.06	2,586
No. of entitled children (2-4 yrs old)	0.08	0	2	0.29	0.26	0.22	2,586
No. of entitled children (5-7 yrs old)	0.17	0	2	0.40	0.29	0.33	2,586
No. of entitled children (8-10 yrs old)	0.22	0	2	0.43	0.28	0.37	2,586
No. of entitled children (11-12 yrs old)	0.17	0	2	0.38	0.21	0.35	2,586
No. of entitled children (13-15 yrs old)	0.26	0	2	0.46	0.28	0.39	2,586
No. of entitled children (16-18 yrs old)	0.26	0	2	0.45	0.28	0.39	2,586
No. of entitled children (19-20 yrs old)	0.16	0	2	0.37	0.27	0.31	2,586
Child support obligation *Obl*	284.59	0	1,084.38	185.23	165.99	90.24	2,586
Instrument for child support obligation *Obl_IV*	273.39	0	1,084.38	194.00	185.39	63.09	2,586
Recourse rate (proxy for enforcement)	0.21	0.04	0.36	0.06	0.05	0.03	2,096
(Re)marriage (1=married; 0=otherwise)	0.21	0	1	0.41	0.30	0.25	2,459
No. of new bio children	0.15	0	3	0.47	0.28	0.29	2,586
New bio children (1=yes:0=no)	0.11	0	1	0.31	0.19	0.19	2,586
Self-reported child support	332.81	27.58	1386.92	186.88	178.51	97.62	1,080
Reporting to pay $\geqslant$ obligation (1=yes;0=no)	0.53	0	1	0.50	0.39	0.38	1,080

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.17: FE-IV (2SLS) regressions for number of minor children living in the household post-separation

	Number of minor children in the household				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	-0.0026	-0.0055*	-0.0058*	-0.0076**	-0.0079**
	(0.0029)	(0.0031)	(0.0031)	(0.0031)	(0.0032)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.2769	0.2769	0.2769	0.2651	0.2670
Fst. stage coef.	0.725***	0.706***	0.701***	0.695***	0.684***
Fst. stage F-stat.	180.67***	170.42***	156.54***	133.45***	118.49***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	58.33***	60.02***	58.50***	53.82***	50.46***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	183.19***	172.93***	158.91***	135.84***	120.77***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	0.77	3.09*	3.50*	5.99**	6.01**
AR Wald test χ^2	0.78	3.14*	3.55*	6.09**	6.12**
SW LM S stat. χ^2	1.19	5.10**	6.25**	14.23***	15.46***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.897	2.596	2.860*	4.756**	4.948**
N	2,586	2,586	2,586	2,358	2,247
Av. obs per parent	6.7	6.7	6.7	6.5	6.3
Non-resident parents	388	388	388	363	354
	Panel B: Less educated parents				
Child support *Obl*	-0.0042	-0.0069	-0.0072*	-0.0094**	-0.0098**
	(0.0044)	(0.0044)	(0.0043)	(0.0040)	(0.0040)
Control variables	no	yes	yes	yes	yes
No. of non-resident children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.2928	0.2928	0.2928	0.2867	0.2862
Fst. stage coef.	0.650***	0.635***	0.633***	0.641***	0.632***
Fst. stage F-stat.	86.40***	84.13***	77.50***	72.05***	65.99***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	39.72***	40.04***	38.73***	37.18***	35.52***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	87.98***	85.75***	79.03***	73.73***	67.63***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	0.92	2.34	2.60	4.92**	5.41**
AR Wald test χ^2	0.93	2.38	2.65	5.03**	5.54**
SW LM S stat. χ^2	1.51	4.16**	4.59**	11.25***	13.09***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.538	1.458	1.624	3.694*	4.017**
N	1,991	1,991	1,991	1,821	1,747
Av. obs per parent	6.7	6.7	6.7	6.6	6.4
Non-resident parents	299	299	299	278	272

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.18: FE-IV (2SLS) regressions for the likelihood to have minor children in the household post-separation

	Minor children living in the household (1 = yes; 0 = no)				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	-0.0007	-0.0027	-0.0027	-0.0033*	-0.0031*
	(0.0020)	(0.0021)	(0.0021)	(0.0017)	(0.0018)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.1953	0.1953	0.1953	0.1841	0.1829
Fst. stage coef.	0.725***	0.706***	0.701***	0.695***	0.684***
Fst. stage F-stat.	180.67***	170.42***	156.54***	133.45***	118.49***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	58.33***	60.02***	58.50***	53.82***	50.46***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	183.19***	172.93***	158.91***	135.84***	120.77***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	0.12	1.68	1.64	3.21*	2.81*
AR Wald test χ^2	0.12	1.70	1.67	3.26*	2.86*
SW LM S stat. χ^2	0.16	2.28	2.22	5.76**	6.08**
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.051	1.062	1.056	1.476	1.179
N	2,586	2,586	2,586	2,358	2,247
Av. obs per parent	6.7	6.7	6.7	6.5	6.3
Non-resident parents	388	388	388	363	354
	Panel B: Less educated parents				
Child support *Obl*	-0.0015	-0.0033	-0.0034	-0.0042*	-0.0039*
	(0.0030)	(0.0030)	(0.0030)	(0.0023)	(0.0022)
Control variables	no	yes	yes	yes	yes
No. of non-resident children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.2029	0.2029	0.2029	0.1977	0.1946
Fst. stage coef.	0.650***	0.635***	0.633***	0.641***	0.632***
Fst. stage F-stat.	86.40***	84.13***	77.50***	72.05***	65.99***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	39.72***	40.04***	38.73***	37.18***	35.52***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	87.98***	85.75***	79.03***	73.73***	67.63***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	0.25	1.20	1.19	2.89*	2.73*
AR Wald test χ^2	0.26	1.22	1.22	2.96*	2.80*
SW LM S stat. χ^2	0.35	1.74	1.73	6.11**	7.49***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.004	0.342	0.349	1.011	0.762
N	1,991	1,991	1,991	1,821	1,747
Av. obs per parent	6.7	6.7	6.7	6.6	6.4
Non-resident parents	299	299	299	278	272

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.19: FE-IV (2SLS) regressions for the number of new biological children post-separation

	Number of new biological children				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	-0.0039*	-0.0054**	-0.0060***	-0.0067***	-0.0071***
	(0.0020)	(0.0022)	(0.0022)	(0.0024)	(0.0025)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.1489	0.1489	0.1489	0.1472	0.1531
Fst. stage coef.	0.725***	0.706***	0.701***	0.695***	0.684***
Fst. stage F-stat.	180.67***	170.42***	156.54***	133.45***	118.49***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	58.33***	60.02***	58.50***	53.82***	50.46***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	183.19***	172.93***	158.91***	135.84***	120.77***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	3.81*	6.34**	7.72***	8.06***	8.36***
AR Wald test χ^2	3.87**	6.43**	7.84***	8.20***	8.52***
SW LM S stat. χ^2	7.42***	13.31***	18.05***	20.94***	26.54***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	3.567*	4.874**	5.939**	5.904**	6.100**
N	2,586	2,586	2,586	2,358	2,247
Av. obs per parent	6.7	6.7	6.7	6.5	6.3
Non-resident parents	388	388	388	363	354
	Panel B: Less educated parents				
Child support *Obl*	-0.0072**	-0.0081***	-0.0088***	-0.0089***	-0.0094***
	(0.0030)	(0.0031)	(0.0031)	(0.0032)	(0.0032)
Control variables	no	yes	yes	yes	yes
No. of non-resident children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.1547	0.1547	0.1547	0.15211	0.1568
Fst. stage coef.	0.650***	0.635***	0.633***	0.641***	0.632***
Fst. stage F-stat.	86.40***	84.13***	77.50***	72.05***	65.99***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	39.72***	40.04***	38.73***	37.18***	35.52***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	87.98***	85.75***	79.03***	73.73***	67.63***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	5.84**	7.02***	8.18***	7.82***	8.46***
AR Wald test χ^2	5.95**	7.16***	8.34***	8.00***	8.67***
SW LM S stat. χ^2	11.42***	13.80***	17.43***	20.29***	27.36***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	4.934**	5.353**	6.376**	6.158**	6.455**
N	1,991	1,991	1,991	1,821	1,747
Av. obs per parent	6.7	6.7	6.7	6.6	6.4
Non-resident parents	299	299	299	278	272

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.20: FE-IV (2SLS) regressions for having new biological children

	New biological children (1 = yes; 0 = no)				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
	Panel A: All non-resident parents				
Child support *Obl*	-0.0012	-0.0024*	-0.0027*	-0.0027*	-0.0029*
	(0.0013)	(0.0014)	(0.0014)	(0.0014)	(0.0015)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.1071	0.1071	0.1071	0.1069	0.1108
Fst. stage coef.	0.725***	0.706***	0.701***	0.695***	0.684***
Fst. stage F-stat.	180.67***	170.42***	156.54***	133.45***	118.49***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	58.33***	60.02***	58.50***	53.82***	50.46***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	183.19***	172.93***	158.91***	135.84***	120.77***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	0.66	2.80*	3.67*	3.57*	3.70*
AR Wald test χ^2	0.67	2.84*	3.73*	3.64*	3.78*
SW LM S stat. χ^2	1.18	5.19**	6.89***	7.78***	10.64***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	0.877	2.349	2.921*	2.380	2.303
N	2,586	2,586	2,586	2,358	2,247
Av. obs per parent	6.7	6.7	6.7	6.5	6.3
Non-resident parents	388	388	388	363	354
	Panel B: Less educated parents				
Child support *Obl*	-0.0023	-0.0038*	-0.0042**	-0.0037*	-0.0039*
	(0.0020)	(0.0021)	(0.0021)	(0.0019)	(0.0020)
Control variables	no	yes	yes	yes	yes
No. of non-resident children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.1085	0.1085	0.1085	0.1076	0.1105
Fst. stage coef.	0.650***	0.635***	0.633***	0.641***	0.632***
Fst. stage F-stat.	86.40***	84.13***	77.50***	72.05***	65.99***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	39.72***	40.04***	38.73***	37.18***	35.52***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	87.98***	85.75***	79.03***	73.73***	67.63***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	2.11	3.45*	4.21**	3.53*	3.77*
AR Wald test χ^2	2.14	3.51*	4.29**	3.61*	3.87**
SW LM S stat. χ^2	3.98	6.63**	8.07***	8.74***	11.63***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	1.751	2.608	3.152*	2.536	2.452
N	1,991	1,991	1,991	1,821	1,747
Av. obs per parent	6.7	6.7	6.7	6.6	6.4
Non-resident parents	299	299	299	278	272

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). More educated is defined as having a CASMIN > 5, less educated as CASMIN $\leqslant 5$. SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.21: Descriptive statistics for non-resident parents younger than 50 years old, sample used in Table 3.4

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
	Panel A: All non-resident parents						
Survey year	2002.74	1985	2013	6.81	6.53	2.97	2,224
Gender (1=female; 0=male)	0.03	0	1	0.17	0.21	0	2,224
Individual's age	39.75	22	50	6.07	6.03	2.97	2,224
Highest educational attainment (CASMIN)	4.42	1	9	2.06	2.08	0.23	2,224
Living in East Germany (1=yes;0=no)	0.20	0	1	0.40	0.40	0.06	2,224
Migration background (1=yes;0=no)	0.17	0	1	0.38	0.39	0	2,224
Labor force participation (1=yes;0=no)	0.87	0	1	0.34	0.27	0.22	2,224
Full-time employed (1=yes;0=no)	0.84	0	1	0.36	0.31	0.23	2,224
Experience in full-time employment (in yrs)	17.09	0	35.4	6.84	7.00	2.64	2,224
No. of children in household (< 1 yrs old)	0.03	0	2	0.19	0.08	0.17	2,224
No. of children in household (2-4 yrs old)	0.07	0	2	0.27	0.13	0.22	2,224
No. of children in household (5-7 yrs old)	0.06	0	2	0.24	0.13	0.20	2,224
No. of children in household (8-10 yrs old)	0.04	0	2	0.21	0.11	0.18	2,224
No. of children in household (11-12 yrs old)	0.03	0	2	0.18	0.11	0.16	2,224
No. of children in household (13-15 yrs old)	0.05	0	3	0.23	0.13	0.19	2,224
No. of children in household (16-18 yrs old)	0.04	0	2	0.20	0.10	0.16	2,224
Partner's age	35.31	18	64	7.73	7.55	3.19	885
Partner's CASMIN	4.34	1	9	1.64	1.79	0.37	740
No. of entitled children (0-17 yrs old)	1.13	0	2	0.61	0.56	0.38	2,224
No. of entitled children (0-20 yrs old)	1.34	1	2	0.47	0.45	0.18	2,224
No. of entitled children (< 1 yrs old)	0.00	0	2	0.07	0.04	0.06	2,224
No. of entitled children (2-4 yrs old)	0.09	0	2	0.30	0.28	0.23	2,224
No. of entitled children (5-7 yrs old)	0.19	0	2	0.41	0.31	0.33	2,224
No. of entitled children (8-10 yrs old)	0.24	0	2	0.45	0.28	0.38	2,224
No. of entitled children (11-12 yrs old)	0.18	0	2	0.39	0.22	0.35	2,224
No. of entitled children (13-15 yrs old)	0.27	0	2	0.46	0.29	0.39	2,224
No. of entitled children (16-18 yrs old)	0.24	0	2	0.44	0.29	0.37	2,224
No. of entitled children (19-20 yrs old)	0.13	0	2	0.34	0.24	0.29	2,224
Child support obligation *Obl*	279.32	0	861.23	179.58	164.51	88.13	2,224
Instrument for child support obligation *Obl_IV*	266.81	0	908.47	187.75	183.11	56.96	2,224
Recourse rate (proxy for enforcement)	0.21	0.04	0.36	0.06	0.06	0.03	1,775
(Re)marriage (1=married; 0=otherwise)	0.22	0	1	0.41	0.31	0.25	2,129
No. of new bio children	0.17	0	3	0.49	0.29	0.30	2,224
New bio children (1=yes:0=no)	0.12	0	1	0.32	0.20	0.20	2,224
	Panel B: Less educated parent						
Survey year	2002.13	1985	2013	6.80	6.58	3.01	1,780
Gender (1=female; 0=male)	0.2	0	1	0.15	0.20	0	1,780
Individual's age	39.48	22	50	6.15	6.17	3.01	1,780
Highest educational attainment (CASMIN)	3.55	1	5	1.12	1.14	0.22	1,780
Living in East Germany (1=yes;0=no)	0.19	0	1	0.39	0.40	0.06	1,780
Migration background (1=yes;0=no)	0.17	0	1	0.37	0.39	0	1,780
Labor force participation (1=yes;0=no)	0.85	0	1	0.36	0.28	0.24	1,780
Full-time employed (1=yes;0=no)	0.83	0	1	0.38	0.31	0.24	1,780
Experience in full-time employment (in yrs)	17.52	0.20	35.40	6.91	7.07	2.63	1,780
No. of children in household (< 1 yrs old)	0.03	0	2	0.19	0.08	0.17	1,780
No. of children in household (2-4 yrs old)	0.07	0	2	0.28	0.14	0.23	1,780
No. of children in household (5-7 yrs old)	0.06	0	2	0.25	0.14	0.21	1,780
No. of children in household (8-10 yrs old)	0.05	0	2	0.23	0.13	0.19	1,780
No. of children in household (11-12 yrs old)	0.03	0	2	0.19	0.11	0.15	1,780
No. of children in household (13-15 yrs old)	0.04	0	2	0.21	0.13	0.17	1,780
No. of children in household (16-18 yrs old)	0.04	0	2	0.20	0.11	0.17	1,780
Partner's age	35.33	18	64	7.96	7.75	3.21	752
Partner's CASMIN	4.14	1	9	1.59	1.78	0.40	633
No. of entitled children (0-17 yrs old)	1.14	0	2	0.62	0.57	0.39	1,780
No. of entitled children (0-20 yrs old)	1.35	1	2	0.48	0.46	0.19	1,780
No. of entitled children (< 1 yrs old)	0.00	0	2	0.07	0.05	0.05	1,780
No. of entitled children (2-4 yrs old)	0.09	0	2	0.30	0.29	0.22	1,780
No. of entitled children (5-7 yrs old)	0.18	0	2	0.41	0.30	0.34	1,780
No. of entitled children (8-10 yrs old)	0.24	0	2	0.45	0.27	0.39	1,780
No. of entitled children (11-12 yrs old)	0.18	0	2	0.39	0.23	0.36	1,780
No. of entitled children (13-15 yrs old)	0.27	0	2	0.46	0.29	0.39	1,780
No. of entitled children (16-18 yrs old)	0.25	0	2	0.45	0.28	0.38	1,780
No. of entitled children (19-20 yrs old)	0.13	0	2	0.34	0.22	0.30	1,780
Child support obligation *Obl*	265.63	0	826.07	173.21	153.77	88.21	1,780
Instrument for child support obligation *Obl_IV*	255.06	0	879.13	183.15	175.74	55.59	1,780
Recourse rate (proxy for enforcement)	0.21	0.06	0.36	0.06	0.06	0.03	1,401
(Re)marriage (1=married; 0=otherwise)	0.23	0	1	0.42	0.32	0.25	1,697
No. of new bio children	0.17	0	3	0.51	0.31	0.31	1,780
New bio children (1=yes:0=no)	0.12	0	1	0.32	0.20	0.20	1,780

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.22: Descriptive statistics for non-resident parents younger than 45 years old, sample used in Table A.2.23

	Mean	Min	Max	Standard deviations			N
				Overall	Between	Within	
	Panel A: Parents with CASMIN $\leqslant 5$						
	2001.64	1985	2013	6.74	6.57	2.77	1,452
Gender (1=female; 0=male)	0.01	0	1	0.11	0.14	0	1,452
Individual's age	37.66	22	45	5.29	5.18	2.77	1,452
Highest educational attainment (CASMIN)	3.58	1	5	1.21	1.15	0.22	1,452
Living in East Germany (1=yes;0=no)	0.19	0	1	0.39	0.40	0.07	1,452
Migration background (1=yes;0=no)	0.18	0	1	0.38	0.39	0	1,452
Labor force participation (1=yes;0=no)	0.85	0	1	0.36	0.27	0.24	1,452
Full-time employed (1=yes;0=no)	0.83	0	1	0.38	0.30	0.24	1,452
Experience in full-time employment (in yrs)	15.86	0.20	30.30	6.08	6.03	2.40	1,452
No. of children in household (< 1 yrs old)	0.04	0	2	0.20	0.09	0.18	1,452
No. of children in household (2-4 yrs old)	0.08	0	2	0.30	0.15	0.23	1,452
No. of children in household (5-7 yrs old)	0.07	0	2	0.27	0.15	0.23	1,452
No. of children in household (8-10 yrs old)	0.05	0	2	0.23	0.15	0.19	1,452
No. of children in household (11-12 yrs old)	0.04	0	2	0.19	0.12	0.15	1,452
No. of children in household (13-15 yrs old)	0.05	0	2	0.22	0.15	0.17	1,452
No. of children in household (16-18 yrs old)	0.04	0	2	0.21	0.13	0.17	1,452
Partner's age	33.90	18	60	7.24	7.25	2.90	636
Partner's CASMIN	4.17	1	9	1.63	1.79	0.42	547
No. of entitled children (0-17 yrs old)	1.22	0	2	0.58	0.54	0.30	1,452
No. of entitled children (0-20 yrs old)	1.36	1	2	0.48	0.48	0.13	1,452
No. of entitled children (< 1 yrs old)	0.00	0	2	0.07	0.05	0.06	1,452
No. of entitled children (2-4 yrs old)	0.11	0	2	0.33	0.31	0.24	1,452
No. of entitled children (5-7 yrs old)	0.22	0	2	0.44	0.32	0.36	1,452
No. of entitled children (8-10 yrs old)	0.27	0	2	0.47	0.29	0.41	1,452
No. of entitled children (11-12 yrs old)	0.20	0	2	0.41	0.26	0.36	1,452
No. of entitled children (13-15 yrs old)	0.27	0	2	0.46	0.31	0.39	1,452
No. of entitled children (16-18 yrs old)	0.20	0	2	0.41	0.26	0.34	1,452
No. of entitled children (19-20 yrs old)	0.08	0	2	0.28	0.18	0.24	1,452
Child support obligation *Obl*	258.84	0	826.07	169.60	153.90	84.83	1,452
Instrument for child support obligation *Obl_IV*	246.25	0	852.83	181.90	178.51	47.65	1,452
Recourse rate (proxy for enforcement)	0.21	0.06	0.36	0.06	0.06	0.03	1,133
(Re)marriage (1=married; 0=otherwise)	0.23	0	1	0.42	0.33	0.25	1,379
No. of new bio children	0.19	0	3	0.53	0.33	0.34	1,452
New bio children (1=yes;0=no)	0.13	0	1	0.34	0.21	0.22	1,452
	Panel B: Parents with CASMIN $\leqslant 3$						
Survey year	2000.23	1985	2013	7.09	7.09	2.95	898
Gender (1=female; 0=male)	0.00	0	1	0.07	0.08	0	898
Individual's age	37.62	22	45	5.39	5.41	2.95	898
Highest educational attainment (CASMIN)	2.77	1	3	0.48	0.51	0.14	898
Living in East Germany (1=yes;0=no)	0.05	0	1	0.23	0.25	0.05	898
Migration background (1=yes;0=no)	0.23	0	1	0.42	0.42	0	898
Labor force participation (1=yes;0=no)	0.86	0	1	0.34	0.25	0.24	898
Full-time employed (1=yes;0=no)	0.85	0	1	0.36	0.27	0.24	898
Experience in full-time employment (in yrs)	16.36	0.2	30.3	6.20	6.25	2.55	898
No. of children in household (< 1 yrs old)	0.05	0	2	0.21	0.10	0.19	898
No. of children in household (2-4 yrs old)	0.08	0	2	0.31	0.14	0.26	898
No. of children in household (5-7 yrs old)	0.07	0	2	0.26	0.15	0.22	898
No. of children in household (8-10 yrs old)	0.04	0	2	0.22	0.11	0.18	898
No. of children in household (11-12 yrs old)	0.03	0	1	0.16	0.08	0.14	898
No. of children in household (13-15 yrs old)	0.04	0	2	0.21	0.11	0.17	898
No. of children in household (16-18 yrs old)	0.05	0	2	0.24	0.15	0.19	898
Partner's age	33.85	18	51	7.00	6.67	3.10	400
Partner's CASMIN	3.71	1	9	1.48	1.46	0.39	340
No. of entitled children (0-17 yrs old)	1.24	0	2	0.57	0.52	0.31	898
No. of entitled children (0-20 yrs old)	1.38	1	2	0.48	0.49	0.12	898
No. of entitled children (< 1 yrs old)	0.00	0	1	0.06	0.03	0.05	898
No. of entitled children (2-4 yrs old)	0.12	0	2	0.35	0.36	0.24	898
No. of entitled children (5-7 yrs old)	0.22	0	2	0.45	0.34	0.37	898
No. of entitled children (8-10 yrs old)	0.27	0	2	0.47	0.28	0.41	898
No. of entitled children (11-12 yrs old)	0.19	0	2	0.40	0.24	0.36	898
No. of entitled children (13-15 yrs old)	0.28	0	2	0.48	0.32	0.40	898
No. of entitled children (16-18 yrs old)	0.20	0	2	0.41	0.23	0.35	898
No. of entitled children (19-20 yrs old)	0.08	0	1	0.27	0.15	0.24	898
Child support obligation	274.13	0	826.07	173.59	157.86	83.88	898
Instrument for *Obl*	259.03	0	852.83	189.62	185.43	46.65	898
Recourse rate (proxy for enforcement)	0.21	0.07	0.36	0.06	0.05	0.03	669
(Re)marriage (1=married; 0=otherwise)	0.29	0	1	0.45	0.36	0.26	836
No. of new bio children	0.21	0	3	0.56	0.35	0.37	898
New bio children (1=yes;0=no)	0.14	0	1	0.35	0.22	0.24	898

Notes: All sums of money are in year 2000 real €. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).

Table A.2.23: FE-IV (2SLS) regressions for having new biological children, non-resident parents younger than 45 years old

	New biological children (1 = yes; 0 = no)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	Panel A: Parents with CASMIN $\leqslant$ 5					
Child support *Obl*	-0.0089**	-0.0102**	-0.0106**	-0.0088**	-0.0095**	-0.0095**
	(0.0044)	(0.0046)	(0.0046)	(0.0034)	(0.0037)	(0.0037)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.1322	0.1322	0.1322	0.1285	0.1323	0.1323
Fst. stage coef.	0.526***	0.521***	0.521***	0.557***	0.528***	0.5296***
Fst. stage F-stat.	35.56***	35.76***	34.43***	39.53***	32.54***	33.70***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	20.28***	19.67***	19.47***	20.33***	18.52***	18.82***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	36.44***	36.70***	35.35***	40.78***	33.64***	34.86***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	4.81**	5.96**	6.49**	6.75**	6.95***	6.92***
AR Wald test χ^2	4.92**	6.11**	6.67***	6.97***	7.18***	7.16***
SW LM S stat. χ^2	7.90***	9.14***	10.00***	12.51***	16.83***	17.17***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	4.640**	5.524**	5.921**	6.617**	6.969***	6.891***
N	1,452	1,452	1,452	1,339	1,277	1,277
Av. obs per parent	6.1	6.1	6.1	6.1	5.9	5.9
Non-resident parents	237	237	237	221	217	217
	Panel B: Parents with CASMIN $\leqslant$ 3					
Child support *Obl*	-0.0132**	-0.0169**	-0.0174**	-0.0122**	-0.0149**	-0.0153**
	(0.0060)	(0.0076)	(0.0075)	(0.0050)	(0.0062)	(0.0064)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.1448	0.1448	0.1448	0.13664	0.1418	0.1418
Fst. stage coef.	0.588***	0.535***	0.531***	0.586***	0.535***	0.5250***
Fst. stage F-stat.	32.09***	24.13***	23.03***	31.32***	22.01***	22.41***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	14.38***	13.20***	12.98***	13.79***	12.22***	12.31***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	33.40***	25.17***	24.06***	32.96***	23.27***	23.73***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	6.41**	7.71***	8.57***	6.55**	6.81**	6.88***
AR Wald test χ^2	6.68***	8.04***	8.95***	6.90***	7.20***	7.28***
SW LM S stat. χ^2	12.44***	14.23***	15.51***	16.86***	18.43***	20.55***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	6.070**	6.660***	7.050***	6.689***	6.574**	6.572**
N	898	898	898	827	776	776
Av. obs per parent	6.5	6.5	6.5	6.4	6.2	6.2
Non-resident parents	139	139	139	129	126	126

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.2.4 Hours invested in childcare

Table A.2.24: FE and FE-IV regressions for parents' hours spent on childcare, without minor children in the household

	Hours spent on childcare on an average weekday					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	Panel A: FE models					
Child support *Obl*	-0.0025	-0.0031	-0.0031	-0.0030	-0.0026	-0.0022
	(0.0025)	(0.0025)	(0.0025)	(0.0028)	(0.0028)	(0.0029)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.3215	0.3215	0.3215	0.3248	0.3213	0.3213
N	1,835	1,835	1,835	1,709	1,634	1,634
Av. obs per parent	5.3	5.3	5.3	5.3	5.3	5.3
Non-resident parents	343	343	343	321	310	310
$Adj.\ R^2$	0.01654	0.01724	0.01670	0.01740	0.01011	0.01056
	Panel B: FE-IV models					
Child support *Obl*	-0.0019	-0.0038	-0.0038	-0.0045	-0.0039	-0.0043
	(0.0046)	(0.0050)	(0.0050)	(0.0055)	(0.0055)	(0.0054)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.3215	0.3215	0.3215	0.3248	0.3213	0.3213
Fst. stage coef.	0.743^{***}	0.724^{***}	0.719	0.709^{***}	0.707^{***}	0.721^{***}
Fst. stage F-stat.	177.93^{***}	174.96^{***}	166.76^{***}	149.16^{***}	139.79^{***}	148.30^{***}
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	45.97^{***}	48.06^{***}	47.25^{***}	44.35^{***}	42.63^{***}	43.77^{***}
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	181.31^{***}	178.49^{***}	170.22^{***}	152.76^{***}	143.41^{***}	152.23^{***}
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	0.18	0.57	0.56	0.67	0.52	0.63
AR Wald test χ^2	0.19	0.58	0.58	0.69	0.53	0.65
SW LM S stat. χ^2	0.32	1.05	1.02	1.25	0.95	1.16
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	0.024	0.031	0.032	0.116	0.091	0.229
N	1,835	1,835	1,835	1,709	1,634	1,634
Av. obs per parent	5.3	5.3	5.3	5.3	5.3	5.3
Non-resident parents	343	343	343	321	310	310

Notes: Standard errors are clustered at individual level. Singletons are excluded. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: $*$ 10%; $**$ 5%; $***$ 1%; Data: SOEPlong v30

A.2.5 Labor supply

Table A.2.25: FE-IV (2SLS) regressions for the likelihood working full-time, non-resident parents younger than 56 years old

	Full-time employed (1 = yes; 0 = no)				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**
Child support *Obl*	-0.0017	-0.0015	-0.0015	-0.0013	-0.0011
	(0.0011)	(0.0012)	(0.0012)	(0.0013)	(0.0013)
Control variables	no	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes
Household category	no	no	no	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes
Mean, dep. var.	0.8425	0.8425	0.8425	0.8403	0.8361
Fst. stage coef.	0.723***	0.710***	0.708***	0.696***	0.687***
Fst. stage F-stat.	155.41***	156.58***	146.67***	121.99***	110.99***
Underid. tests	H_0: equation is underidentified; H_a: identified				
KP rk LM stat.	57.65***	59.21***	57.43***	53.40***	50.87***
	H_0: endogenous regressor *Obl* is unidentified				
SW fst. stage χ^2	157.69***	159.40***	149.38***	124.62***	113.54***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid				
AR Wald test F-stat.	2.66	1.77	1.77	1.10	0.66
AR Wald test χ^2	2.70	1.80	1.81	1.13	0.68
SW LM S stat. χ^2	3.44*	2.71*	2.80*	2.02	1.20
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous				
End. test stat. χ^2	22.853***	22.173***	21.726***	18.247***	16.522***
N	2,451	2,451	2,451	2,241	2,141
Av. obs per parent	6.5	6.5	6.5	6.3	6.2
Non-resident parents	377	377	377	353	344

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification), youngest non-resident child's age as a second order polynomial, and parent's age group ($\leqslant$ 25 years old, 26-30, ..., 51-55 years old). No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.2.6 Robustness checks for fertility

Table A.2.26: FE-IV (2SLS) regressions for having new children, parents younger than 50 years old, at least one non-resident child $\leqslant$ 17 years old

	New biological children (1=yes; 0=no)							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Child support *Obl*	-0.0070**	-0.0073**	-0.0076**	-0.0072**	-0.0072**	-0.0072**	-0.0087***	-0.0075**
	(0.0031)	(0.0032)	(0.0032)	(0.0027)	(0.0028)	(0.0028)	(0.0033)	(0.0030)
Control variables	no	yes	yes	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes	yes	yes
(Re)married (1=no;0=yes)	no	no	no	no	yes	yes	yes	yes
Full-time employed (1=no;0=yes)	no	no	no	no	no	yes	yes	yes
Work experience	no	no	no	no	no	no	yes	yes
Difference in incomes	no	no	no	no	no	no	no	yes
Mean, dependent variable	0.1143	0.1143	0.1143	0.1134	0.1165	0.1165	0.1165	0.0950
Fst. stage coefficient	0.537***	0.545***	0.549***	0.563***	0.544***	0.542***	0.491***	0.491***
Fst. stage F-stat.	35.27***	35.36***	33.47***	32.46***	28.23***	28.23***	18.78***	19.18***
Underidentification tests	H_0: equation is underidentified; H_a: identified							
Kleibergen-Paap rk LM stat.	19.78***	19.54***	19.09***	18.63***	16.96***	16.94***	13.04***	13.18***
	H_0: endogenous regressor *Obl* is unidentified							
Sanderson-Windmeijer fst. stage χ^2	36.10***	36.23***	34.33***	33.43***	29.14***	29.16***	19.42***	19.91***
Weak-instrument-robust inference	H_0: coef. of endogenous regressor *Obl* in the main equation is zero							
Anderson-Rubin Wald test F-stat.	5.50**	5.64**	6.33**	7.10***	6.88***	6.88***	8.60***	7.00***
Anderson-Rubin Wald test χ^2	5.63**	5.78**	6.49**	7.31***	7.10***	7.11***	8.89***	7.27***
Stock-Wright LM S stat. χ^2	7.49***	8.04***	9.14***	13.02***	15.30***	15.46***	18.24***	15.31***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous							
Endogeneity test stat. χ^2	5.063**	5.190**	5.856**	6.629**	6.562**	6.498**	7.338***	5.541**
N	1,531	1,531	1,531	1,411	1,348	1,348	1,348	1,232
Av. obs per parent	6.1	6.1	6.1	6.1	6.0	6.0	6.0	5.6
Non-resident parents	249	249	249	231	226	226	226	221

Notes: See Appendix Table A.2.27.

Table A.2.27: FE-IV (2SLS) regressions for having new children, parents younger than 50 years old, without years with self-employment

	New biological children (1=yes; 0=no)							
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Child support *Obl*	-0.0049**	-0.0057***	-0.0060***	-0.0052***	-0.0056***	-0.0055***	-0.0059***	-0.0048***
	(0.0020)	(0.0020)	(0.0020)	(0.0017)	(0.0017)	(0.0016)	(0.0017)	(0.0016)
Control variables	no	yes	yes	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes	yes	yes
(Re)married (1=no;0=yes)	no	no	no	no	yes	yes	yes	yes
Full-time employed (1=no;0=yes)	no	no	no	no	no	yes	yes	yes
Work experience	no	no	no	no	no	no	yes	yes
Difference in incomes	no	no	no	no	no	no	no	yes
Mean, dependent variable	0.1091	0.1091	0.1091	0.1066	0.1098	0.1098	0.1098	0.0916
Fst. stage coefficient	0.679***	0.667***	0.672***	0.694***	0.680***	0.687***	0.662***	0.670***
Fst. stage F-stat.	99.96***	102.25***	98.44***	100.08***	89.67***	94.00***	72.47***	74.49***
Underidentification tests	H_0: equation is underidentified; H_a: identified							
Kleibergen-Paap rk LM stat.	36.02***	35.68***	35.21***	34.77***	32.87***	33.52***	30.03***	31.01***
	H_0: endogenous regressor *Obl* is unidentified							
Sanderson-Windmeijer fst. stage χ^2	102.09***	104.54***	100.72***	102.80***	92.28***	96.80***	74.74***	77.06***
Weak-instrument-robust inference	H_0: coef. of endogenous regressor *Obl* in the main equation is zero							
Anderson-Rubin Wald test F-stat.	6.48**	8.19***	9.26***	8.91***	10.38***	10.37***	11.74***	8.58***
Anderson-Rubin Wald test χ^2	6.62**	8.37***	9.47***	9.15***	10.69***	10.68***	12.11***	8.88***
Stock-Wright LM S stat. χ^2	10.57***	12.60***	14.74***	16.41***	22.09***	22.39***	23.65***	21.72***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous							
Endogeneity test stat. χ^2	5.859**	6.933***	7.889***	7.244***	8.279***	8.445***	8.575***	6.344**
N	1,696	1,696	1,696	1,557	1,485	1,485	1,485	1,364
Av. obs per parent	6.4	6.4	6.4	6.3	6.1	6.1	6.1	5.7
Non-resident parents	267	267	267	247	242	242	242	238

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. Work experience includes years of full-time work as a second order polynomial. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9).
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

Table A.2.28: FE-IV (2SLS) regressions for having new biological children, non-resident parents with CASMIN $\leqslant$ 5, without residents of Bavaria

	New biological children (1 = yes; 0 = no)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
	Panel A: Parents younger than 50 years old					
Child support *Obl*	-0.0045**	-0.0050**	-0.0052**	-0.0048***	-0.0051***	-0.0051***
	(0.0022)	(0.0022)	(0.0022)	(0.0018)	(0.0018)	(0.0018)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.1251	0.1251	0.1251	0.1241	0.1271	0.1271
Fst. stage coef.	0.667***	0.655***	0.657***	0.669***	0.653***	0.654***
Fst. stage F-stat.	75.62***	77.45***	75.30***	74.12***	65.88***	66.49***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	31.00***	30.51***	30.10***	29.50***	27.87***	27.86***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	77.50***	79.49***	77.35***	76.51***	68.15***	68.84***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	4.27**	5.36**	5.78**	6.51**	7.13***	7.11***
AR Wald test χ^2	4.38**	5.50**	5.93**	6.72***	7.37***	7.36***
SW LM S stat. χ^2	7.49***	9.38***	10.01***	15.86***	21.52***	22.05***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	2.829*	3.465*	3.785*	4.737**	5.280**	5.224**
N	1,447	1,447	1,447	1,313	1,259	1,259
Av. obs per parent	6.3	6.3	6.3	6.2	6.1	6.1
Non-resident parents	229	229	229	211	208	208
	Panel B: Parents younger than 45 years old					
Child support *Obl*	-0.0078*	-0.0084*	-0.0086*	-0.0072**	-0.0079**	-0.0080**
	(0.0046)	(0.0046)	(0.0046)	(0.0032)	(0.0035)	(0.0036)
Control variables	no	yes	yes	yes	yes	yes
No. of children	no	no	yes	yes	yes	yes
Household category	no	no	no	yes	yes	yes
(Re)married (1=yes;0=no)	no	no	no	no	yes	yes
Full-time empl. (1=yes;0=no)	no	no	no	no	no	yes
Mean, dep. var.	0.1403	0.1403	0.1403	0.1364	0.1398	0.1398
Fst. stage coef.	0.535***	0.533***	0.535***	0.576***	0.541***	0.536***
Fst. stage F-stat.	30.03***	30.15***	29.53***	34.35***	27.80***	27.66***
Underid. tests	H_0: equation is underidentified; H_a: identified					
KP rk LM stat.	19.06***	18.54***	18.42***	20.16***	18.42***	18.12***
	H_0: endogenous regressor *Obl* is unidentified					
SW fst. stage χ^2	30.95***	31.12***	30.51***	35.70***	28.96***	28.85***
Weak-I-robust inf.	H_0: coef. of endogenous regressor *Obl* in the main equation is zero and orthogonality conditions are valid					
AR Wald test F-stat.	3.02*	3.58*	3.80*	4.43**	4.48**	4.49**
AR Wald test χ^2	3.11*	3.69*	3.92*	4.60**	4.67**	4.68**
SW LM S stat. χ^2	5.99**	7.15***	7.64***	12.06***	15.08***	16.85***
Endogeneity test	H_0: endogenous regressor *Obl* can be treated as exogenous					
End. test stat. χ^2	2.552	2.960*	3.152*	3.958**	4.167**	4.096**
N	1,176	1,176	1,176	1,078	1,030	1,030
Av. obs per parent	5.9	5.9	5.9	5.8	5.7	5.7
Non-resident parents	199	199	199	185	182	182

Notes: Standard errors are clustered at individual level. Singletons are excluded. Underidentification, weak identification and weak-identification-robust test statistics are cluster-robust. All sums of money are in year 2000 real units of €10. Individual's age as a second order polynomial and year fixed effects are always included. Additional control variables include the highest educational attainment (CASMIN-classification) and youngest non-resident child's age as a second order polynomial. No. of children stands for the number of minor children who are entitled to child support and live outside the household. The household categories are: Living alone; living with a partner who does not work full-time nor part-time; living with a partner employed part-time; living together with a partner who works full-time. The CASMIN educational classification distinguishes between inadequately completed education (1), general and vocational certification at the compulsory level (2, 3), intermediate level of education (4, 5), general and vocational certification at the maturity level (6, 7), and tertiary education (8, 9). SW fst. stage χ^2 stands for Sanderson-Windmeijer first stage χ^2. AR Wald test stands for Anderson-Rubin Wald test, KP rk LM for Kleibergen-Paap rk LM statistic, SW LM S for Stock-Wright LM S statistic, and Weak-I-robust inf. for Weak-instrument-robust inference.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v30

A.3 CHAPTER 4 TABLES

Table A.3.1: Summary Statistics, women between 25 and 54 years old

Variable	Obs	Mean	St. dev.	Min	Max
	Panel A: Career and cohabitation partner				
Year	13,713	2003.24	7.10	1984	2012
Life satisfaction	13,713	7.48	1.55	0	10
Career	13,713	0.25	0.43	0	1
Cohabitation	13,713	0.79	0.41	0	1
Career and cohabitation	13,713	0.18	0.38	0	1
Age	13,713	39.35	8.05	25	54
Birth year	13,713	1963.84	10.29	1930	1987
Migration background	13,713	0.19	0.39	0	1
	Panel B: Career and family				
Year	13,709	2003.24	7.10	1984	2012
Life satisfaction	13,709	7.48	1.55	0	10
Career	13,709	0.25	0.43	0	1
Family	13,709	0.45	0.50	0	1
Career and family	13,709	0.05	0.22	0	1
Age	13,709	39.35	8.05	25	54
Birth year	13,709	1963.83	10.29	1930	1987
Migration background	13,709	0.19	0.39	0	1
	Panel C: Career and child(ren) in the household				
Year	13,789	2003.27	7.11	1984	2012
Life satisfaction	13,789	7.48	1.55	0	10
Career	13,789	0.25	0.43	0	1
Child(ren)	13,789	0.49	0.50	0	1
Career and child(ren)	13,789	0.06	0.23	0	1
Age	13,789	39.31	8.06	25	54
Birth year	13,789	1963.91	10.34	1930	1987
Migration background	13,789	0.19	0.40	0	1

Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.2: Panel tabulation for career and cohabitation

	Overall		Between		Within
Interaction term	Frequency	Percent	Frequency	Percent	Percent
0	11,406	82.25	2,697	89.54	91.42
1	2,461	17.75	881	29.25	62.03
$\sum$	13,867	100.00	3,578 (n = 3,012)	118.79	84.18

Notes: Interaction term equals one if a given woman has a career and a cohabitation concurrently, zero otherwise; 3,012 women between 25 and 54 years old; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.3: Transition probabilities from one period to the next for variables career and cohabitation

State	career & cohabitation	no career & cohabitation	career & no cohabitation	no career & no cohabitation	$\sum$
career & cohabitation	1,314 72.80	440 24.38	40 2.22	11 0.61	1,805 100.00
no career & cohabitation	391 6.17	5,850 92.26	10 0.16	90 1.42	6,341 100.00
career & no cohabitation	61 8.53	16 2.24	509 71.19	129 18.04	715 100.00
no career & no cohabitation	30 2.29	81 6.18	139 10.61	1,060 80.92	1,310 100.00
$\sum$	1,796 17.66	6,387 62.80	698 6.86	1,290 12.68	10,171 100.00

Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.4: Panel tabulation for career and family

Interaction term	Overall Frequency	Overall Percent	Between Frequency	Between Percent	Within Percent
0	13,180	95.13	2,924	97.37	97.76
1	674	4.87	270	8.99	53.49
∑	13,854	100.00	3,194 (n = 3,003)	106.36	94.02

Notes: Interaction term equals one if a given woman has a career and a family concurrently, zero otherwise; 3,003 women between 25 and 54 years old; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.5: Transition probabilities from one period to the next for variables career and family

State	career & family	no career & family	career & no family	no career & no family	∑
career & family	334 69.44	116 24.12	21 4.37	10 2.08	481 100.00
no career & family	145 3.48	3,808 91.43	11 0.26	201 4.83	4,165 100.00
career & no family	17 0.83	116 5.69	1,552 76.15	353 17.32	2,038 100.00
no career & no family	5 0.14	147 4.22	409 11.74	2,924 83.90	3,485 100.00
∑	501 4.93	4,187 41.17	1,993 19.60	3,488 34.30	10,169 100.00

Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.6: Panel tabulation for career and child(ren)

Interaction term	Overall Frequency	Overall Percent	Between Frequency	Between Percent	Within Percent
0	13,145	94.32	2,924	96.82	97.49
1	791	5.68	309	10.23	54.79
∑	13,936	100.00	3,233 (n = 3,020)	107.05	93.41

Notes: Interaction term equals one if a given woman has a career and child(ren) concurrently, zero otherwise; 3,020 women between 25 and 54 years old; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.7: Transition probabilities for career and child(ren)

Interaction term	Interaction term 0	Interaction term 1	∑
0	9,448 98.06	187 1.94	9,635 100.00
1	168 29.53	401 70.47	569 100.00
∑	9,616 94.24	588 5.76	10,204 100.00

Notes: Interaction term equals one if a given woman has a career and child(ren) concurrently, zero otherwise; women between 25 and 54 years old; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.8: Pooled OLS regressions, women's life satisfaction

	Dependent variable: Life satisfaction	
Sample Restriction	(1) none	(2) age $\geqslant$ 40
	Panel A: Career and cohabitation partner	
Career	0.420***	0.553***
	(0.092)	(0.168)
Partner	0.730***	0.732***
	(0.078)	(0.115)
Career and partner	-0.359***	-0.380**
	(0.104)	(0.187)
Obs	13,713	6,453
Women	2,872	1,345
Adj. R^2	0.0407	0.0385
	Panel B: Career and family	
Career	0.312***	0.365***
	(0.058)	(0.101)
Family	0.537***	0.455***
	(0.061)	(0.083)
Career and family	-0.281**	-0.257
	(0.113)	(0.163)
Obs	13,709	6,450
Women	2,872	1,342
Adj. R^2	0.0345	0.0274
	Panel C: Career and child(ren) in the household	
Career	0.266***	0.324***
	(0.060)	(0.105)
Child(ren)	0.390***	0.282***
	(0.065)	(0.087)
Career and child(ren)	-0.219**	-0.181
	(0.108)	(0.154)
Obs	13,789	6,456
Women	2,888	1,347
Adj. R^2	0.0240	0.0174

Notes: The following controls are included in all regressions: age as a second order polynomial, migration background (dummy), year fixed effects, indicator variables for birth cohort. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.9: FE regressions, women's life satisfaction

	Dependent variable: Life satisfaction				
Sample Restriction	none	none	SOEP	SOEP	SOEP
	(1)	(2)	(3)	(4)	(5)
	Panel A: Career and cohabitation partner				
Career	0.283***	0.291***	0.335***	0.391***	0.405***
	(0.081)	(0.083)	(0.087)	(0.095)	(0.098)
Partner	0.322***	0.214**	0.203*	0.291***	0.181
	(0.073)	(0.104)	(0.110)	(0.081)	(0.125)
Career and partner	-0.172*	-0.205**	-0.238**	-0.302***	-0.329***
	(0.089)	(0.093)	(0.098)	(0.103)	(0.109)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	13,867	12,837	11,388	10,039	9,204
Women	3,012	2,862	2,057	2,065	1,941
Adj. R^2	0.0189	0.0188	0.0204	0.0230	0.0222
	Panel B: Career and family				
Career	0.215***	0.200***	0.211***	0.208***	0.206***
	(0.050)	(0.052)	(0.054)	(0.057)	(0.061)
Family	0.143***	0.131**	0.108*	0.094	0.085
	(0.053)	(0.059)	(0.061)	(0.064)	(0.072)
Career and family	-0.169*	-0.152	-0.145	-0.171*	-0.153
	(0.087)	(0.095)	(0.097)	(0.099)	(0.111)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	13,854	12,824	11,388	10,039	9,204
Women	3,003	2,853	2,057	2,065	1,941
Adj. R^2	0.0171	0.0188	0.0199	0.0210	0.0210
	Panel C: Career and child(ren) in the household				
Career	0.198***	0.188***	0.203***	0.178***	0.180***
	(0.051)	(0.052)	(0.054)	(0.057)	(0.060)
Child(ren)	0.121**	0.142**	0.129**	0.098	0.116
	(0.059)	(0.061)	(0.063)	(0.070)	(0.073)
Career and child(ren)	-0.098	-0.072	-0.074	-0.012	0.009
	(0.082)	(0.088)	(0.091)	(0.098)	(0.105)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	13,936	12,839	11,388	10,046	9,204
Women	3,020	2,856	2,057	2,067	1,941
Adj. R^2	0.0164	0.0186	0.0200	0.0208	0.0212

Notes: The following controls are included in all regressions: age as a second order polynomial and year fixed effects. Singletons are not excluded. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.10: FE regressions, life satisfaction of women past the age of 40

	Dependent variable: Life satisfaction				
Sample Restriction	none	none	SOEP	SOEP	SOEP
	(1)	(2)	(3)	(4)	(5)
	Panel A: Career and cohabitation partner				
Career	0.458***	0.457**	0.458**	0.521***	0.511***
	(0.176)	(0.182)	(0.182)	(0.180)	(0.182)
Partner	0.250**	0.159	0.152	0.089	-0.020
	(0.127)	(0.182)	(0.184)	(0.143)	(0.204)
Career and partner	-0.434**	-0.483**	-0.488**	-0.509***	-0.535***
	(0.182)	(0.198)	(0.196)	(0.192)	(0.202)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	6,528	6,025	5,858	5,341	4,909
Women	1,419	1,320	1,192	1,207	1,117
Adj. R^2	0.0164	0.0152	0.0159	0.0288	0.0245
	Panel B: Career and family				
Career	0.209*	0.185*	0.187*	0.182*	0.170
	(0.106)	(0.109)	(0.110)	(0.110)	(0.117)
Family	0.058	0.054	0.057	0.073	0.057
	(0.077)	(0.083)	(0.084)	(0.082)	(0.090)
Career and family	-0.245*	-0.247*	-0.256*	-0.159	-0.179
	(0.134)	(0.144)	(0.144)	(0.131)	(0.146)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	6,519	6,016	5,858	5,341	4,909
Women	1,410	1,311	1,192	1,207	1,117
Adj. R^2	0.0149	0.0137	0.0144	0.0268	0.0220
	Panel C: Career and child(ren) in the household				
Career	0.181*	0.166	0.169	0.133	0.130
	(0.109)	(0.111)	(0.111)	(0.112)	(0.120)
Child(ren)	0.063	0.091	0.094	0.092	0.092
	(0.078)	(0.082)	(0.082)	(0.083)	(0.087)
Career and child(ren)	-0.131	-0.148	-0.157	0.012	-0.030
	(0.139)	(0.138)	(0.138)	(0.135)	(0.139)
Working partner	no	yes	yes	no	yes
Partner's earnings	no	no	yes	no	yes
Total working time	no	no	no	yes	yes
Obs	6,526	6,017	5,858	5,341	4,909
Women	1,416	1,312	1,192	1,207	1,117
Adj. R^2	0.0144	0.0134	0.0141	0.0267	0.0219

Notes: The following controls are included in all regressions: age as a second order polynomial and year fixed effects. Singletons are not excluded. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Table A.3.11: FE regressions, life satisfaction of East German women

Dependent variable: Life satisfaction					
Panel A: 25th percentile threshold for career definition					
Career	-0.005	Career	0.076	Career	0.072
	(0.130)		(0.066)		(0.068)
Partner	0.185	Family	0.139*	Child(ren)	0.034
	(0.144)		(0.075)		(0.077)
Career and	0.071	Career and	-0.043	Career and	-0.030
partner	(0.140)	family	(0.087)	child(ren)	(0.084)
Obs	7,830	Obs	7,819	Obs	7,850
Women	1,251	Women	1,240	Women	1,252
Adj. R^2	0.0077	Adj. R^2	0.0073	Adj. R^2	0.0064
Panel B: 50th percentile threshold for career definition					
Career	-0.086	Career	0.047	Career	0.084
	(0.148)		(0.075)		(0.077)
Partner	0.178	Family	0.119*	Child(ren)	0.034
	(0.131)		(0.067)		(0.068)
Career and	0.157	Career and	0.001	Career and	-0.076
partner	(0.163)	family	(0.108)	child(ren)	(0.104)
Obs	7,830	Obs	7,819	Obs	7,850
Women	1,251	Women	1,240	Women	1,252
Adj. R^2	0.0078	Adj. R^2	0.0072	Adj. R^2	0.0064
Panel C: 75th percentile threshold for career definition					
Career	-0.206	Career	0.149	Career	0.178
	(0.176)		(0.110)		(0.117)
Partner	0.183	Family	0.120*	Child(ren)	0.025
	(0.127)		(0.064)		(0.066)
Career and	0.423**	Career and	0.029	Career and	-0.048
partner	(0.189)	family	(0.133)	child(ren)	(0.140)
Obs	7,830	Obs	7,819	Obs	7,850
Women	1,251	Women	1,240	Women	1,252
Adj. R^2	0.0086	Adj. R^2	0.0077	Adj. R^2	0.0067

Notes: In Panel A I define "career" as reaching an income level greater than that achieved by a East German man who was at the 25th percentile of the East German male income distribution. In Panel B I use the 50th percentile (median) of the male income distribution as the threshold for defining "career". In Panel C I use the 75th percentile. The following controls are included in all regressions: age as a second order polynomial and year fixed effects. Singletons are not excluded. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1993, 1998)

Table A.3.12: FE regressions, life satisfaction of East German women past the age of 40

Dependent variable: Life satisfaction					
Panel A: 25th percentile threshold for career definition					
Career	-0.057	Career	0.109	Career	0.105
	(0.231)		(0.087)		(0.086)
Partner	0.255	Family	0.127	Child(ren)	0.012
	(0.281)		(0.116)		(0.115)
Career and	0.195	Career and	-0.003	Career and	0.008
partner	(0.241)	family	(0.125)	child(ren)	(0.121)
Obs	4,513	Obs	4,511	Obs	4,513
Women	721	Women	719	Women	720
Adj. R^2	0.0101	Adj. R^2	0.0085	Adj. R^2	0.0076
Panel B: 50th percentile threshold for career definition					
Career	0.232	Career	0.156*	Career	0.192
	(0.225)		(0.094)		(0.094)
Partner	0.362	Family	0.141	Child(ren)	0.046
	(0.259)		(0.098)		(0.096)
Career and	-0.121	Career and	-0.070	Career and	-0.145
partner	(0.248)	family	(0.153)	child(ren)	(0.139)
Obs	4,513	Obs	4,511	Obs	4,513
Women	721	Women	719	Women	720
Adj. R^2	0.0098	Adj. R^2	0.0086	Adj. R^2	0.0081
Panel C: 75th percentile threshold for career definition					
Career	-0.061	Career	0.196	Career	0.204
	(0.328)		(0.138)		(0.145)
Partner	0.313	Family	0.128	Child(ren)	0.020
	(0.256)		(0.094)		(0.093)
Career and	0.271	Career and	-0.013	Career and	-0.032
partner	(0.339)	family	(0.188)	child(ren)	(0.194)
Obs	4,513	Obs	4,511	Obs	4,513
Women	721	Women	719	Women	720
Adj. R^2	0.0097	Adj. R^2	0.0084	Adj. R^2	0.0076

Notes: In Panel A I define "career" as reaching an income level greater than that achieved by a East German man who was at the 25th percentile of the East German male income distribution. In Panel B I use the 50th percentile (median) of the male income distribution as the threshold for defining "career". In Panel C I use the 75th percentile. The following controls are included in all regressions: age as a second order polynomial and year fixed effects. Singletons are not excluded. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1993, 1998)

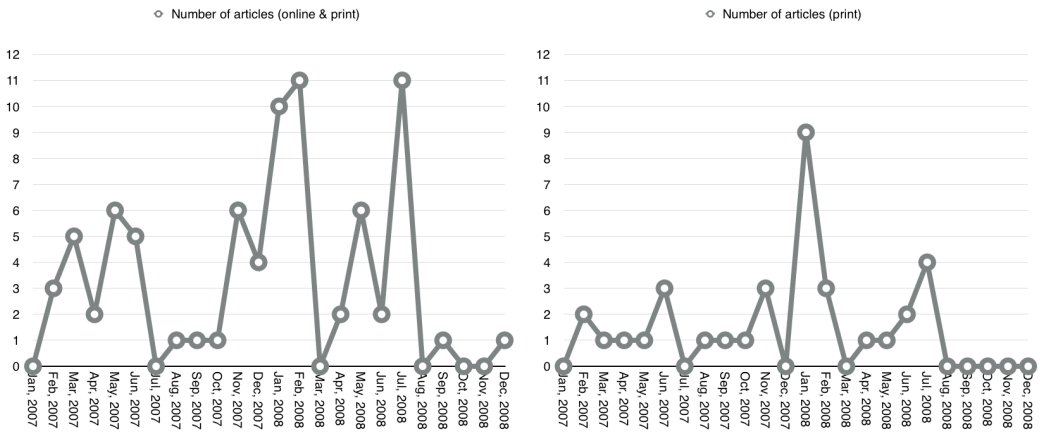
Table A.3.13: FE regressions, alternative thresholds for career definition

Dependent variable: Life satisfaction					
Panel A: 50th percentile threshold for career definition					
Career	0.289**	Career	0.211***	Career	0.200***
	(0.117)		(0.067)		(0.066)
Partner	0.283***	Family	0.097*	Child(ren)	0.081
	(0.068)		(0.050)		(0.056)
Career and	-0.129	Career and	-0.053	Career and	-0.009
partner	(0.128)	family	(0.108)	child(ren)	(0.111)
Obs	13,867	Obs	13,854	Obs	13,936
Women	3,012	Women	3,003	Women	3,020
Adj. R^2	0.0182	Adj. R^2	0.0162	Adj. R^2	0.0157
Panel B: 75th percentile threshold for career definition					
Career	0.322*	Career	0.186*	Career	0.162
	(0.188)		(0.106)		(0.106)
Partner	0.268***	Family	0.082*	Child(ren)	0.066
	(0.068)		(0.049)		(0.054)
Career and	-0.196	Career and	-0.002	Career and	0.057
partner	(0.204)	family	(0.187)	child(ren)	(0.174)
Obs	13,867	Obs	13,854	Obs	13,936
Women	3,012	Women	3,003	Women	3,020
Adj. R^2	0.0175	Adj. R^2	0.0154	Adj. R^2	0.0149

Notes: In Panel A I define "career" as reaching an income level greater than that achieved by a man who was at the 50th percentile (median) of the male income distribution. In Panel B I use the the 75th percentile of the male income distribution as the threshold for defining "career". The following controls are included in all regressions: age as a second order polynomial and year fixed effects. Singletons are not excluded. Robust standard errors in parentheses, clustered at individual level.
Significance levels: * 10%; ** 5%; *** 1%; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

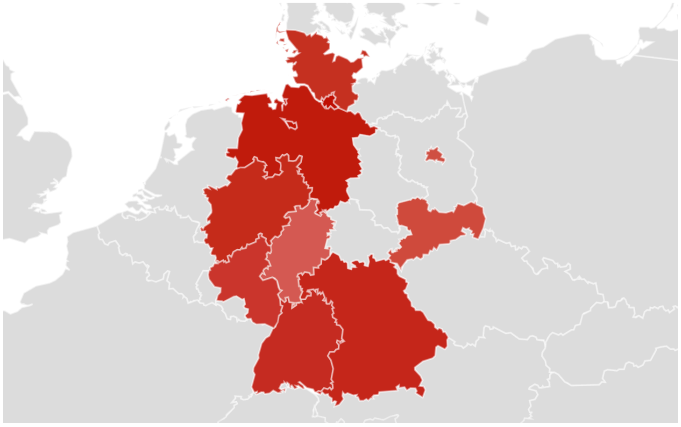
B APPENDIX FIGURES

B.1 CHAPTER 2 FIGURES



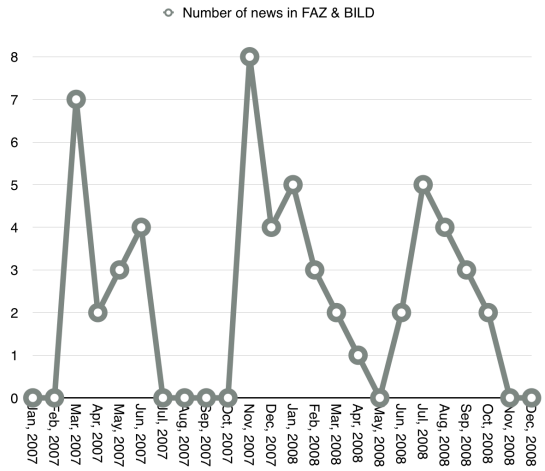
Notes: Included weekly journals directed to the general public are "Der Spiegel", "FOCUS" and "FOCUS MONEY". "Der Spiegel" is the leading periodical in 2007 and 2008 with an average 1,059,605 of distributed circulation per quarter (IVW n.d.g, accessed on 28.04.2016); "FOCUS" and "FOCUS MONEY" with an average of 903,948 (IVW n.d.e, IVW n.d.f, accessed on 28.04.2016). List of article titles can be taken from Appendix Table A.1.3 on page 144. Source: Search in "FOCUS" includes "FOCUS Online" (`http://www.focus.de`) and "FOCUS MONEY Online" (`http://www.focus.de/finanzen/`); "SPIEGEL ONLINE" (`http://www.spiegel.de`); search term: (Ehe UND Unterhalt) ODER Unterhaltsrecht ODER Ehegattenunterhalt ODER "nachehelicher Unterhalt" ODER (Unterhalt UND Zypries) ODER (Scheidung UND Unterhalt); own compilation

Figure B.1.1: Number of articles related to the reform of alimony law in top ranked journals



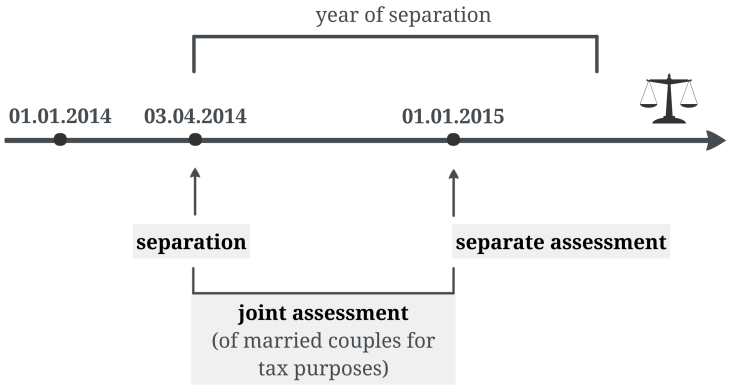
Notes: The term "neues unterhaltsrecht" means new alimony regulations. Ranking in regional web search interest: Hamburg 100%, Bremen 97%, Lower Saxony 93%, Bavaria 88%, North Rhine-Westphalia 86%, Baden-Wuerttemberg 84%, Schleswig-Holstein 83%, Rhineland-Palatinate 78%, Saxony 67%, Berlin 66% and Hessia 58%. Note, 0-100 values are relative measures: all of the interest data for the keyword is included and dividing by the highest point of interest for that date range. Zero represents a region that scores less than 1% of the popularity in comparison to the highest value. Number of divorces per 10,000 existing marriages in 2007/2008: Hamburg (133.7/136.8), Berlin (131.1/132.1), Bremen (123.6/129.8), Hessia (144.4/115.5), Schleswig-Holstein (118.8/120.1), Saarland (115.5/114.2), Rhineland-Palatinate (109.8/110.4), Lower Saxony (108.5/113.2), North Rhine-Westphalia (106.1/114.5), Brandenburg (88.6/88.2), Bavaria (101.2/103.4), Mecklenburg-Western Pomerania (80.3/86.6), Baden-Wuerttemberg (90.8/93.9), Saxony-Anhalt (88.4/91.3), Thuringia (83.3/84.6), and Saxony (79.7/80.4) (Krack-Roberg 2010, p. 1195).
Source: Google 2016a, accessed on 04.26.2016

Figure B.1.2: Regional web search interest for "neues unterhaltsrecht" in years 2007 and 2008



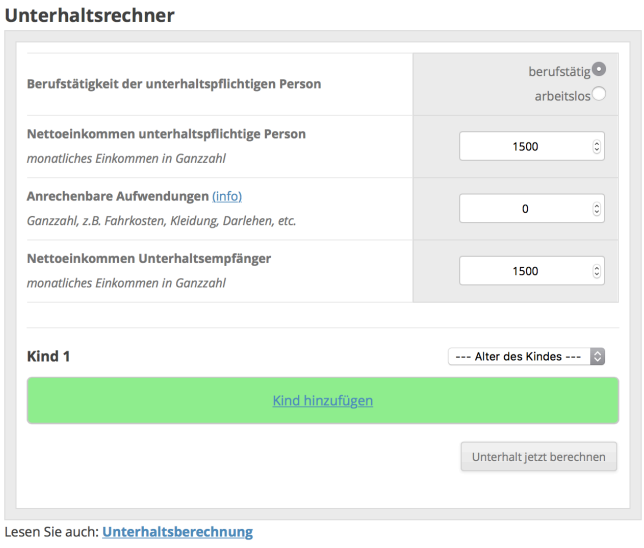
Notes: Included daily newspapers are "Frankfurter Allgemeine" (FAZ), "Frankfurter Allgemeine Sonntagszeitung", "BILD" and "BILD am Sonntag". "BILD" is the leading daily newspaper in 2007 and 2008, "BILD am Sonntag" is ranked second. Included newspapers reached a paid circulation of approximately 5.7 million in 1st quarter, 2008 (IVW n.d.a, IVW n.d.b, IVW n.d.c, IVW n.d.d, accessed on 04.26.2016).
Source: `http://www.bild.de`, `http://www.faz.net`; search term: (Ehe UND Unterhalt) ODER Unterhaltsrecht ODER Ehegattenunterhalt ODER "nachehelicher Unterhalt" ODER (Unterhalt UND Zypries) ODER (Scheidung UND Unterhalt); number of articles in BILD is incomplete because of a high number of articles without information on publishing date; own compilation

Figure B.1.3: Number of articles related to the reform of alimony law in top ranked daily newspapers



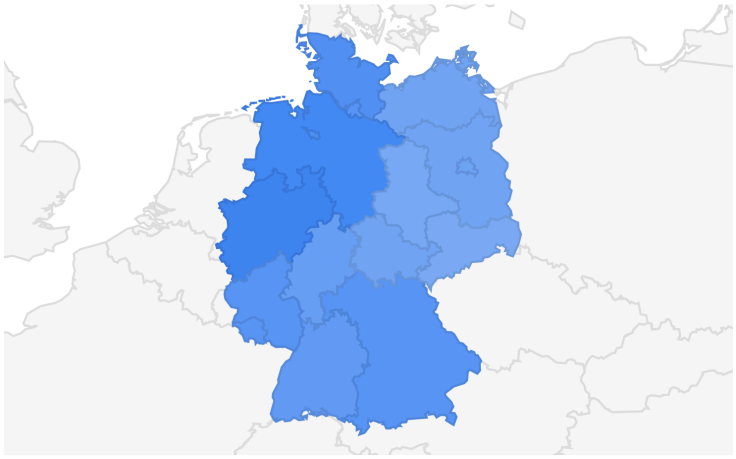
Notes: Joint taxation (tax classes III/IV or IV/IV), individual taxation (tax class I)
Source: Own illustration

Figure B.1.4: Example of taxation of labor income



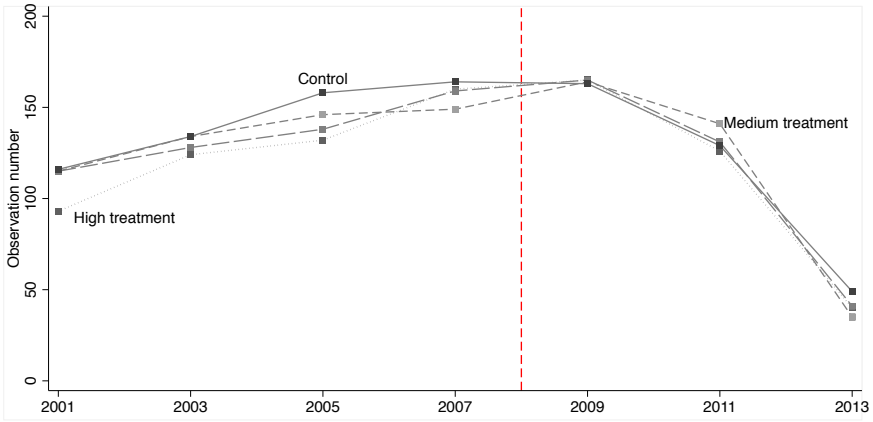
Source: snapshot from Unterhalt.net 2015, accessed on 11.18.2015

Figure B.1.5: Example for an alimony calculator valid for 2015



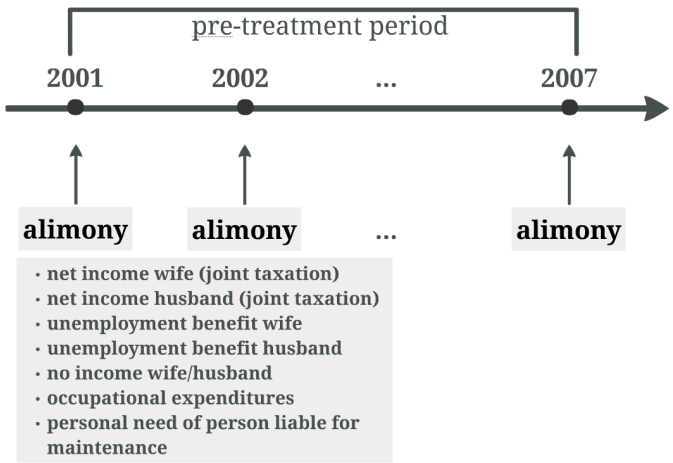
Notes: Search word "Düsseldorfer Tabelle"
Source: Google 2015, accessed on 09.23.2015

Figure B.1.6: Regional web search interest for Düsseldorf Table



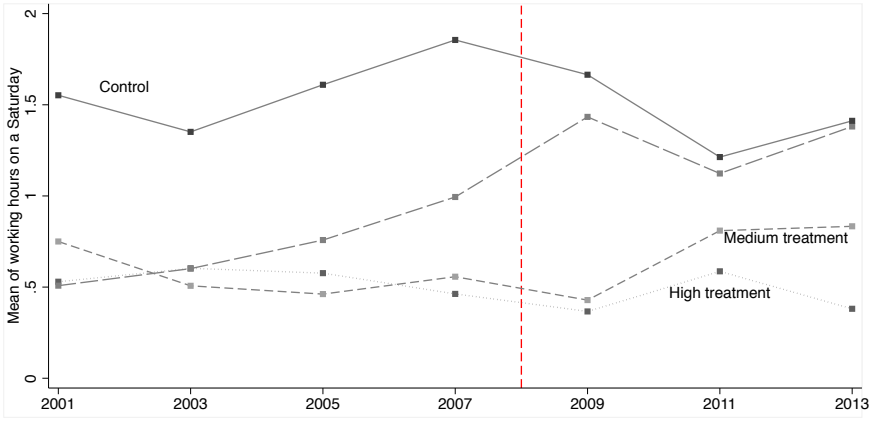
Notes: The figure shows observation number for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs. Data: SOEPlong v30

Figure B.1.7: Observation number over the years 2001-2013



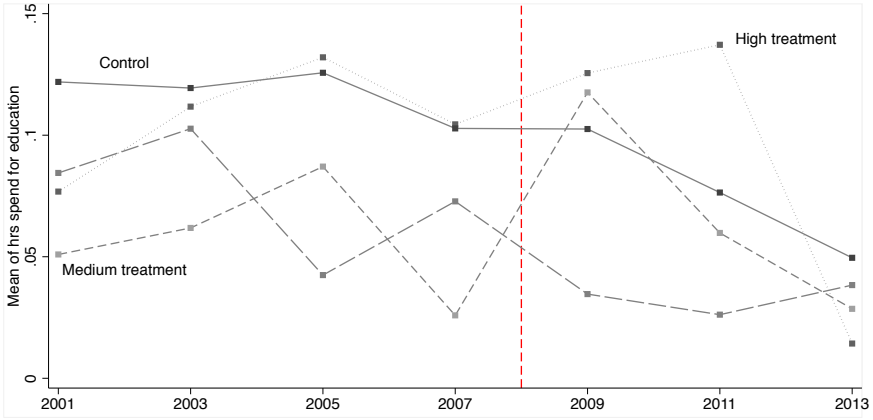
Notes: In general, the basis for calculating alimony payments is the allowable income of the two spouses in the previous 12 months. Allowable income is defined as a monetary income or earnings such as gross annual income or unemployment benefits which are corrected by subtracting taxes, occupational expenditures, etc. Being financially able to pay alimony is a precondition for the obligation to maintain. That is why the Düsseldorf Tables regulate the minimum personal need of a person liable for maintenance. This illustration depicts the information I used to determine the allowable incomes of a married couple without children. I impute the missing values in alimony for 2007 using a single exponential smoothing.
Source: Own illustration

Figure B.1.8: Determination of the allowable incomes and maintenance



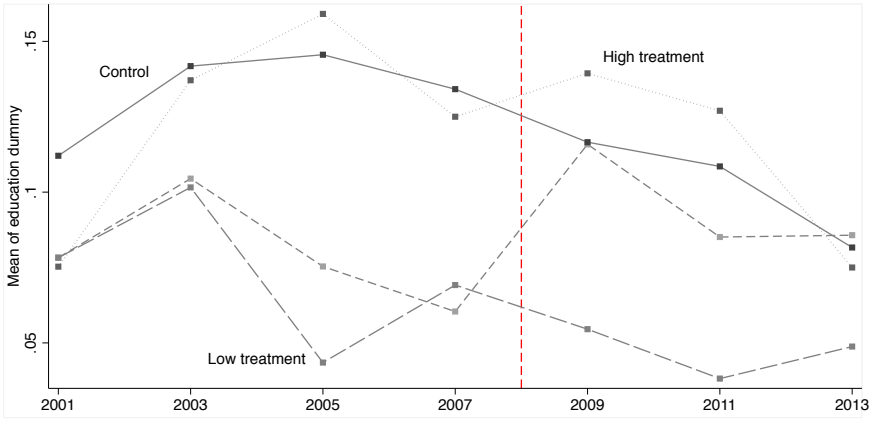
Notes: The figure shows mean values for working hours for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs. Data: SOEPlong v30

Figure B.1.9: Mean values of working hours on a Saturday over the years 2001-2013



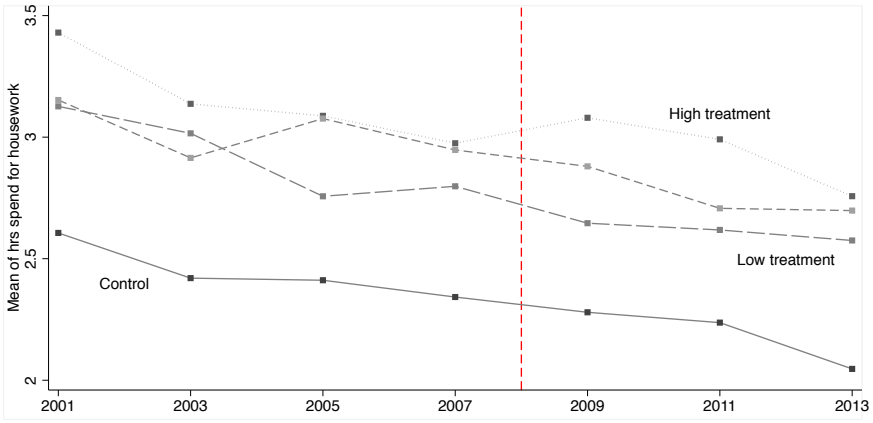
Notes: The figure shows mean values for education in hrs for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs.
Data: SOEPlong v30

Figure B.1.10: Mean values of hours spent on education over the years 2001-2013



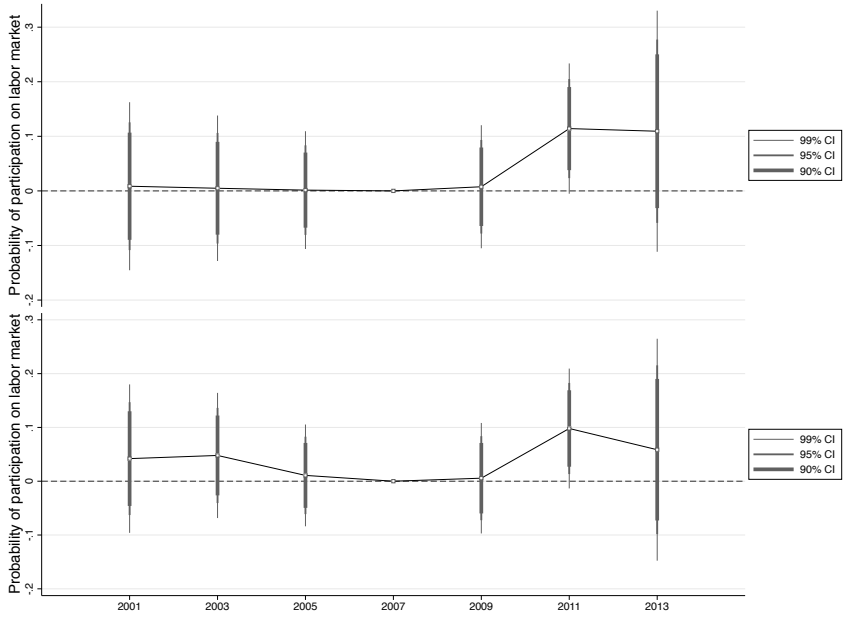
Notes: The figure shows mean values for education dummy for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs.
Data: SOEPlong v30

Figure B.1.11: Mean values of the education dummy over the years 2001-2013



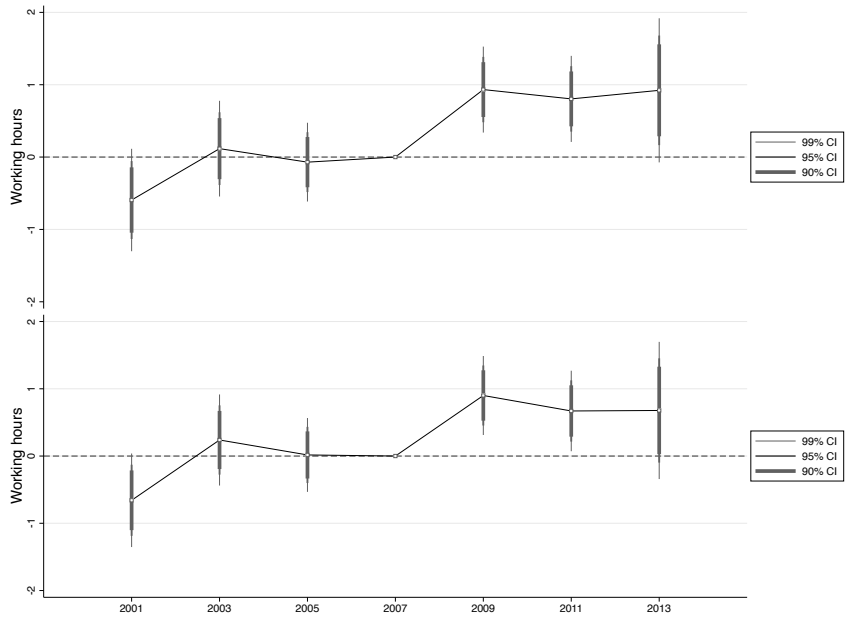
Notes: The figure shows mean values for hours spent on housework for the control and treatment groups. The sample consists of 792 wives living in West Germany, 3,514 obs.
Data: SOEPlong v30

Figure B.1.12: Mean values of housework hours over the years 2001-2013



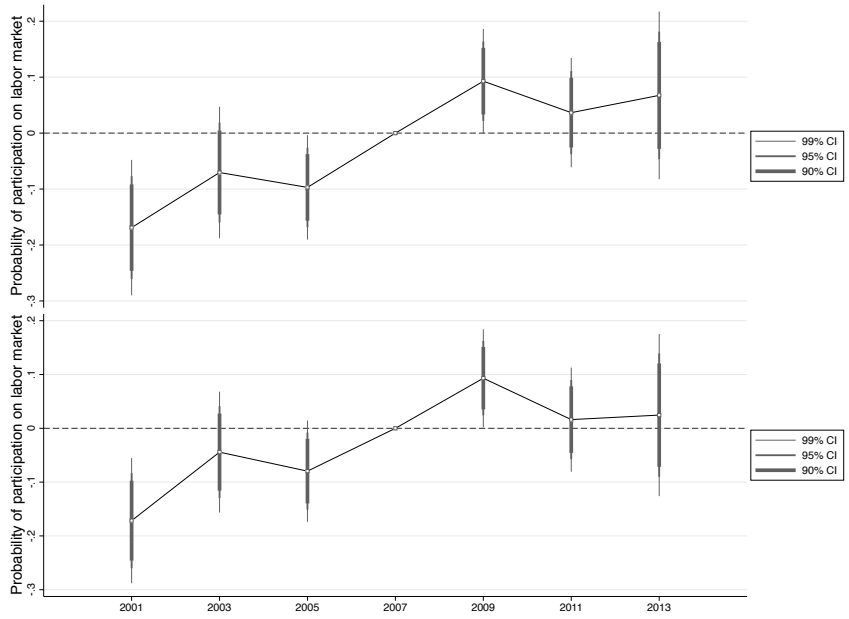
Notes: The figure shows coefficients of the interaction of the medium-intensity treatment group dummy and year dummies from FE models. In the bottom image I control additionally for wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives living in West Germany.
Data: SOEPlong v30

Figure B.1.13: The estimated impact of alimony restriction on the medium-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008



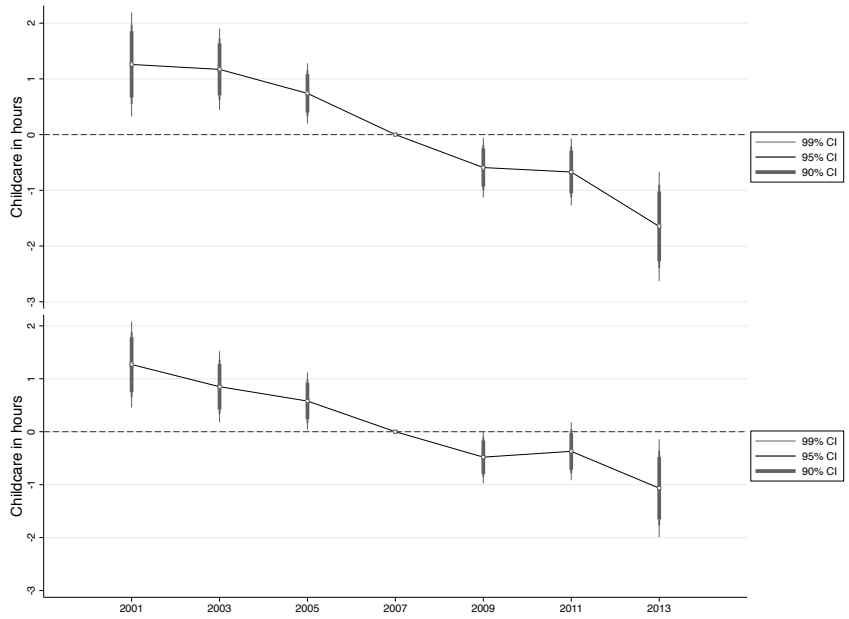
Notes: The figure shows coefficients of the interaction of the low-intensity treatment group dummy and year dummies from FE models where I use husbands as an alternative control group. In the bottom image I control additionally for individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives and husbands living in West Germany. Data: SOEPlong v30

Figure B.1.14: The estimated impact of alimony restriction on the low-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008 using husbands as an alternative control group



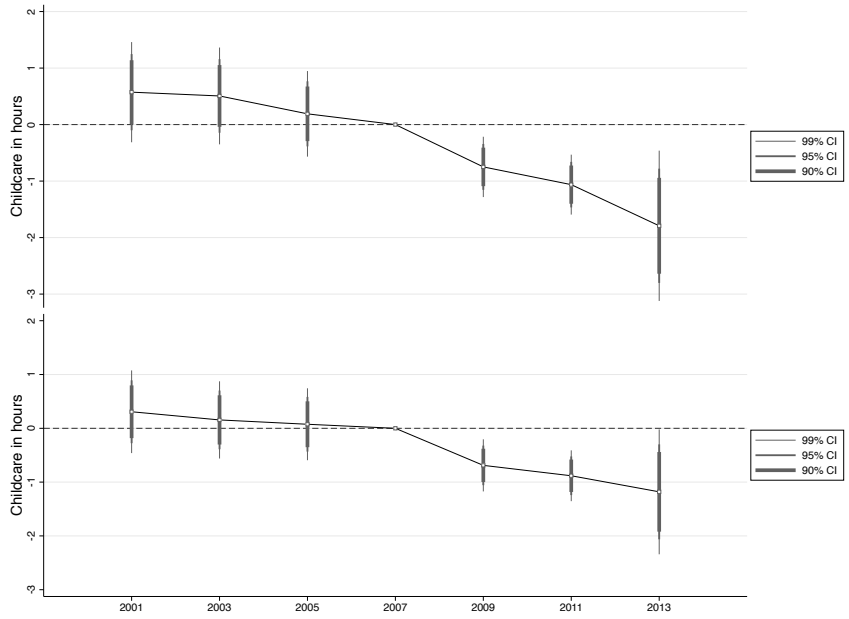
Notes: The figure shows coefficients of the interaction of the low-intensity treatment group dummy and year dummies from FE models where I use husbands as an alternative control group. In the bottom image I control additionally for individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives and husbands living in West Germany. Data: SOEPlong v30

Figure B.1.15: The estimated impact of alimony restriction on the low-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008 using husbands as an alternative control group



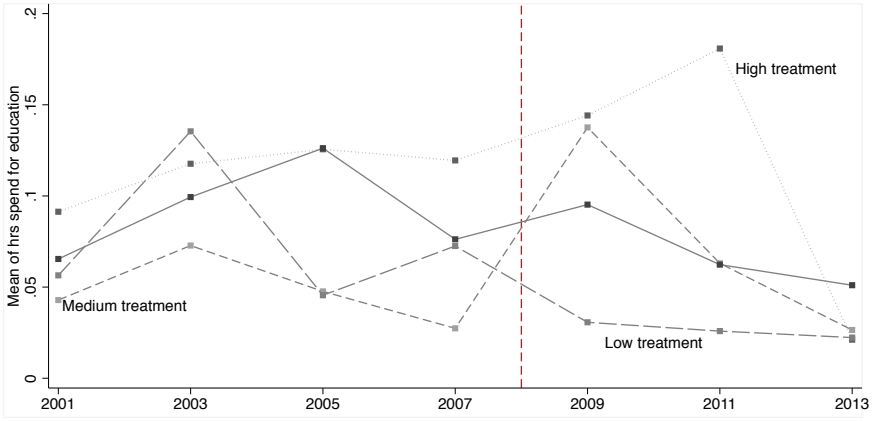
Notes: The figure shows coefficients of the interaction of the low-intensity treatment group dummy and year dummies from FE models where I use husbands as an alternative control group. In the bottom image I control additionally for individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives and husbands living in West Germany. Data: SOEPlong v30

Figure B.1.16: The estimated impact of alimony restriction on the low-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008 using husbands as an alternative control group



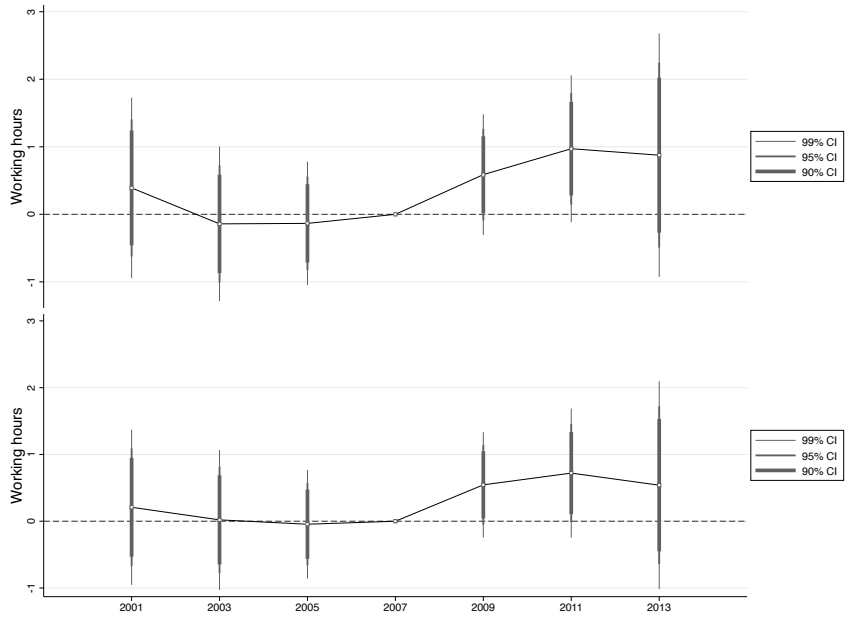
Notes: The figure shows coefficients of the interaction of the medium-intensity treatment group dummy and year dummies from FE models where I use husbands as an alternative control group. In the bottom image I control additionally for individual's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. The sample consists of wives and husbands living in West Germany. Data: SOEPlong v30

Figure B.1.17: The estimated impact of alimony restriction on the medium-intensity treatment wives for the years prior to and subsequent to the adoption of the law in 2008 using husbands as an alternative control group



Notes: The figure shows mean values for education in hours for the control and treatment groups. The sample consists of 612 30-54 years old wives living in West Germany, 2,636 obs. Data: SOEPlong v30

Figure B.1.18: Mean values of hours in education over the years 2001-2013, 30-54 years old wives

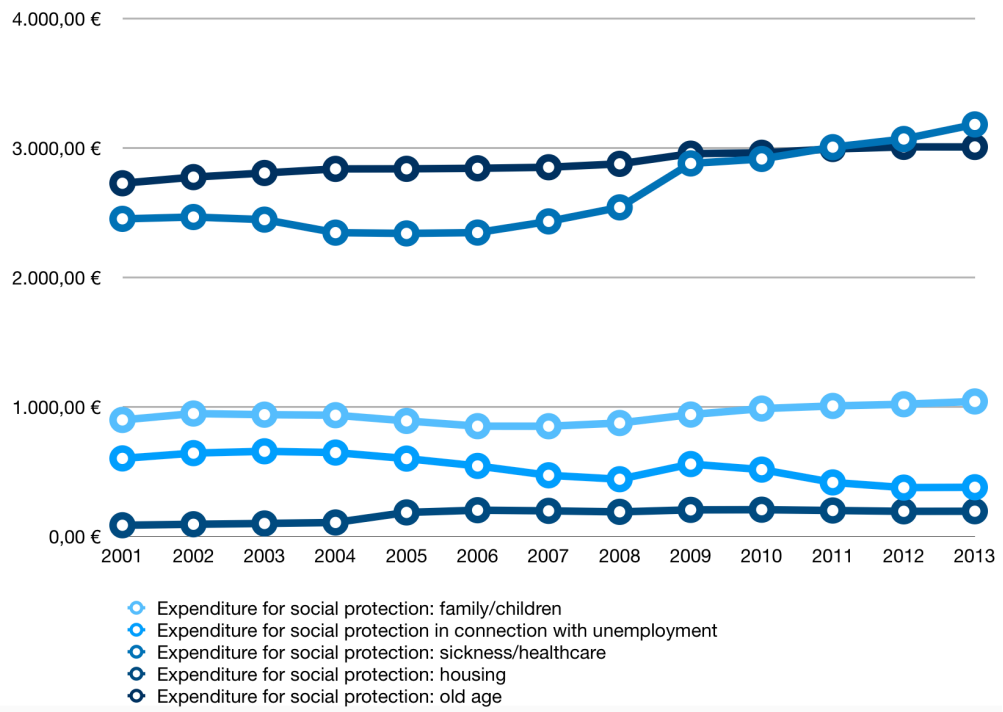


Notes: The figure shows coefficients of the interaction of the low-intensity treatment group dummy and year dummies including 317 wives who are younger than 45 years of age. In the bottom image I control additionally for wife's age as a second order polynomial and the number of minor children in each age group (0-1, ..., 16-18 years old). 2007 is the baseline year. Data: SOEPlong v30

Figure B.1.19: The estimated impact of alimony restriction on low-intensity treatment wives who are younger than 45 years of age for the years prior to and subsequent to the adoption of the law in 2008

Notes: The term "Zugewinnausgleich" means equalisation of accrued gains, and the term "Zugewinnausgleichsrecht" law of equalisation of accrued gains. Source: Google 2017, accessed on 06.13.2017

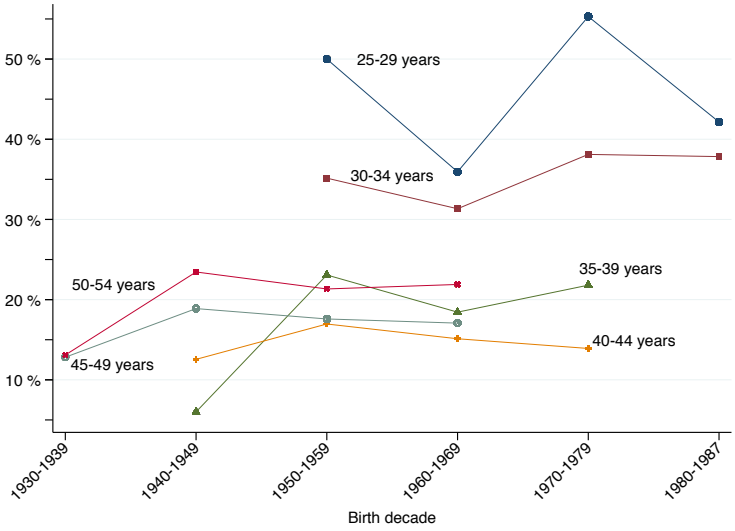
Figure B.1.20: Web search interest for "equalisation of accrued gains" and "law of equalisation of accrued gains"



Source: European Commission, eurostat n.d.; for further explanation see European Commission, eurostat 2012; own compilation

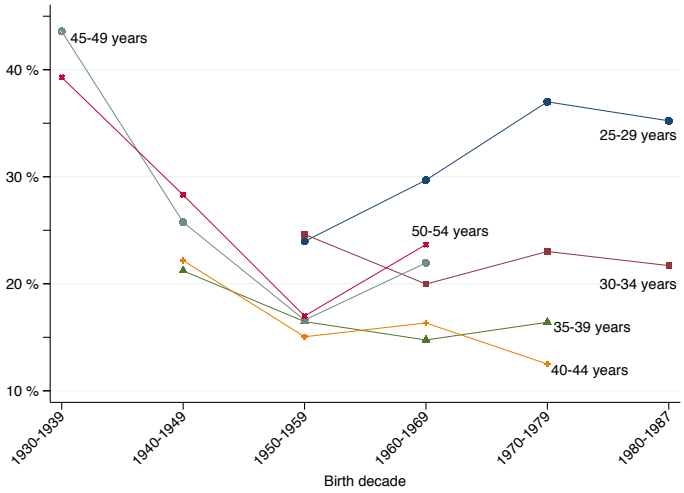
Figure B.1.21: Expenditure in Euro per inhabitant (at constant 2010 prices)

B.2 CHAPTER 4 FIGURES



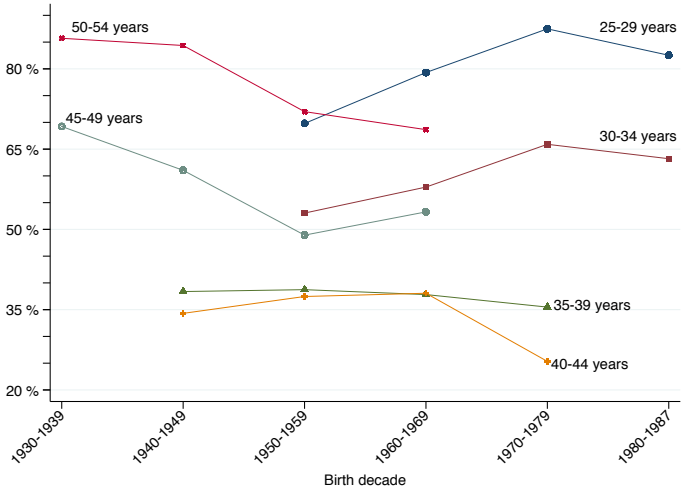
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87; 13,867 observations, 3,012 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.1: College-educated women: Percentage of observations classified as having a career



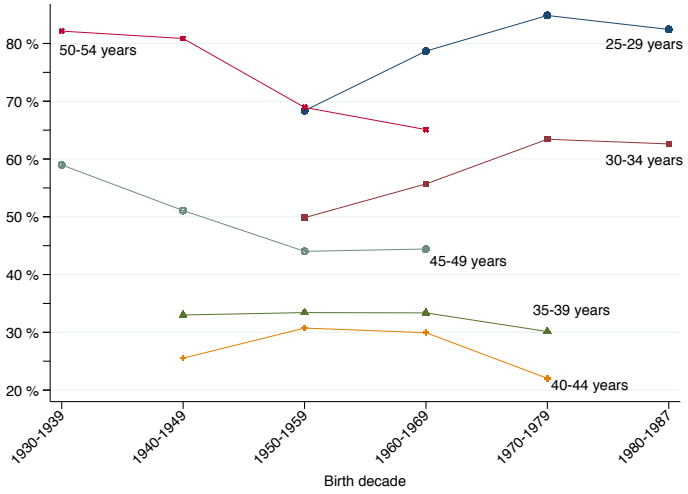
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87; 13,867 observations, 3,012 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.2: College-educated women: Percentage of observations without a cohabitation partner



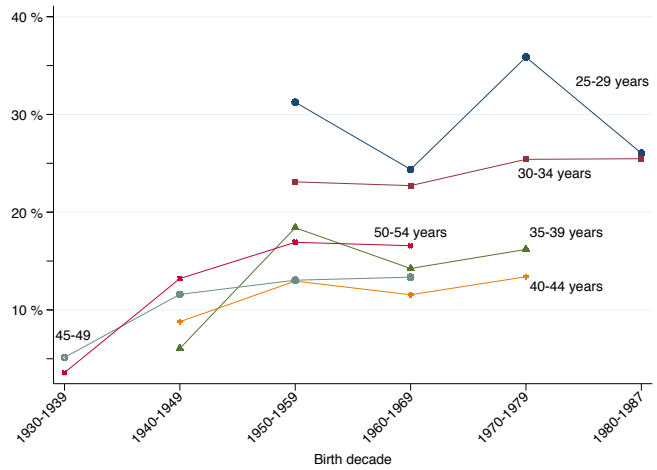
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87; 13,854 observations, 3,003 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.3: College-educated women: Percentage of observations without a family



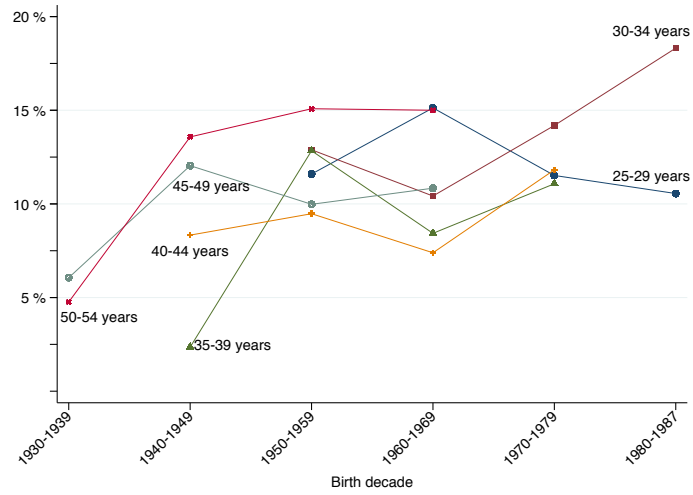
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87; 13,936 observations, 3,020 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.4: College-educated women: Percentage of observations without minor child(ren) in the household



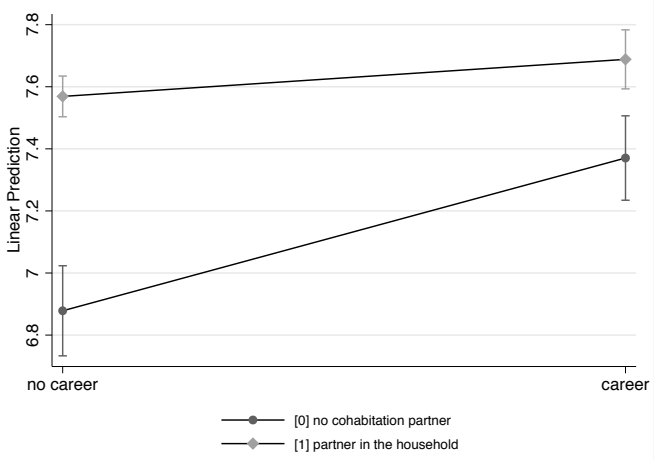
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87.
Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.5: Birth cohorts of West German college women: Percentage of woman-year observations classified as having a career and a cohabitation simultaneously



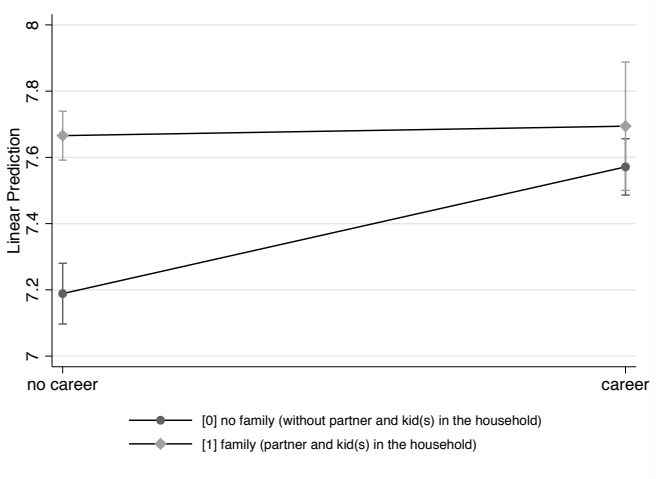
Notes: Cohort 1: born 1930-1939; cohort 2: 1940-1949; cohort 3: 1950-1959; cohort 4: 1960-1969; cohort 5: 1970-1979; cohort 6: 1980-87; 13,936 observations, 3,020 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.6: College-educated women: Percentage of observations classified as having a career and minor child(ren) in the household simultaneously



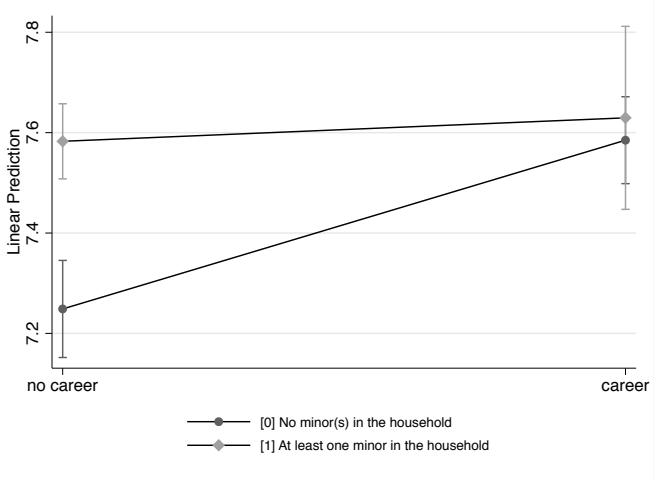
Notes: Predictive Margins with 95% CIs; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.7: Life satisfaction by career and cohabitation - graph of means



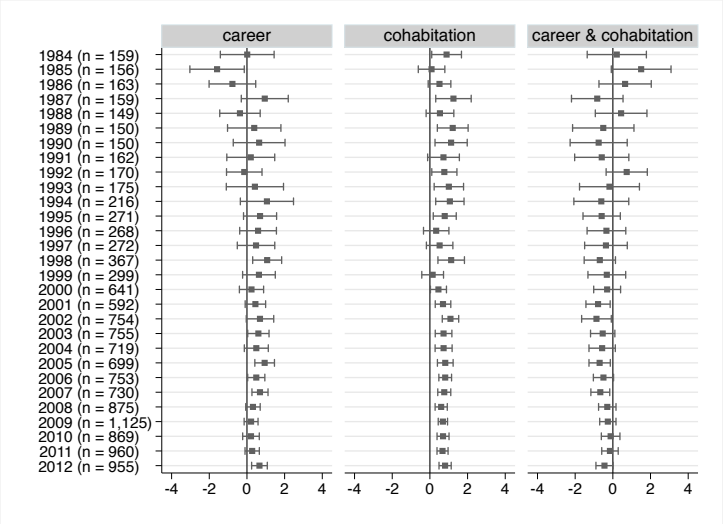
Notes: Predictive Margins with 95% CIs; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.8: Life satisfaction by career and family - graph of means



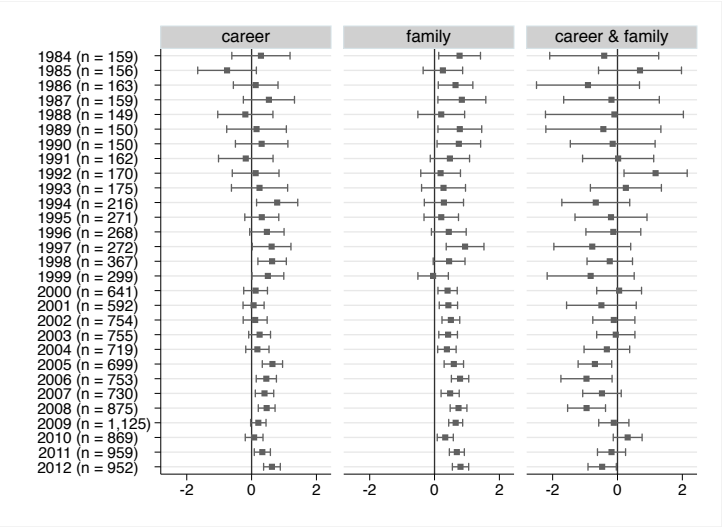
Notes: Predictive Margins with 95% CIs; Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.9: Life satisfaction by career and minor child(ren) in the household - graph of means



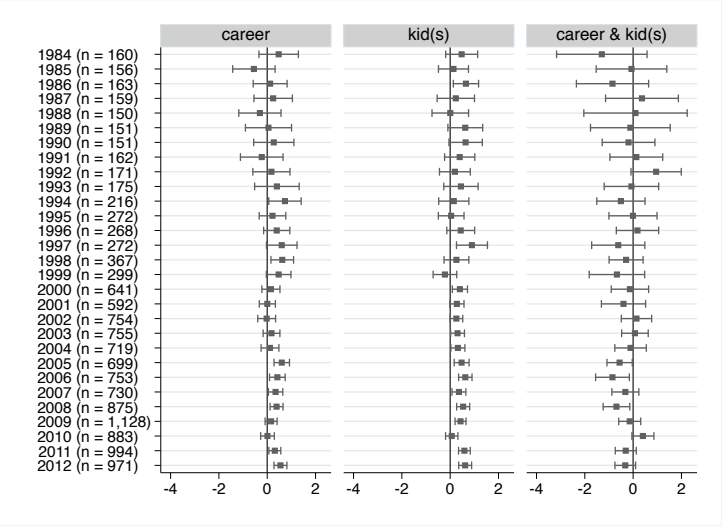
Notes: OLS regressions are estimated for every year separately (with robust standard errors). The following control variables are included in all regressions: woman's age as a second order polynomial, migration background (dummy), indicator variables for birth cohort. Observation number in brackets; 95% CIs; 13,713 observations, 2,872 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.10: Coefficients of career, cohabitation and the interaction term over time



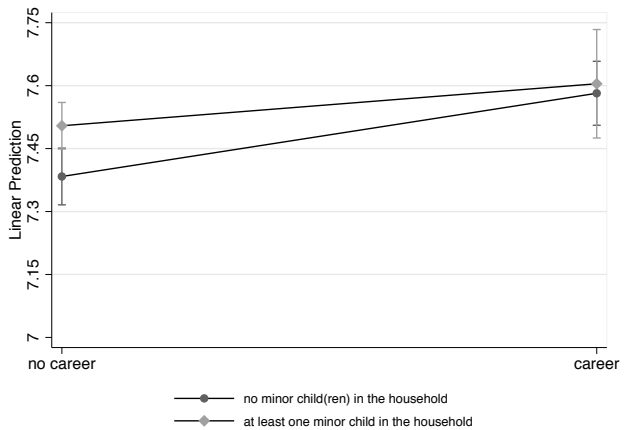
Notes: OLS regressions are estimated for every year separately (with robust standard errors). The following control variables are included in all regressions: woman's age as a second order polynomial, migration background (dummy), indicator variables for birth cohort. Observation number in brackets; 95% CIs; 13,709 observations, 2,872 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.11: Coefficients of career, family and the interaction term over time



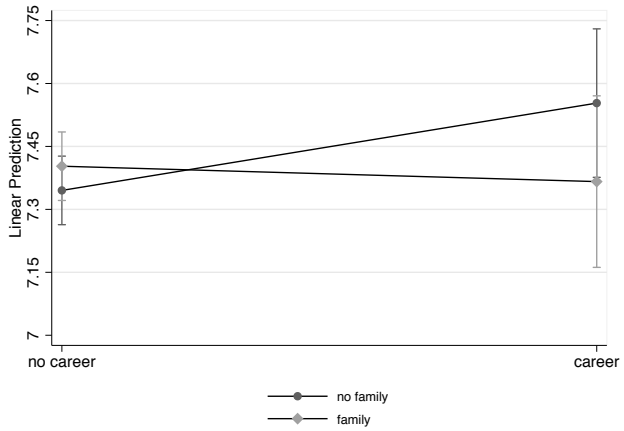
Notes: OLS regressions are estimated for every year separately (with robust standard errors). The following control variables are included in all regressions: woman's age as a second order polynomial, migration background (dummy), indicator variables for birth cohort. Observation number in brackets; 95% CIs; 13,789 observations, 2,888 women. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.12: Coefficients of career, minor child(ren) and the interaction term over time



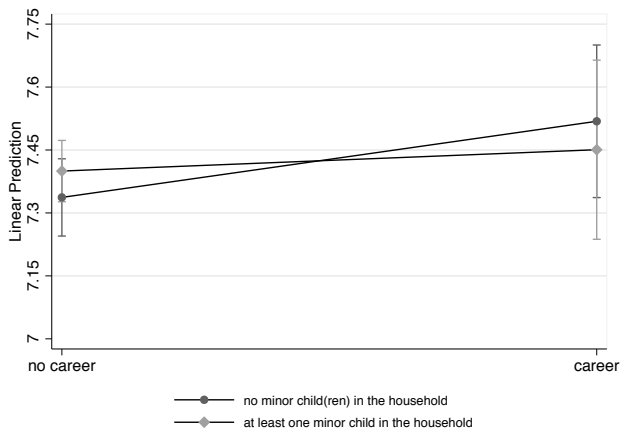
Notes: Adjusted predictions of career#child(ren) (see Panel C Column (1) of Appendix Table A.3.9 on page 208); predictive margins with 95% CIs. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.13: Life satisfaction by career and child(ren) in the household



Notes: Adjusted predictions of career#family (see Panel B Column (1) of Appendix Table A.3.10 on page 209); predictive margins with 95% CIs. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.14: Life satisfaction by career and family status for women over 40 years of age



Notes: Adjusted predictions of career#child(ren) (see Panel C Column (1) of Appendix Table A.3.10 on page 209); predictive margins with 95% CIs. Data: SOEPlong v29, pairfam 5.0, Welfare Surveys (1984, 1988, 1993, 1998)

Figure B.2.15: Life satisfaction by career and children for women over 40 years of age

C | GERMAN MAINTENANCE LAWS

§1569 of the Civil Code

§1569 of the Civil Code (old version) *Final Regulation*: A divorced spouse may demand maintenance of the other, if she/he is not in a position to provide her/his own maintenance, under the following provisions.

According to reformed §1569 of the Civil Code (new version) *Principle of personal responsibility*: After divorce, each spouse is responsible for providing his/her own maintenance. If she/he is not in a position to do this, she/he has a claim for maintenance against the other spouse only under the following provisions.

The following provisions in the Civil Code are: §1570 *Maintenance to care for a child*, §1571 *Maintenance by reason of old age*, §1572 *Maintenance for illness or infirmity*, §1573 *Maintenance for unemployment and topping-up maintenance*, §1575 *Training, further training or retraining* and §1576 *Maintenance for reasons of equity*.

§1570 of the Civil Code

§1570 of the Civil Code (old version) *Maintenance to care for a child*: A divorced spouse may demand maintenance from the other, as long as she/he cannot be expected to work because of the care for or upbringing of a child of the spouses.

§1570 of the Civil Code (new version) *Maintenance to care for a child*:
(1) A divorced spouse may demand maintenance from the other, for the care for or upbringing of a child of the spouses, or at least three years after the birth. The duration of the claim to maintenance is extended as long as and to the extent that is equitable. Here, the concerns of the child and the existing possibilities of childcare are to be taken into account.
(2) The duration of the maintenance claim is further extended if, taking into account the arrangement of childcare and gainful employment in the marriage and the duration of the marriage, this is equitable.

§1574 of the Civil Code

§1574 of the Civil Code (old version) *Appropriate gainful employment*:
(1) The divorced spouse is expected only to enter gainful employment that is appropriate for her/him.
(2) Gainful employment is appropriate if it suits the training, the skills, the age and the state of health of the divorced spouse as well as the standard of living in the marriage; in considering the standard of living in the marriage, the duration of marriage and the duration of the care for or upbringing of a child of the spouses are to be taken into account.
(3) To the extent that it is necessary in order to take up appropriate gainful employment, the divorced spouse is under a duty to undertake training, further training or retraining, if successful completion of the training is to be expected.

§1574 of the Civil Code (new version) *Appropriate gainful employment*:
(1) The divorced spouse is under a duty to enter gainful employment that is appropriate for her/him.

(2) Gainful employment is appropriate if it suits the training, the skills, a former employment, the age and the state of health of the divorced spouse, to the extent that such work would not be inequitable with regard to the standard of living in the marriage. In considering the standard of living in the marriage, particular account is to be taken of the duration of the marriage and the duration of the care for or upbringing of a child of the spouses.
(3) To the extent that it is necessary in order to take up appropriate gainful employment, the divorced spouse is under a duty to undertake training, further training or retraining, if successful completion of the training is to be expected.

§1578b of the Civil Code

§1578b of the Civil Code (valid until 1st March, 2013) *Reduction and time limitation of maintenance on grounds of inequity*:
(1) The maintenance claim of the divorced spouse is to be reduced to cover the reasonable necessities of life where an assessment of the maintenance claim oriented to the marital standard of living would be inequitable even if the concerns of a child of the spouse entrusted to the person entitled in order to be cared for or brought up were observed. Here, particular account is to be taken of how far, as a result of the marriage, disadvantages have occurred with regard to the possibility of taking care of one's own maintenance. Disadvantages may result above all from the duration of the care or upbringing of a child of the spouses, from the organization of household management and gainful employment during the marriage, as well as the duration of the marriage.
(2) The maintenance claim of the divorced spouse is to be limited in time where a maintenance claim without time limitation would be inequitable even if the concerns of a child of the spouses entrusted to the person entitled in order to be cared for or brought up were observed. Subsection (1) sentences 2 and 3 applies with the necessary modifications.
(3) The reduction and time limitation of the maintenance claim may be combined.

§1579 of the Civil Code

§1579 Civil Code (old version) *Restriction or loss of obligation*: A maintenance claim is to be refused, reduced or restricted in time to the extent that it would be grossly inequitable for the person obliged to be claimed on, even if the concerns of a child of the spouses entrusted to the person entitled in order to be cared for or brought up were observed, because
1. the marriage was of short duration; here, account must be taken of the time in which the person entitled may demand maintenance for the care for or upbringing of a child of the spouses under §1570.
See §1579 Civil Code (old version) for a complete list.

§1579 Civil Code (new version) *Restriction or refusal of maintenance for gross inequity*: A maintenance claim is to be refused, reduced or restricted in time to the extent that it would be grossly inequitable for the person obliged to be claimed on, even if the concerns of a child of the spouses entrusted to the person entitled in order to be cared for or brought up were observed, because
1. the marriage was of short duration; here, account must be taken of the time in which the person entitled may demand maintenance for the care or upbringing of a child of the spouses under §1570.
2. (newly created) the person entitled lives in a stable long-term relationship[.]
See §1579 Civil Code (new version) for a complete list.

§1603 (1) of the Civil Code

According to §1603 Civil Code *Ability to pay*: (1) A person who, taking into account his other duties, is unable, without endangering his reasonable maintenance, to pay maintenance has no obligation to maintain.

§1609 of the Civil Code

§1609 Civil Code (old version) *Ranking of several dependents*:
(1) If there is more than one person entitled to maintenance and if the person liable for maintenance is unable to pay maintenance to all, then children in the sense of §1603 (2) come before other children, among children of ascendants the more closely related take precedence over the more distantly related.
(2) The spouse has the same status as children in the sense of §1603 (2); she/he takes precedence over other children and relatives. If the marriage is divorced or declared invalid, then the spouse entitled to maintenance takes precedence over children in the sense of sentence 1 and over other relatives of the liable spouse.
See §1609 Civil Code (old version) for a complete ranking list.

§1609 Civil Code (new version) *Priority of more than one person entitled to maintenance*: If there is more than one person entitled to maintenance and if the person liable for maintenance is unable to pay maintenance to all, the following order of priority applies:
1. minor unmarried children and children in the meaning of §1603 (2) sentence 2,
2. parents who are entitled to maintenance for the care of a child, or would be so entitled in the case of a divorce, and spouses and divorced spouses in the case of a long marriage; if it is determined that the marriage was long, account must also be taken of disadvantages in the meaning of §1578b (1) sentences 2 and 3,
3. spouses and divorced spouses who do not fall under no. 2.
See §1609 Civil Code (new version) for a complete ranking list.

D ADDITIONAL REMARKS

After completion of Chapter 2, a paper using SOEP data was published which also analyzes the 2008 alimony reform. I include this study in my literature review in Section 2.3.2. Bredtmann and Vonnahme (2017) also aim to study the behavioral response of married individuals to the new alimony law using a difference-in-differences method. Overall, Bredtmann and Vonnahme (2017) do not find labor supply responses from women or men. They argue that "[t]hese effects can be interpreted as a lower bound to the overall effects, as non-married cohabiting couples might also have reacted to the reform, but to a lesser effect" (Bredtmann and Vonnahme 2017, p. 3).

There are, however, some crucial differences to my contribution. First, the authors state that alimony is decided by family courts on an individual basis. At the same time they point out that child support is an exception (Bredtmann and Vonnahme 2017, p. 6). However, to achieve consistency in terms of the maintenance law the appellate courts issue the so-called Düsseldorf Tables and Guidelines[1], which provide information regarding the rules and calculations used to determine both child support *and* the amount of post-marital alimony granted by the courts. In general, the so-called difference method is applied to determine the alimony amount. Therefore, it is possible to calculate alimony payments for every married individual. Since Bredtmann and Vonnahme do not determine the level of individual maintenance but assume that all women receive alimony, they are likely to consider some wives as alimony beneficiaries, thus disadvantaged by the 2008 reform, although they are not. The reverse applies to men. In short, the group affiliation seems to be problematic.

Further, Bredtmann and Vonnahme argue that "no official statistics on the gender of alimony beneficiaries are available" (Bredtmann and Vonnahme 2017, pp. 6 et seq.). However, some information is available. In about 84% of cases concerning alimony payments decided by the decree of dissolution in West Germany (including Berlin) in 2007, alimony was paid to former wives and in about 16% of cases to former husbands. In about 30% of cases in East Germany (excepting Saxony), maintenance was paid to former husbands from their former wives; in about 70% of the cases, it was former husbands that paid alimony to their previous wives (Federal Office of Statistics 2008b, p. 26). These statistics underline the fact that one should not make simplified assumptions based on gender.

That a majority of women have lower gross incomes than men[2] , as the authors emphasize (Bredtmann and Vonnahme 2017, p. 7), does not imply that *wives* have a general claim to maintenance. On one hand, the basis for calculating alimony payments is allowable net income which is corrected for by the occupational expenditures of the *two spouses* from the previous 12 months. On the other hand, if the allowable income of the first earner is below the defined personal need, there is no money available for distribution; i.e., such couples would not be affected by the 2008 reform. Being financially able to pay alimony is a precondition for the obligation to maintain (§1603 (1) of the Civil Code on page 226).

At the time the *Act for the Reform of the Maintenance Law* came into force, couples in the authors' sample were married for less than 3 years. The average marriage duration is 2.11 years at pre-treatment and 3.18 years at the pre- and post-treatment period in the treatment group of women (Bredtmann and Vonnahme 2017, pp. 23, 30). As explained in Subsection 2.6, for reason of gross inequity, maintenance claims are refused in cases of short marriages; the exception are cases of alimony wherein a former spouse cares for a child. A short marriage is understood as having been married for less than three years. However, courts can decide differently in individual cases and may choose a higher threshold. An individual, for example, who married in 2006/2007

1 Before 2008, so-called Berliner Tables and Guidelines were issued that applied to East Germany.

2 Bredtmann and Vonnahme (2017) find that "the gross labor income of women was [...] 29% lower than that of men" (Bredtmann and Vonnahme 2017, p. 7). However, they consider the full sample in their analysis, thus married and cohabiting individuals who live in West and/or East Germany in the pre- and post-treatment period. It seems that important information about the corresponding spouses is ignored. Thus, the authors simply compare men and women in their sample rather than considering the incomes of *both spouses*.

would not be entitled to maintenance under the old alimony regime in the event of a divorce in 2008/2009. Newly-married women would therefore have had to anticipate that they would be entitled to alimony in the near future, which has now been basically eliminated. However, this also implies that they could predict the future intra-marital income gap that would exist in a few years. Therefore, an implicit assumption of Bredtmann and Vonnahme (2017) is the following: Given the current incomes of both spouses, spouses can predict their future incomes and therefore any future maintenance payments that would arise in the event of a future divorce. Therefore, because this future alimony is threatened by the new regulations, spouses can be expected to change their behavior. In contrast to the work of Bredtmann and Vonnahme, I exclude individuals who have been married for less than three years, because they are not (legally) affected by the 2008 reform. Thus, I consider only those who have a legal maintenance claim or obligation and for whom I can determine the potential alimony in the last pre-treatment year, namely 2007. In order to be affected by the 2008 reform, a short-married woman has to assume that she would have been an alimony recipient – in the case of a future divorce – under the old alimony regime. Alternatively, the authors need to present convincing arguments as to why short-married women might *feel* disadvantaged by the 2008 reform, and as a result, they can be expected to change their time-allocation behavior.

The short-married women in Bredtmann's and Vonnahme's study work an average of 7.38 hours per day on a normal weekday and are 29.57 years old at pre-treatment. This means that these women are, on average, full-time employees according to the definition of the Federal Statistical Office (Federal Office of Statistics 2018c, accessed on 08.18.2018). In contrast, wives in my sample are on average 45 years old and have been married for about 18 years. Women in the low-intensity treatment group work at base (before 2008) 20.50 hours per week on average. Thus, these wives are, on average, part-time workers. Further, net incomes of the two spouses are not reported by the authors, i.e. it is not possible to estimate how much alimony a wife would expect (if any at all) based on current incomes in the case of divorce after three years of marriage under the old regime. It would be more plausible to assume that the intra-marital income gap in short marriages is rather small and may increase over time, e.g., with the birth of a child. This seems to be reflected in the understanding of the legislature, which is why short-married individuals were and are not entitled to maintenance: The exclusion regulation is based on the idea that spouses after only a short time in marriage have not yet adjusted their living conditions to such an extent as to justify a maintenance claim (von Heintschel-Heinegg and Gerhardt 1990, pp. 93 et seq. Borth 2011, p. 287; see §1579 of the Civil Code on page 226).

Another issue is their treatment of low-income wives as being most exposed to the reform (Bredtmann and Vonnahme 2017, p. 14). Again, that is questionable since alimony depends on the allowable net incomes of *both* spouses. Therefore, low-income wives are not the most exposed or strongly affected group, per se. If newlywed women with low incomes are more likely to be married to men with low incomes, they are probably unaffected by the new law. As mentioned above, if the first earner (who is assumed to be the husband) has allowable net income below personal need, his wife would not receive alimony in the case of divorce, this is the case irrespective of the 2008 alimony reform. Such low income couples are unaffected by the law changes that took place in 2008.

The reasons why "non-married cohabiting couples might also have reacted to the reform, but to a lesser effect" (Bredtmann and Vonnahme 2017, p. 3) are not obvious. Again, the underlying assumption seems to be that women in cohabitations feel disadvantaged by the 2008 reform and would, therefore, adjust their labor supply because they (a) are women and (b) would expect to receive alimony in the case of a future divorce following a future marriage, etc. These implicit assumptions are not stated or discussed by the authors; the intra-cohabitation income gap is not displayed.

Further, unlike in my study, Bredtmann and Vonnahme (2017) include East and West Germans in the same analysis and estimate OLS models controlling for i.a. federal state and year fixed effects interactions. They consider a 5-day week and a different time frame that is not restricted by other relevant changes in the law or policy and for this reason appears to be arbitrary.