

# **Equity and divorce.**

## **New findings for Western Germany and the United States.**

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### **Abstract**

*The gender construction perspective hypothesizes that ‘doing gender’ stabilizes relationships where the female partner’s employment status contradicts traditional gender patterns. The equity perspective, in contrast, emphasizes the positive impact of fairness for partnership stability. However, the possibility that it could lead to a decrease of divorce appears to be implausible, as it has been repeatedly linked with more partnership dissolution.*

*Applying an event-history analytical design to GSOEP for West Germany and PSID for the United States between the mid ’80 and the end of the ’00s, our findings give support to the gender equity thesis for more recent marriage cohort for both countries. Indeed, dual earner couples who embrace gender egalitarian practices have become the single most stable in the United States. Our findings contrast with the predictions of the gender construction perspective, highlighting that a shift away from the traditional family model is no longer detrimental to marital stability.*

**Keywords** Equity, norms, couple arrangements, divorce.

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## 1. Introduction

A substantial amount of research has focused on the link between women's role change and marital instability. The cross-national correlation between female employment and divorce rates suggests that women's role change may explain the rise in divorce (Kalmijn, 2007). At the individual level, however, the link is unclear (Özcan and Breen, 2012): the empirical evidence suggests that the effect of wives' employment on divorce varies both between and within countries (Liefbroer and Dourlejin, 2006; Wagner and Weiß, 2006; Cooke, 2006; Cooke et al, 2013).

Some studies suggest that focusing solely on women's altered employment profile is inadequate unless we simultaneously take into account the domestic sphere and, in particular, the allocation of housework (Sayer and Bianchi, 2000; Schoen et al, 2002). In fact, a number of studies highlight the impact of inequitable practices in the division of housework on marital conflict and dissolution (Scanzoni, 1978; Kluwer et al, 1997; Rogers, 2004; Cooke, 2004, 2006; Gershuny et al., 2005). There is consistent evidence that male participation in household tasks enhances couple stability (Cooke 2004, 2006; Sigle-Rushton, 2010; Wilkie et al., 1998). Similarly, the perceived quality of the relationship decreases when the female partner is saddled with a disproportionate share of domestic chores (Frisco and Williams, 2003; Wilkie, Feree and Ratcliff, 1998; Kalmijn 1999).

Studies which focus on men's relative dedication to housework usually adopt a linear assumption, i.e. that an increase in the male partner's contribution leads to a, proportionally speaking, reduced risk of divorce – when controlling for the female's level of paid work (or income). Cooke (2006) tests the effect of an equitable division of work by regressing marital stability on the share of housework that the husband does - and, in another model, on a dummy for whether he contributes more or less than 50% of housework. But her study does not simultaneously take into account the relative contribution of both partners to paid work (or income). Similarly, DeMaris (2010) examines how the risk of couple disruption is associated with the partners' division of unpaid work, but he does not analyze how this association depends on their division of paid work. We should, however, expect that any consideration of fairness in the division of domestic tasks may be misleading if one does not simultaneously take into account the partners' dedication to paid work (Kalmijn and Monden, 2012; Esping Andersen et

al, 2013). Indeed, traditional male breadwinner couples can display perfect equity even if the male's housework contribution is nil (Amato and Booth, 1995; Wilcox and Nock 2006).

Research focusing on divorce has only rarely explored the influence of gender role norms related marital stability. This is of course only possible in studies that compare across clearly different normative environments.

Our study can be seen as an extension of Cooke (2006). Like her, to capture the salience of contrasting "gender cultures" we compare couples in the United States and West Germany, two countries which differ substantially as regards the societal discourse on gender roles. Our study moves beyond Cooke's in two respects. Firstly, we develop a more comprehensive equity measure by including information on the partners' paid and unpaid work simultaneously. Secondly, our study includes more recent partnerships for both countries. Since there is evidence that the social acceptance of gender egalitarianism has gained momentum in both countries (Bianchi et al, 2006; Schwartz, 2010; Schober and Stahl, 2014), this allows us to examine whether this, in turn, translates into enhanced marital stability within those couples who adopt an equal division of paid and unpaid work. Our analyses will be based on the German Socio-Economic Panel (GSOEP) and the Panel Study of Income Dynamics (PSID). And we shall compare marriages that began between 1962 to 1985 and 1986 to 2008 (2009 in case of the US), respectively.

To anticipate our conclusions, we find that overall in Western Germany specialized couples continue to represent the single most stable group while, in the United States that is not the case. And we find that marital stability among *equitable* dual earner couples has increased within the most recent cohort in both countries. In Western Germany, this couple arrangement has become a rival to the traditional specialized partnership in terms of marital stability; in the United States, it now represents the single most stable arrangement.

In the following, we discuss theories on the link between partnership equity, employment and divorce. In the third section, we describe the data, variables and methods and present our findings. Finally, we conclude.

## **2. Couples' division of paid and unpaid work and partnership stability.**

There is broad agreement that equitable arrangements increase marital stability by fostering cooperation and active involvement within partnerships (Poortman, 2005; Wilcox and Nock, 2006). But in line with the gender ideology literature, this is likely to vary according to the

prevailing normative principles that guide couples' division of paid and unpaid work (Cooke and Gash, 2010). In other words, the extent to which equity in partnerships will enhance marital stability is likely to depend on whether the adopted couple arrangement conforms to reigning societal norms (DeMaris and Longmore, 1996).

During the postwar decades the breadwinner-homemaker model was dominant in both the US and Western Germany (Tilly and Scott, 1978). According to Parsons (1953) and Becker (1981), the beneficial consequences of such mutual dependency were enhanced efficiency and reduced marital dissolution.

With surge in women's labor market participation over the last decades of the 20<sup>th</sup> Century was accompanied by ever greater acceptance of women combining a career with motherhood (Cotter et al., 2011). But, as a vast literature has demonstrated, the rise of female employment did not produce a corresponding increase in males' housework contribution (Bianchi et. al., 2000). Witness Hochschild's (1989) notion of the "stalled revolution". The gender construction perspective argues that housework and child care intrinsically represent the female role. Therefore, where traditional gender norms remain prevalent we should expect that employed wives will accept a 'double shift' arrangement so as to avoid couple conflicts (Berk, 1985; Erickson, 2005), and to counteract social stigma (Tichenor, 2005). In such a normative context, the adoption of inequitable couple arrangements can be seen as an "insurance" against divorce (Ruppanner, 2010; Kaufmann, 1998; for German case, Grunow et al, 2012).

In lieu of the foregoing, we can now formulate the first working hypotheses:

Hypothesis1. When wives' employment is considered to be a threat to husbands' breadwinner identity, the display of traditional gender identities - via 'the double shift' or specialization - should stabilize relationships. As a consequence, *gender symmetric arrangements in dual earner couples are unlikely to be associated with greater couple stability.*

And it follows that we should expect more partnership stability the greater is the wife's dedication to the domestic sphere. A number of studies suggest that social expectations about the proper role of women is more traditional in West Germany than in the United States (Cooke, 2006; Pampel, 2011).<sup>1</sup> After childbirth, (Western) German women will normally curtail employment for several years after which they will, most likely, opt for part-time work or

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<sup>1</sup> German female partners with one or two children account for 25% and 20% on average of couples' total paid hours, respectively, while in the United States this incidence is much higher (35% and 33%).

housewifery (Pfau-Effinger, 2010). In contrast, US mothers tend to follow divergent labor market trajectories post-birth; they are likely to either continue working on a full-time, full-year basis, or to abandon employment (Blossfeld and Drobnic, 2001).

Germany and the US exhibit significant differences also in terms of labor market and family policies. While female employment rates are relatively high in both countries, German family policies are very much defined around the assumption that mothers are mainly responsible for care work while this is not the case in the US (Pfau-Effinger, 2012). German policy has been traditionally biased towards a specialized division of labor, by the tax system (which levies a high marginal tax rate on the second earner), by the family benefit system (designed to promote care of children within the home) and by the shortage of child-care provision (Drobnic et. al, 1999; Hook, 2010; Pfau-Effinger, 2012; Schober, 2013). The dualistic employment response among American mothers is, instead, very likely related to the absence of family support policies (Blau and Kahn, 2013; Charles et al, 2001). The US tax system encourages the labor supply of the most career-oriented mothers (Gruber, 2011), and the large (low cost) service sector permits American couples to purchase market substitutes for domestic tasks (Heisig, 2011).

Hypothesis (1a): The adoption of traditional gender identities is likely to yield a higher stability premium for traditional couples in Western Germany than in the United States.

## **2.1 The emergence of a new family paradigm**

Although there is broad agreement about the importance of gender role expectations (Brines, 1994; Pfau Effinger, 2004; South and Spitze, 1994), it is evident that in the last decades the pervasiveness of gender egalitarianism has increased in both countries, (Brooks and Bolzendahl, 2004; Fan and Marini, 2000, Pampel 2011, Davis et al 2007, Knudsen and Waerness, 2008).

In Western Germany, the increasing participation of women in the labor market, especially in recent decades, has gone hand in hand with a gradual erosion of the male breadwinner model (Buhr and Huinink, 2015). For the 1940 birth cohort, the employment rate of (Western) German mothers was about 20%, while almost double that for the 1970 birth cohort - even if the increase can be mostly attributed to part-time work (Trappe et al, 2015).

We observe a parallel persistent rise in trend toward endorsement of gender-egalitarian attitudes also related to the private sphere. The mean scores on gender egalitarianism scale drastically increased in the last decades (Pampel, 2011) while the proportion of people support for the

traditional female role has declined (Pampel, 2011). According to a recent study the percentage of German people that consider that a pre-school child is likely to suffer if from his mother is employed going to work halved, decreasing from 68.8% in 1994 to 32.1% in 2012 (Schober and Stahl, 2014).<sup>2</sup> Furthermore recent policy development indicates a slow movement towards greater acceptance also at the institutional level of a maternal employment throughout the expansion of formal care and stronger incentives for shared parental childcare for children. (Schober and Schmitt, 2013; Fleckenstein, 2011).<sup>3</sup>

Attitudes toward gender equality became widespread in the United States starting in the 1970s. As Donnelly and colleagues (2015) show, white women born between 1946 and 1964 were the pioneers of egalitarian attitudes in the United States. With a brief halt in the early 2000s younger generations have continued to adopt gender-egalitarian values in increasing numbers (Cotter et al 2011), In 1977, 68% believed that a pre-school child with a working mother suffers, while this fell to 42% in 1998 and to 35% in 2012 (Donnelly et al, 2015). Overall, US adults supporting egalitarian attitudes as regards women's roles went from minority to majority status between the 1970s and 2010s.

As in West Germany, the US educational system also promoted equal educational opportunities for both men and women. Beginning from the mid-1980s (much earlier than in West Germany), US women outpaced men in terms of college completion rates (Buchmann and DiPrete, 2006).<sup>4</sup> These policies helped boost female employment and, certainly in the U.S., full-time employment also among mothers with small children (Grunow et al, 2006).

Given the rise of gender egalitarian values, the assumption that women should do the majority of unpaid work is losing its dominant normative status. As a consequence, the stability premium associated with traditional couple relations is likely to have declined in both countries. In parallel, as a new gender egalitarian normative order gains ground, we should expect to see a fall in divorce probabilities, especially among dual earner couples in the United States. This leads us to formulate an additional hypothesis regarding the changing relationship between equity and divorce.

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Hypothesis 2: Marriages of dual earner couples with an equitable division of paid and unpaid work were once more likely than others to dissolve, but this association has declined in more recent marriage cohorts. The normative climate of ever greater support for gender egalitarianism should be associated with enhanced couple stability among equitable dual earner couples; in other words, *equity is increasingly associated with greater conjugal stability within dual-earner partnerships.*

### **3. Data, methods and variables**

#### **3.1 Data and analytical sample.**

The GSOEP began in 1984 with a sample (interviewed annually) of 12290 individuals nested in 5921 households.<sup>5</sup> We exclude Eastern Germany since it only entered into the GSOEP after 1990. The PSID started in 1968 with a sample of 18000 individuals residing in 5,000 family units.<sup>6</sup> Data was collected annually until 1997 and biennially thereafter. Both are representative panel surveys that provide information on marital history, weekly data on the partners' paid and unpaid work hours, as well as standard socio-demographic characteristics.

In order to obtain a comparable time frame, we analyze the years 1986-2010 for the PSID and the years 1986-2009 for the GSOEP. Compared to the GSOEP, the PSID has some limitations. Firstly, the head of household responds on behalf of all household members, while the GSOEP conducts separate interviews with each member. Secondly, the PSID does not report information on parental childcare. Our comparisons focus therefore only on domestic work. As we explain below, in order to address the potential bias from the missing childcare measure, we control for the number of children as well as for the presence of a child younger than 3.<sup>7</sup> Thirdly the GSOEP collects information about paid and unpaid work during the weekdays for all the years considered; weekend data are available only for some years. The US data refer to an ordinary

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<sup>5</sup> We exclude the first two waves because of changes in the definition of key variables.

<sup>6</sup> In 2000 the GSOEP added a major new refresher sample that significantly increased the sample size (Wagner, 2009).

<sup>7</sup> Cooke (2004) finds that the relative contribution to child care of German fathers does not alter significantly the risk of marital dissolution.

day<sup>8</sup>.

We examine only couples in which both respondents are between age 18 and 55 so as to ensure that they fall within the employable ages. We exclude cohabiting couples for both theoretical and practical considerations. Firstly, in both countries the distribution of paid and unpaid work is different for cohabiting and married couples (Barg and Beblo, 2012; Bianchi et al., 2014). Secondly, the meaning of marriage and cohabitation differs markedly in both countries. West Germany boasts a modest level of cohabitation (Dominguez-Folgueras, 2013), and fertility is strongly associated with marriage (Le Goff, 2002). In the U.S., cohabitation has become common but it tends to be short-lived and is clearly not an equivalent to marriage (Heuveline and Timberlake, 2004). Thirdly, on a practical note, we do not have retrospective data related to cohabitation spells and can therefore not construct comparable marital and cohabitation histories. We identify marital histories by combining retrospective and panel information. The start of each episode corresponds to the first year in which we observe the couple together. When the start of the partnership does not correspond to the actual first year of observation, we report the duration using the actual partnership starting date.<sup>9</sup> Partnership episodes are right-censored at any of the following events: age 55, 20 years of partnership duration, or last available interview (due to separation or death). The dependent variable is coded 1 for years during which a separation occurs and zero otherwise.

These restrictions produce a final sample of 6061 couples for the GSOEP and 7726 for the PSID (and an analytical sample of, respectively, 32731 and 52461 couple-years). We observe 414 episodes of marital dissolution (separations or divorces) in West Germany, and 1293 in the United States.

### ***Explanatory variables***

Our key explanatory variable is a typology of couple arrangement that considers two dimensions, degree of objective equity, and the division of paid work.

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<sup>8</sup> In the Technical Appendix, we explain how we handle missing information in the off-years after 1997.

<sup>9</sup> This type of incomplete information is usually referred to as delayed entry in the event-history analysis literature.



In order to identify objective equity, we simultaneously take into account the division of paid work of both partners (Mirowsky, 1985). Research on the influence of fairness on marital outcomes has largely favored subjective measures (e.g. Walster et al, 1978). In such studies the respondents are typically asked how positive they feel about their outcomes in the relationship in proportion to their inputs. This measure is, in turn, used to explain another subjective measure, such as marital dissatisfaction (Mirowsky, 1985). This can produce ambiguity (Grote and Clark 2001; DeMaris, 2010). It is for this reason that we favor an ‘objective’ measure – objective equity can be observed (DeMaris, 2010).

We first measure the relative share of paid work of the male partner (from 0% to 100%). In the PSID, from 1997 onwards, we use filler variables, whenever available, which measure the average number of weekly hours worked two years earlier (t-2)<sup>10</sup>. Secondly, we measure the relative amount of unpaid work of the male partner (again ranging from 0 to 100%). In the PSID, housework input is measured at the time of the survey by asking the respondent how many weekly hours, on average, does each spouse dedicate to housework. Following the approach in Esping-Andersen et al. (2013), a couple is equitable when the male share of domestic work corresponds symmetrically to the male share of paid work hours. Similarly, to Nock (2001), we allow for a (+/-) .10 deviation from this condition. We then combine the equity criterion with specific patterns of the partners’ division of paid work (inspired by Lewis, 2001). This produces five distinct couple arrangements.

\* *Male breadwinner couples* where the husband is the sole or dominant breadwinner - the male share of paid work is more than 75%. Other conditions that we impose are the following. We allow for couples where the female works twenty hours a week at maximum and the male works at least thirty hours a week. This is to guarantee that the wife is involved only marginally in the labor market, while the husband works full time (or has a long part time contract).

\* *Dual earner couples* where the male share of paid work is between 35% and 75%. Another condition that we impose is the following. We allow for couples where both the female and male work at least 10 hours a week. This is because dual earner couples actively participate in the labor market by definition.

This model has four variants,

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<sup>10</sup> In the Technical Appendix, we explain how we use the filler variables to construct the relative measure of paid work.

- *the gender egalitarian model* where both partners are employed and contribute equally to paid and unpaid work;
- *the male under-shooter model* where both partners are employed and the female partner contributes disproportionately more to unpaid work;
- *the male over-shooter model* where both partners are employed and the male partner contributes disproportionately more to unpaid work;
- *the female breadwinner family* where the female share of paid work exceeds 65%.<sup>11</sup>

As is obvious, male breadwinner and male under-shooter partnerships mirror conventional gender roles, while the gender egalitarians, the male over-shooters, and female breadwinners represent unconventional partnerships.

### ***Controls***

We include the standard control variables used in divorce studies: whether it is a first marriage, the current year (linear and squared), the wife's age in the year of marriage (also squared in the case of the US), and the age difference between the partners (whether he is older less than or equal to five years, whether she is older, and whether he is older more than five years). We include variables for the number of children in the household and whether any child under the age of three is present in the household.

We include both partners' education level as categorical variables. For the United States, the categories correspond to: less than 12 years of education (less than high-school diploma), 12 years (high-school diploma), between 13 and 15 years (some college or a two-year college degree), and 16 years plus (four-year college degree or more). For West Germany, we include 3 categories corresponding to: ISCED 1 and 2, ISCED 3 and 4, and ISCED 5 and 6. Additionally, for the U. S. we also include a categorical variable for the race of the wife (white, black or other since, historically, marital instability is greater among black couples (Hoffman and Duncan 1995).<sup>12</sup>) For Western Germany we include a dummy that identifies whether the interviewed is

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<sup>11</sup> As shown in Table 7 and Table 8 we conduct additional checks related to the selected thresholds. We do not consider under-employed couples, i.e. where the sum of paid hours of both partners is less than 15 hours a week (0.38% in the United States and 0.85% in West Germany).

<sup>12</sup> 'Others' regroup American Indian and Alaska natives, Asian and Pacific Islanders, Latin descents, and 'others'.

not German. This is because Turks, the prevailing ethnic minority, have a significant lower risk of divorce.

Moreover, we control for the survey year (including its squared function) and for its squared as well as for and for the couple's paid and unpaid number of hours, since it has become become standard practice in divorce studies.

Finally, we distinguish two marriage cohorts to proxy a shift in gender roles within each country (Schwartz and Han, 2014). We distinguish between couples married before 1986 and after (or during) 1986. Since we control for marital duration, we avoid a misinterpretation of the empirical findings due to compositional characteristics of the marriage cohorts (Wagner et al 2015).<sup>13</sup>

Tables 1 and 2 present descriptive statistics for the main variables for each country.

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<sup>13</sup> We did sensitivity checks changing the definition of marriage cohorts, using instead 1993 as the divider between the two 'cohorts'. The results (upon request of authors) are similar for both countries.

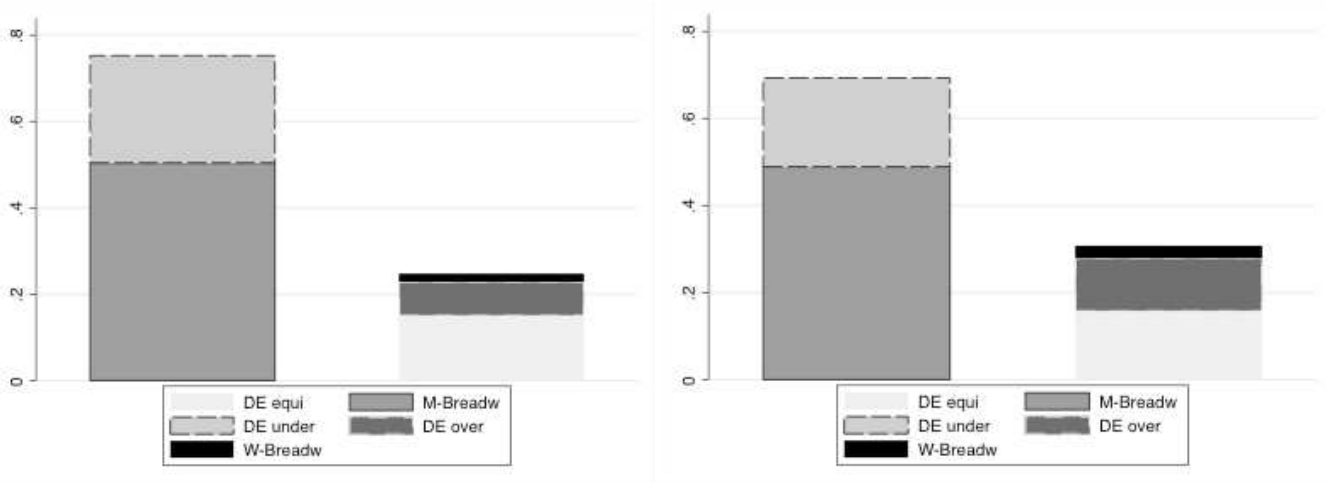
**Table 1 – Descriptive Statistics for West Germany****Table 2 – Descriptive Statistics for the United States**

	West Germany				United States			
	Mean	SD	Min	Max	Mean	SD	Min	Max
<i>Continuous variables</i>								
Log of marriage duration	2.05	0.76	0.00	2.94	2.01	0.70	0.00	2.94
Total hours of paid work	60.24	21.08	16.00	200.00	74.18	22.79	16.00	200.00
Total hours of housework	30.47	17.74	1.00	190.00	26.98	17.41	1.00	190.00
Survey year (0 = 1986)	12.65	6.54	0.00	23.00	10.99	7.13	0.00	24.00
Survey year <sup>2</sup>	202.65	158.73	0.00	529.00	171.54	175.03	0.00	576.00
Age at partnership start	24.96	6.18	16.00	54.00	26.25	6.55	13.00	55.00
Num of children in the hh.	1.44	1.05	0.00	10.00	1.52	1.20	0.00	10.00
<i>Categorical variables</i>								
First marriage order	97.99				76.89			
Couple typology (Ref. Dual-earner and equitable)	15.53				22.17			
Male breadwinner	49.28				26.64			
Dual-earner and undershooter	21.62				41.47			
Dual-earner and overshooter	10.98				6.47			
Female breadwinner	2.58				3.25			
Marriage cohort: 1986-2009 (ref. 1962-1985)	72.68				62.49			
German	83.05				.			
Non-German	16.95				.			
White					71.83			
African-American	.				20.49			
Others	.				7.68			
Age Difference (ref. Age homogamy)	62.00				61.33			
Wife is older	13.24				22.16			
Wife is younger	24.76				16.51			
Education (ref. 12 years and less )	20.17				7.17			
12 years	.				33.28			
13-15 years	57.68				29.21			
16 years and above	22.15				30.35			
Husband's education (ref. 12 years and less )	15.65				9.86			
12 years	.				37.01			
13-15 years	52.27				23.87			
16 years and above	32.08				29.26			
Presence of children <4 in the hh.	61.14				34.00			
N couple-years	32731				52461			

### 3.2 Descriptive statistics and methodology

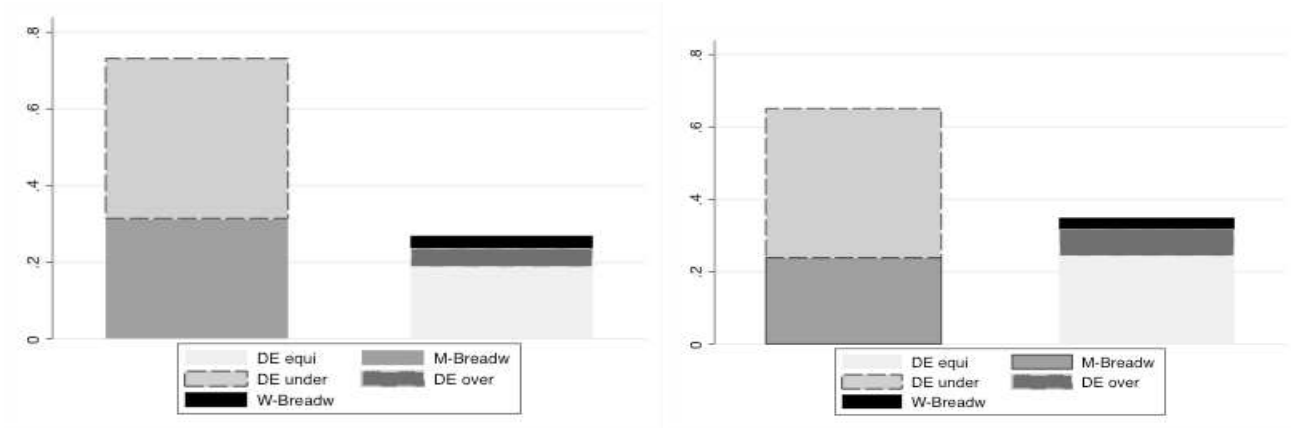
Figures 1 and 2 present the relative distribution of couple-year arrangements in Western Germany and the United States for the two marriage-cohorts (panel a and b respectively). In each marriage cohort, we divide couples into two clusters. The first (left bar) represents conventional partnerships (male breadwinner or male under-shooter couples); the second represents equitable dual earners, male over-shooter, and female breadwinner couples. We observe that in both countries and for both marriage cohorts the first cluster accounts for the majority of the partnerships. In Western Germany this is mainly because of a large proportion of male breadwinner couples; in the United States, primarily due to a large number of male under-shooter arrangements. Comparing across the two cohorts we see a clear shift away from gender traditionalism. In the pre-1986 cohort, male breadwinner and male under-shooter partnerships accounted for nearly 80% of all couple-years both Germany and the United States. Panel b in Figures 1 and 2 shows that for couples married post-1985 over 30% of the US or German couples display an unconventional division of work.

**Figure 1.** The distribution of couple-years by cohort and couple arrangement. Panel a (marriage cohort before 1986) and panel b (marriage cohort after 1985). West Germany.



Note: DE equi = Dual-earner and equitable, M-Breadw = Man breadwinner, DE under = Dual-earner and undershooter, DE over = Dual-earner and overshooter, W-Breadw = Woman breadwinner.

**Figure 2** – The distribution of couple-years by couple arrangement. Panel a (marriage cohort before 1986) and panel b (marriage cohort after 1985). United States.



Note: DE equi = Dual-earner and equitable, M-Breadw = Man breadwinner, DE under = Dual-earner and undershooter, DE over = Dual-earner and overshooter, W-Breadw = Woman breadwinner.

#### 4. Empirical results

We start by estimating the association between couple arrangements and divorce without distinguishing between the younger and older cohorts (Hypothesis 1). Then we test whether the adoption of equitable practices by dual earner couples has a different impact on divorce risks across cohorts (Hypothesis 2). In each case, we first present a naked model (Model 1) which includes only partnership duration and the variable that identifies couple arrangements –the reference category are equitable dual earner couples. In the full models we include the control variables (with and without controls for number of children and whether a child under three is present – Models 2 and 3). All the results are presented as odds ratios.

##### *Gender identities, couple arrangements and divorce.*

Tables 3 and 4 for, respectively, West Germany and the United States summarize our main results regarding the first hypothesis, i.e. whether the display of traditional gender identities help stabilize marriages.

**Table 3 – Couple arrangements and divorce risk in Western Germany**

**Table 4 – Couple arrangements and divorce risk in the United States**

Western Germany	Model 1			Model 2			Model 3			United States	Model 1			Model 2			Model 3		
	Odds ratio	Robust SE		Odds ratio	Robust SE		Odds ratio	Robust SE			Odds ratio	Robust SE		Odds ratio	Robust SE		Odds ratio	Robust SE	
Log of marriage duration	0.892	(0.046)*		0.973	(0.071)		0.956	(0.071)		Log of marriage duration	0.800	(0.027)***		0.830	(0.041)***		0.801	(0.040)***	
Couple typology (Ref. Dual-earner and equitable)										Couple typology (Ref. Dual-earner and equitable)									
Male breadwinner	0.677	(0.095)**		0.745	(0.124)+		0.741	(0.126)+		Male breadwinner	1.153	(0.102)		1.141	(0.132)		1.113	(0.129)	
Dual-earner and undershooter	0.862	(0.134)		0.841	(0.134)		0.841	(0.134)		Dual-earner and undershooter	1.403	(0.110)***		1.210	(0.097)*		1.199	(0.096)*	
Dual-earner and overshooter	1.128	(0.195)		1.121	(0.196)		1.125	(0.198)		Dual-earner and overshooter	1.100	(0.148)		1.047	(0.142)		1.047	(0.142)	
Female breadwinner	1.328	(0.360)		1.432	(0.432)		1.433	(0.433)		Female breadwinner	2.390	(0.316)***		1.998	(0.319)***		1.990	(0.318)***	
Marriage cohort: 1986-2010 (ref. 1962-1985)				1.669	(0.288)**		1.718	(0.307)**		Marriage cohort: 1986-2010 (ref. 1962-1985)				1.333	(0.136)**		1.351	(0.139)**	
Total hours of paid work				1.003	(0.003)		1.003	(0.003)		Total hours of paid work				1.001	(0.002)		1.001	(0.002)	
Total hours of housework				0.998	(0.003)		0.997	(0.004)		Total hours of housework				0.992	(0.002)***		0.990	(0.002)***	
Survey year (0 = 1986)				1.021	(0.032)		1.020	(0.033)		Survey year (0 = 1986)				1.074	(0.018)***		1.072	(0.018)***	
Survey year <sup>2</sup>				0.999	(0.001)		0.999	(0.001)		Survey year <sup>2</sup>				0.997	(0.001)***		0.997	(0.001)***	
First marriage order				0.498	(0.129)**		0.508	(0.133)**		First marriage order				0.569	(0.048)***		0.593	(0.051)***	
Age at partnership start				0.973	(0.010)**		0.972	(0.010)**		Age at partnership start				0.816	(0.025)***		0.813	(0.025)***	
Age at partnership start <sup>2</sup>										Age at partnership start <sup>2</sup>				1.002	(0.000)***		1.003	(0.000)***	
Non-German				0.524	(0.091)***		0.523	(0.091)***		Race (Ref. White)									
										African-American				1.505	(0.101)***		1.447	(0.099)***	
										Others				1.048	(0.117)		1.023	(0.115)	
Age Difference (ref. Age homogamy)										Age Difference (ref. Age homogamy)									
Wife is older				1.544	(0.221)**		1.550	(0.222)**		Wife is older				1.269	(0.096)**		1.267	(0.096)**	
Wife is younger				1.160	(0.136)		1.158	(0.136)		Wife is younger				1.201	(0.092)*		1.206	(0.092)*	
Education (ref. 12 years and less )										Education (Ref. less than 12 years)									
13-15 years				0.829	(0.111)		0.835	(0.112)		12 years				1.183	(0.142)		1.204	(0.145)	
16 years and above				0.908	(0.154)		0.914	(0.155)		13-15 years				1.322	(0.169)*		1.349	(0.173)*	
Husband's education (ref. 12 years and less)										16 years and above				1.022	(0.147)		1.053	(0.152)	
13-15 years				0.878	(0.125)		0.878	(0.125)		Husband's education (Ref. less than 12 years)									
16 years and above				0.593	(0.103)**		0.591	(0.103)**		12 years				0.881	(0.083)		0.890	(0.084)	
Presence of children <4 in the hh.							0.916	(0.132)		13-15 years				0.771	(0.082)*		0.779	(0.083)*	
Num of children in the hh.							1.056	(0.066)		16 years and above				0.464	(0.059)***		0.470	(0.059)***	
N couple-years	32731			32731			32731			Presence of children <4 in the hh.							1.005	(0.067)	
N couples	6061			6061			6061			Num of children in the hh.							1.100	(0.029)***	
										N couple-years	52461			52461			52461		
										N couples	7726			7726			7726		

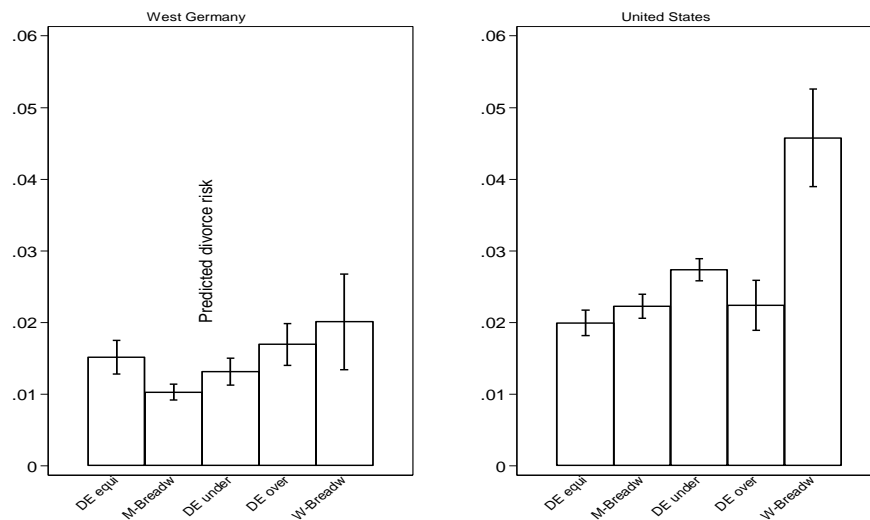
Notes: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001. OR = Odds Ratio. SE = Standard Errors.

The results for West Germany (Table 3) show that the traditional gender arrangement when compared to equitable dual earners (the reference category) significantly diminishes the relative risk of divorce. Note that this effect size is basically the same in both the naked and the full model. This indicates that gender traditional couples in Germany are comparably more stable.

For the United States (Table 4), the risk of divorce is not significantly different for male breadwinner and equitable dual earner couples – be it in the naked or full models. Moreover, we observe that American male under-shooter couples face significantly higher divorce probabilities compared to equitable dual earner couples.

For ease of interpretation, we present the results for each couple type in Figure 3. As the model is non-linear, we prefer to estimate predictive margins (based on the full model).

**Figure 3.** Predicted divorce risk by couple arrangement in West Germany and the United States



Notes: Predictions are obtained using estimates from a logistic regression model (Model 3 in Table 4 for West Germany and Model 3 in Table 5 for the United States). Confidence intervals are centered on the predictions and have lengths equals to  $2 \times 1.39 \times$  standard errors to have an average level of 5% for the Type I error probability in the pair-wise comparisons of a group of means (Goldstein and Healy, 1995). DE equi = Equitable dual-earner couples, M-Breadw = Man breadwinner, DE under = Dual-earner and undershooter, DE over = Dual-earner and overshooter, W-Breadw = Woman breadwinner.

Figure 3 suggests that, in West Germany, divorce risks are significantly lower when the husband is the main earner. Moreover, we observe that the adoption of a conventional division of housework within dual earner couples stabilizes the partnership– although the coefficient is not significant. We can conclude that, as predicted by the gender construction perspective



(Hypothesis 1a), the adoption of conventional gender roles, regardless of whether women are employed or not, has a stabilizing effect on marriages in Western Germany; this is especially the case for male breadwinner couples. In contrast, traditional couples in the United States do not enjoy any stability dividend compared to dual earner couples (cf. Hypothesis 1a). And we observe that male under-shooter couples face higher divorce risks than the equitable dual earner couples.

In both countries, the risk of divorce increases for couples where the wife is the main breadwinner; indeed, this is especially the case for the United States. Additional tests show that these results are not driven by the imposition of thresholds of paid work that we implemented to define couple arrangements (see section “Additional analyses”). Taken together, these results only partly support the “gender construction” thesis. That is, the adoption of conventional gender identities does not represent a universal insurance against marital dissolution.

### *Value shifts and changing divorce risks*

We now turn to a comparison across the two marriage cohorts. These are estimated using logistic models with the same covariates used previously, but with the inclusion of an interaction term between couple arrangement and marriage cohort (see Table 5 and Table 6).

**Table 5 – Couple arrangements, marriage cohorts and divorce risk in Western Germany**

**Table 6 – Couple arrangements, marriage cohorts and divorce risk in the United States**

Western Germany	Model 1		Model 2		Model 3		United States	Model 1		Model 2		Model 3	
	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE		Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE
Log of marriage duration	0.955	(0.056)	0.979	(0.071)	0.960	(0.072)	Log of marriage duration	0.851	(0.033)***	0.825	(0.041)**	0.795	(0.040)***
Couple typology (Ref. Dual-earner and equitable)							Couple typology (Ref. Dual-earner and equitable)						
Male breadwinner	0.332	(0.096)***	0.378	(0.113)**	0.371	(0.111)***	Male breadwinner	0.713	(0.111)*	0.718	(0.122)+	0.701	(0.119)*
Dual-earner and undershooter	0.494	(0.155)*	0.494	(0.155)*	0.494	(0.155)*	Dual-earner and undershooter	1.038	(0.143)	0.881	(0.123)	0.874	(0.122)
Dual-earner and overshooter	1.083	(0.376)	1.084	(0.375)	1.085	(0.376)	Dual-earner and overshooter	1.339	(0.306)	1.270	(0.293)	1.267	(0.292)
Female breadwinner	0.681	(0.505)	0.801	(0.600)	0.792	(0.594)	Female breadwinner	1.344	(0.353)	1.094	(0.307)	1.100	(0.309)
Marriage cohort: 1986-2009 (ref. 1962-1985)	0.815	(0.210)	0.989	(0.275)	1.015	(0.284)	Marriage cohort: 1986-2010 (ref. 1962-1985)	0.829	(0.121)	0.874	(0.144)	0.887	(0.146)
Couple Typology x 1986-2009							Couple Typology x 1986-2010						
Male breadwinner x 1986-2009	2.505	(0.829)**	2.401	(0.799)**	2.444	(0.815)**	Male breadwinner x 1986-2010	2.059	(0.388)***	1.972	(0.373)**	1.973	(0.373)***
Dual-earner and undershooter x 1986-2009	2.128	(0.770)*	2.017	(0.733)+	2.013	(0.731)+	Dual-earner and undershooter x 1986-2010	1.550	(0.260)**	1.566	(0.265)**	1.564	(0.264)**
Dual-earner and overshooter x 1986-2009	1.068	(0.428)	1.092	(0.437)	1.097	(0.439)	Dual-earner and overshooter x 1986-2010	0.762	(0.215)	0.765	(0.218)	0.767	(0.218)
Female breadwinner x 1986-2009	2.278	-1.816	2.105	(1.679)	2.135	-1.703	Female breadwinner x 1986-2010	2.257	(0.687)**	2.349	(0.724)**	2.318	(0.717)**
Total hours of paid work			1.003	(0.003)	1.003	(0.003)	Total hours of paid work			1.001	(0.002)	1.001	(0.002)
Total hours of housework			0.998	(0.003)	0.997	(0.004)	Total hours of housework			0.992	(0.002)**	0.990	(0.002)***
Survey year (0 = 1986)			1.015	(0.032)	1.013	(0.033)	Survey year (0 = 1986)			1.073	(0.018)**	1.072	(0.018)***
Survey year <sup>2</sup>			0.999	(0.001)	0.999	(0.001)	Survey year <sup>2</sup>			0.997	(0.001)**	0.997	(0.001)***
First marriage order			0.503	(0.131)**	0.514	(0.135)*	First marriage order			0.572	(0.049)**	0.596	(0.052)***
Age at partnership start			0.974	(0.010)**	0.974	(0.010)**	Age at partnership start			0.816	(0.025)**	0.813	(0.025)***
Age at partnership start <sup>2</sup>							Age at partnership start <sup>2</sup>			1.002	(0.000)**	1.003	(0.000)***
Non-German			0.522	(0.091)***	0.520	(0.091)***	Race (Ref. White)						
							African-American			1.501	(0.101)**	1.445	(0.098)***
							Others			1.043	(0.117)	1.019	(0.115)
Age Difference (ref. Age homogamy)							Age Difference (ref. Age homogamy)						
Wife is older			1.533	(0.220)**	1.539	(0.221)**	Wife is older			1.269	(0.096)**	1.268	(0.096)**
Wife is younger			1.164	(0.137)	1.161	(0.137)	Wife is younger			1.205	(0.092)*	1.210	(0.093)*
Education (ref. 12 years and less )							Education (Ref. less than 12 years)						
12 years							12 years			1.180	(0.142)	1.201	(0.145)
13-15 years			0.828	(0.111)	0.834	(0.112)	13-15 years			1.310	(0.167)*	1.338	(0.171)*
16 years and above			0.904	(0.153)	0.911	(0.154)	16 years and above			1.015	(0.146)	1.046	(0.151)
Husband's education (ref. 12 years and less )							Husband's education (Ref. less than 12 years)						
12 years							12 years			0.879	(0.083)	0.887	(0.084)
13-15 years			0.878	(0.125)	0.877	(0.125)	13-15 years			0.773	(0.082)*	0.781	(0.083)*
16 years and above			0.596	(0.104)**	0.594	(0.104)**	16 years and above			0.465	(0.059)**	0.470	(0.059)***
Presence of children <4 in the hh.					0.899	(0.131)	Presence of children <4 in the hh.					1.001	(0.067)
Num of children in the hh.					1.064	(0.067)	Num of children in the hh.					1.100	(0.029)***
N couple-years	32731		32731		32731		N couple-years	52461		52461		52461	
N couples	6061		6061		6061		N couples	7726		7726		7726	

Notes: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001. OR = Odds Ratio. SE = Standard Errors.

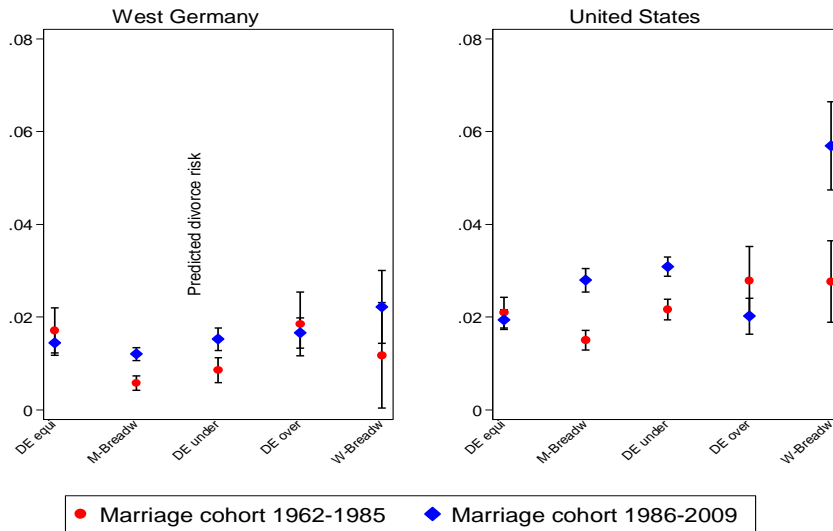
When we focus on the more recent cohorts we register substantial changes in divorce risk. For both countries we note that the stability advantage that traditional German couples once enjoyed has declined; in the United States, it has even reversed itself.

In Figure 4 (Panel a) we report the predicted probabilities of our explanatory variable for the older and the younger marriage cohorts when all the control variables are included (Model 3). As regards Western Germany, equitable dual earner couples from the older cohort were more likely to divorce than were traditional couples. Turning to the younger cohort, we see that traditional couples are no longer significantly less likely to divorce: the ‘traditionalism premium’ is evidently eroding. And the comparably more stable ‘under-shooting’ dual earner couples in the old cohort (their risk of dissolution was about 50% for equitable dual earner couples) have clearly lost their stability advantage. Since this simultaneously implies that the equitable dual earner partnerships are experiencing significant stability gains in the younger cohort (when compared to more conventional couples), we seem to be witnessing the dawn of a new era in terms of German gender relations.

Turning to the United States, we observe a similar - but also distinctive – shift (Figure 4 Panel b). For the old cohort, it was the traditional couple that faced the lowest divorce risk. They were also less likely to dissolve than under-shooter dual earner couples. As predicted by the second hypothesis, in the recent marriage cohort the risk of divorce is significantly higher for traditional compared to equitable dual earner couples. Moreover, male under-shooter dual earner couples are now more likely to divorce than the reference category. All in all, within the younger cohort it is the equitable dual earner couple that displays the greatest degree of marital stability.

But the increased stability among non-conventional couples appears to have not reached the point at which female income dominance is unproblematic. Indeed, in both countries the divorce propensity for this (certainly minoritarian) couple arrangement has actually risen.

**Figure 4.** Predicted divorce risk by couple arrangements across two marriage cohorts in West Germany (Panel a) and the United States (Panel b).



Notes: Predictions are obtained using estimates from a logistic regression model (Model 3 in Table 6 for West Germany and Model 3 in Table 7 for the United States). Confidence intervals are centered on the predictions and have lengths equals to  $2 \times 1.39 \times \text{standard errors}$  to have an average level of 5% for the Type I error probability in the pair-wise comparisons of a group of means (Goldstein and Healy, 1995). DE equi = Equitable dual-earner couples, M-Breadw = Man breadwinner, DE under = Dual-earner and undershooter, DE over = Dual-earner and overshooter, W-Breadw = Woman breadwinner.

### Additional analyses

In this section we consider three additional analyses (Appendix A1 for Western Germany and Appendix A2 for the United States). To begin with, we now estimate with an alternative operationalization our explanatory variable, re-defining the couple typology as following. In Model 1 and 2 we redefine female breadwinner couples as partnerships where the female share of paid work is now up to 40% (instead of 35%); in Model 3 and 4 we redefine male breadwinner couples as partnerships where the male share of paid work is greater than 80% (instead of 75%); in Model 5 and 6 we relax the condition related to the minimum hours of male's paid work within male breadwinner couples (in the original it was 30 hours minimally and now we do not impose any minimum); in Model 7 and 8 we restrict the condition about the maximum number of paid work hours for women in male breadwinner arrangements (from a maximum of 20 hours to a maximum of 10 hours).

As a second robustness check (Model 9 and 10) we re-estimate with a more restrictive sample related to marital duration. The association between couple arrangements and marital dissolution

may vary by marital duration (Schober 2012). If this is the case, we may represent just a time specific association between couple arrangements and divorce. We consider just the first 15 years of marital history (at maximum).

As a final robustness check, we implement a fixed effects regression model (Model 11 and 12). The association between couple arrangements and divorce may be affected by potential bias due to unobservables that may be correlated with the adoption of a specific couple arrangement. The results in the appendix suggest that our original findings remain quite robust. . Not only do the direction and significance of the effects not vary, but also the magnitudes are quite stable.

This indicates that unobserved individual specific effects do not explain (solely) the divorce variance – in both West Germany and in the United States.

## **5. Conclusions**

This study has revisited the much-researched link between couples' work arrangements and marital (in)stability. Our aim was to better capture divorce dynamics on three principal dimensions. First of all, we identify the presence of qualitatively different behavioral logics that are driven by rival normative orders. Secondly, we emphasize the importance of dominant social norms in guiding family life. And thirdly, we have sought to improve our understanding of how and under what conditions the adoption of gender egalitarianism may influence partnership dynamics positively.

Like Cooke's earlier studies (2006) we, too, focus on West Germany and the United States not least because they have represented quite different degrees of adaptation to the new role of women, both attitudinally and in couple practices. Our study has been advantaged by the availability of newer recent data, thus permitting us to better identify recent change in light of the clear progress towards more gender egalitarianism in both countries. This has, in turn, allowed us to identify a clear turnabout in couple dynamics – especially for the German case.

In address to our first hypothesis -- the display of traditional gender identities can help stabilize relationships -- we found that, overall, traditional couples are more stable than equitable dual earner couples in West Germany; but not so in United States, where 'double-shift' women face a higher divorce risk, and where traditional couples do not enjoy a larger stability premium than do equitable dual earner couples.

As to our second hypothesis -- that equity is increasingly centrally important for conjugal stability within dual-earner partnerships -- we observe that the stability premium related to traditional gender roles in the domestic sphere has declined in both countries and that equitable dual earner couples have increased their advantage in the United States. In other words, the adoption of a traditional division of paid and unpaid work was once the best insurance against divorce, but this is no longer the case, be it in West Germany or the United States.

Another major finding is that the divorce risk among equitable dual earner couples has clearly declined, relatively speaking, within the younger cohorts. Indeed, these couples are now the single most stable in the U.S. Put differently, gender egalitarianism appears now to be key to marital stability in the United States; the same, albeit still in a more embryonic form, appears now to obtain also West Germany.

In this sense, our findings suggest that the explanatory power of the gender construction thesis is waning and possibly disappearing entirely as societies eventually adopt gender egalitarianism more broadly.

In this study we have performed a number of additional checks that should help ensure that our results are valid. An interesting challenge for future research would be to identify more precisely whether value shifts and changing partnership dynamics are being driven by specific social strata (such as, for example, the higher educated) and the extent to which there is ever-greater convergence across the social strata.

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## Appendix: Robustness checks

**Table A1 – Couple arrangements, marriage cohorts and divorce risk in Western Germany, robustness checks**

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE
Couple typology (Ref. Dual-earner and equitable)												
Male breadwinner	0.741	(0.126)+	0.371	(0.111)***	0.773	(0.129)	0.458	(0.137)**	0.737	(0.125)+	0.372	(0.112)***
Dual-earner and undershooter	0.841	(0.134)	0.494	(0.155)*	0.840	(0.132)	0.518	(0.163)*	0.841	(0.134)	0.494	(0.155)*
Dual-earner and overshooter	1.125	(0.198)	1.085	(0.376)	1.226	(0.205)	1.052	(0.365)	1.125	(0.198)	1.085	(0.376)
Female breadwinner	1.433	(0.433)	0.792	(0.594)	1.524	(0.455)	0.894	(0.668)	1.433	(0.433)	0.790	(0.593)
Marriage cohort: 1986-2009 (ref. 1962-1985)	1.718	(0.307)**	1.015	(0.284)	1.707	(0.305)**	1.098	(0.306)	1.711	(0.306)**	1.014	(0.284)
Couple Typology x 1986-2009												
Male breadwinner x 1986-2009			2.444	(0.815)**			1.981	(0.660)*			2.425	(0.809)**
Dual-earner and undershooter x 1986-2009			2.013	(0.731)+			1.883	(0.680)+			2.011	(0.730)+
Dual-earner and overshooter x 1986-2009			1.097	(0.439)			1.257	(0.496)			1.098	(0.439)
Female breadwinner x 1986-2009			2.135	(1.703)			1.969	(1.569)			2.139	(1.706)
N couple-years	32731		32731		32731		32731		32731		32731	
N couples	6061		6061		6061		6061		6061		6061	
	Model 7		Model 8		Model 9		Model 10		Model 11		Model 12	
	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE
Couple typology (Ref. Dual-earner and equitable)												
Male breadwinner	0.733	(0.124)+	0.437	(0.135)**	0.722	(0.132)+	0.348	(0.129)**	0.476	(0.163)*	0.412	(0.337)
Dual-earner and undershooter	0.883	(0.137)	0.552	(0.171)+	0.932	(0.157)	0.658	(0.236)	0.976	(0.263)	0.339	(0.222)+
Dual-earner and overshooter	1.304	(0.211)	1.193	(0.397)	1.334	(0.232)+	1.048	(0.426)	0.967	(0.261)	0.507	(0.316)
Female breadwinner	1.495	(0.446)	0.894	(0.668)	1.245	(0.422)	1.534	(0.532)	0.795	(0.469)	0.243	(0.365)
Marriage cohort: 1986-2009 (ref. 1962-1985)	1.707	(0.305)**	1.138	(0.318)	1.599	(0.341)*	0.987	(0.318)	0.864	(1.121)	0.349	(0.503)
Couple Typology x 1986-2009												
Male breadwinner x 1986-2009			1.955	(0.665)*			2.440	(0.970)*			1.234	(1.076)
Dual-earner and undershooter x 1986-2009			1.849	(0.658)+			1.551	(0.626)			3.655	(2.658)+
Dual-earner and overshooter x 1986-2009			1.159	(0.441)			1.379	(0.620)			2.229	(1.529)
Female breadwinner x 1986-2009			1.913	(1.523)							4.282	(6.808)
N couple-years	32731		32731		26544		26544		2511		2511	
N couples	6061		6061		5371		5371		375		375	

Note: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001. OR = Odds Ratio. SE = Standard Errors.

**Table A2 – Couple arrangements, marriage cohorts and divorce risk in the United States, robustness checks**

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE
Couple typology												
(Ref. Dual-earner and equitable)												
Male breadwinner	1.113	(0.129)	0.701	(0.119)*	1.152	(0.134)	0.729	(0.124)+	1.114	(0.129)	0.701	(0.120)*
Dual-earner and undershooter	1.199	(0.096)*	0.874	(0.122)	1.186	(0.094)*	0.869	(0.121)	1.199	(0.096)*	0.874	(0.122)
Dual-earner and overshooter	1.047	(0.142)	1.267	(0.292)	1.042	(0.139)	1.270	(0.289)	1.047	(0.142)	1.267	(0.292)
Female breadwinner	1.990	(0.318)***	1.100	(0.309)	2.034	(0.323)***	1.133	(0.318)	1.990	(0.318)***	1.100	(0.309)
Marriage cohort: 1986-2009 (ref. 1962-1985)	1.351	(0.139)**	0.887	(0.146)	1.349	(0.139)**	0.896	(0.147)	1.350	(0.139)**	0.887	(0.146)
Couple Typology x 1986-2009												
Male breadwinner x 1986-2009			1.973	(0.373)***			1.960	(0.371)***			1.972	(0.373)***
Dual-earner and undershooter x 1986-2009			1.564	(0.264)**			1.551	(0.261)**			1.564	(0.264)**
Dual-earner and overshooter x 1986-2009			0.767	(0.218)			0.757	(0.213)			0.767	(0.218)
Female breadwinner x 1986-2009			2.318	(0.717)**			2.294	(0.708)**			2.318	(0.717)**
N couple-years	52455		52455		52455		52455		52455		52455	
N couples	7726		7726		7726		7726		7726		7726	
	Model 7		Model 8		Model 9		Model 10		Model 11		Model 12	
	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE	Odds ratio	Robust SE
Couple typology												
(Ref. Dual-earner and equitable)												
Male breadwinner	1.230	(0.143)+	0.776	(0.133)	1.214	(0.152)	0.752	(0.151)	1.113	(0.129)	0.701	(0.119)*
Dual-earner and undershooter	1.195	(0.095)*	0.869	(0.121)	1.215	(0.104)*	0.834	(0.143)	1.199	(0.096)*	0.874	(0.122)
Dual-earner and overshooter	1.011	(0.135)	1.217	(0.276)	0.943	(0.138)	1.228	(0.338)	1.047	(0.142)	1.267	(0.292)
Female breadwinner	2.130	(0.336)***	1.184	(0.332)	2.221	(0.372)***	1.337	(0.430)	1.990	(0.318)***	1.100	(0.309)
Marriage cohort: 1986-2009 (ref. 1962-1985)	1.346	(0.139)**	0.889	(0.145)	1.262	(0.147)*	0.836	(0.157)	1.351	(0.139)**	0.887	(0.146)
Couple Typology x 1986-2009												
Male breadwinner x 1986-2009			1.972	(0.373)***			1.907	(0.412)**			1.973	(0.373)***
Dual-earner and undershooter x 1986-2009			1.567	(0.263)**			1.625	(0.319)*			1.564	(0.264)**
Dual-earner and overshooter x 1986-2009			0.769	(0.216)			0.709	(0.231)			0.767	(0.218)
Female breadwinner x 1986-2009			2.305	(0.711)**			1.940	(0.671)+			2.318	(0.717)**
N couple-years	52455		52455		31987		31987		8263		8263	
N couples	7726		7726		6382		6382		1091		1091	

Note: + p<0.10 \* p<0.05 \*\* p<0.01 \*\*\* p<0.001. OR = Odds Ratio. SE = Standard Errors.

## Technical Appendix

### *A1. Work hours and hours of housework – United States*

*Work hours.* In the Panel Study of Income Dynamics (PSID), we use the following question to measure the average weekly hours of paid work for each spouse.

[For the survey year 1986]

“On the average, how many hours a week did you work on your main job(s) in 1985?”

“On the average, how many hours a week did she [your wife] work on her main job(s) in 1985?”

The information is provided by the head of the household, who is for a large majority of households the male respondent. Work hours are collected for the previous year and not the year of the survey. After the switch to biennial interviews, the PSID collected work hours for the previous year as well as the year before the last in some selected years: 1999, 2001, 2009 and 2011. Between the years 2003-2007, the work hours at t-2 were collected for small sub-sample of respondents called OFUMs (other family unit members) but they represent a very small percentage of our total sample.

*Housework hours.* We use the following question to measure the average weekly hours of housework for each spouse.

[For the survey year 1986]

“About how much time do you (HEAD) spend on housework in an average week? I mean time spent cooking, cleaning, and doing other work around the house?”

“About how much time does your (Wife/"WIFE") spend on housework in an average week? I mean time spent cooking, cleaning, and doing other work around the house.”

Again, the information is provided by the head of the household for both spouses. Differently from the work hours, the information on housework is collected at the time of the survey.

*Combining work and housework hours* In Table A1, we summarize in which years the work and housework hours variables are available. In order to construct our equity measure, we need to observe work and housework hours both partners in the same year. After the biennial switch, given the pattern of data collection, we had to do some imputations to carry out our analysis. For the years 1998, 2000, 2008 and 2010, we used the work and housework hours measured at t-1. We proceed with list wise deletion for the years from 2001 to 2006.

Table A1 – Availability of the work hours and housework hours variables in the PSID by year

Years	Work hours	Housework
1986-1997	yes	yes
1998	yes	no
1999	yes	yes
2000	yes	no
2001	no	yes
2002	yes	no
2003	no	yes
2004	yes	no
2005	no	yes
2006	yes	no
2007	yes	yes
2008	yes	no
2009	yes	yes
2010	yes	no



## A2. Work hours and hours of housework – Western Germany

*Work hours.* In the German Socio-Economic Panel (GSOEP), we use the following question to measure the average weekly hours of paid work for each spouse.

[For the survey year 1986]

“And how much on average does your actual working week amount to, with possible overtime?”

[For the survey year 2002]

“And how many hours do your actual working-hours consist of including possible over-time?”

or, in case of missing value,

“How many hours per week is your agreed working week without overtime?”

The information is provided by each spouse.

*Housework hours.* We use the following question to measure the average weekly hours of housework for each spouse.

[For the survey year 1986]

“What does your normal day look like at present? How many hours per day do you spend on the following activities? Please enter this separately for the average workday and for Sunday. Household and shopping”

[For the survey year 1997]

“How many hours per day do you spend on the following activities? Housework (washing, cooking, cleaning) ... on a typical weekday, on a typical Saturday and on a typical Sunday”

[for the survey year 2006]

“What does a typical weekday look like for you? How many hours per day do you spend on the following activities? Housework (washing, cooking, cleaning) - ”

Again, the information is provided by both spouses.

*Combining work and housework hours.* In Table A1, we summarize in which years the work and housework hours for weekdays and for week-end days are available. In order to construct our equity measure, we need to take into consideration working days and week-end for both partners.

Table A2 – Availability of the work hours and housework hours variables in the PSID by year

Year	week days	Sunday and or Saturday	Year	week days	Sunday and or Saturday
1986	yes	Sunday	1998	yes	No week-end
1987	yes	Sunday	1999	yes	Saturday & Sunday
1988	yes	Sunday	2000	yes	No week-end
1989	yes	Sunday	2001	yes	Saturday & Sunday
1990	yes	Sunday	2002	yes	No week-end
1991	yes	no week end	2003	yes	Saturday & Sunday
1992	yes	Sunday	2004	yes	No week-end
1993	yes	Saturday & Sunday	2005	yes	Saturday & Sunday
1994	yes	no week end	2006	yes	No week-end
1995	yes	Saturday & Sunday	2007	yes	Saturday & Sunday
1996	yes	No week-end	2008	yes	No week-end
1997	yes	Saturday & Sunday	2009	yes	Saturday & Sunday