When equity matters for marital stability: Comparing German and U.S. couples

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Abstract
Comparing West Germany and the U.S., we analyze the association between equity—in terms of the relative gender division of paid and unpaid work hours—and the risk of marriage dissolution. Our aim is to identify under what conditions equity influences couple stability. We apply event-history analysis to marriage histories using data from the German Socio-Economic Panel for West Germany and the Panel Study of Income Dynamics for the U.S. for the period 1986–2009/10. For the U.S., we find that deviation from equity is particularly destabilizing when the wife underbenefits, especially when both partners' paid work hours are similar. In West Germany, equity is less salient. Instead, we find that the male breadwinner model remains the single most stable couple arrangement.

Keywords
Couple arrangements, distributive justice, divorce, equity, GSOEP, family studies, norms, PSID

The ideals and values underpinning marriage have undergone many transformations over the past century. As marriage becomes ever more deinstitutionalized, the conventional obligations that reinforced binding commitments have given way to a gender contract founded on reciprocity and symmetric roles (Amato, 2004; Cherlin, 2004). Among the principles that govern marital life, the embrace of an equitable division of duties (and leisure) has gained importance.

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Research in sociology and psychology has devoted substantial attention to the impact of conjugal equity on marital quality. Equity theorists (Walster, Berscheid, & Walster, 1973), stressing the importance of proportionality between contribution (input) and compensation (outcome) in partners' exchange, argue that fairness exerts a direct beneficial effect on couples' relationships. Some studies confirm this, showing that inequities in the partners' work contribution foster marital frustration and emotional dissatisfaction (e.g., Hatfield, Rapson, & Aumer-Ryan, 2008).

Scholars within the distributive justice approach (Suitor, 1991; Thompson, 1991) suggest that partners' fairness evaluation may be driven by other justice principles than just proportionality. Here, the notion of conjugal justice mirrors underlying normative beliefs regarding how resources are expected to be allocated (Greenstein, 1996; Hochschild & Machung, 1989). Symbolic meanings attached to the division of paid and unpaid work are expected to influence partners' fairness evaluation (Hegtvedt & Markovsky, 1995). In line with this conceptualization, empirical evidence consistently shows that it is when individuals perceive their relationship as inequitable that they experience a decrease in marital quality (Hatfield, Traupmann, Sprecher, Utne, & Hay, 1985; Sprecher, 1986; Van Yperen & Buunk, 1990).

Even if comparative studies show that societal beliefs shape partners' fairness principles regarding work (Fuwa, 2004; Geist, 2005; Hook, 2006), only few examine how the normative context moderates the way spousal work allocation affects marital outcomes. Exceptions are Braun, Lewin-Espstein, Stier, and Baumgärtner (2008) and Ruppanner (2010, 2012), whose cross-national studies demonstrate that women embedded in a more gender egalitarian context report higher levels of marital conflict when the partners' division of work is unfair than do those who live in more traditional environment. These studies provide valuable insights into cross-country variation in marital dissatisfaction as result of a disproportional allocation of partners' work, but they do not explore the extent to which it also may provoke more severe responses, such as divorce.

Our aim is to fill these gaps in two ways. First, we opt for a comparison of two societies, West Germany and the U.S., which differ greatly in terms of the norms that underpin the allocation of work within marriage. They represent contrasting patterns as regards both women's employment and the diffusion of gender egalitarianism, two contextual factors that are likely to exert a decisive influence on fairness principles in intimate relationships (Geist, 2005; Hook, 2006; Knudsen & Wærness, 2008). This cross-national contrast emerges clearly from trends in gender attitudes based on the World Value Survey and European Value Study of the 1990s. As illustrated in Figure 1, attitudes toward gender roles are very dissimilar in the two countries: More than 50% of West German respondents, compared to only 25% in the U.S., did not recognize the importance of sharing household chores in marriage; about two third of West Germans, but less than one third in the U.S., agreed that "being a housewife is just as fulfilling as working for pay"; and, again, slightly less than 80% of West German respondents but only 45% of the U.S. believed that "a preschool child is likely to suffer if his or her mother works" (our own elaborations).

Second, using longitudinal data, we are able to focus on a marital outcome, namely, divorce, which is rarely examined in the literature related to equity theory. In this way, we can better identify the dynamics that produce marital dissolution, expanding the limited research on the impact of couple inequities on marital instability (one exception is Cooke, 2006).
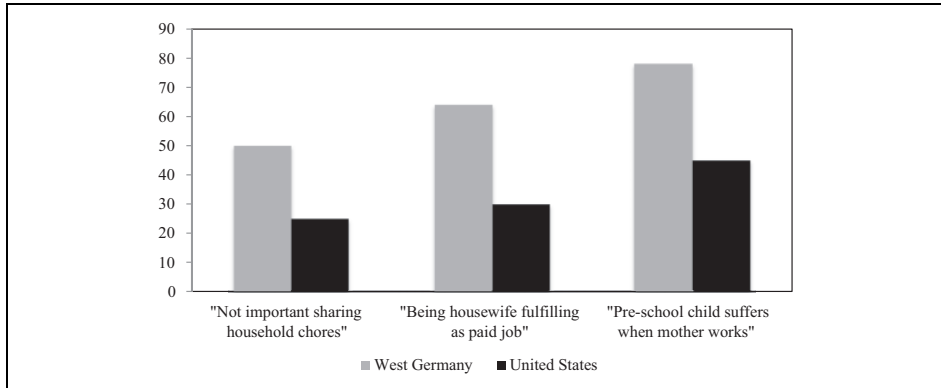
Figure 1. West German and American attitudes toward gender roles. *Note*: Based on 1990s EVS and WVS data, reflecting mean country scores on the questions ranging from 1, *strongly agree*, to 5, *strongly disagree*.

We address these issues applying event-history analysis for the period 1986–2009 in West Germany and between 1986 and 2010 in the U.S. We utilize the German Socio-Economic Panel (GSOEP, 2010) and the Panel Study of Income Dynamics (PSID, 2016). Both report information on the partners' paid and unpaid work hours.

The article is structured as follows. We begin with a review of theories addressing the link between equity and marital instability. Here, we focus on equity theory and the distributive justice approach. We then formulate our research hypotheses and describe our data, methodology, and the variables we include. We subsequently present our empirical analyses and, finally, we conclude.

Equity as proportionality: Does it matter for marital stability?

According to the proportionality principle of justice, as defined by Walster et al. (1973), equity is structured around the principle of fair exchange; that is, the outcomes of all parties involved in an exchange are proportional to their inputs.

Applied to intimate relationships, a fair exchange implies that each partner receives rewards that are commensurate to his or her contribution (Walster et al., 1973). In this version of equity theory, hereafter simply referred to as equity theory, equity rules require that more benefits will be allocated to the partner whose inputs are greater (the contribution rule). The distribution of time and tasks is a key element in partners' exchange (Mikula, 1998; Thompson, 1991).[1] The relative time they dedicate to paid and unpaid tasks represents the benchmark for their evaluation of fairness (Berger, Zelditch, Anderson, & Cohen, 1972; Kalmijn & Monden, 2012). The member who contributes more to paid work is accordingly entitled to devote proportionally less time to unpaid work.[2]

In this framework, an equitable allocation of outputs according to inputs is seen as essential for marital harmony and marital satisfaction.[3] A long research tradition, focused primarily on the U.S., has confirmed that proportionality in the division of duties can generate positive marital outcomes, such as well-being and marital satisfaction (e.g., Bird,

1999; Gager, 2008; Glass & Fujimoto, 1994). Accordingly, when individual expectations of proportionality are unfilled, a partner may experience a sense of injustice, which in turn can provoke marital conflicts (DeMaris, 2007, 2010; Stafford & Canary, 2006). Following this reasoning, inequitable relationships may also face a higher risk of divorce.

A corollary of this theory is that the proportionality principle is universally recognized and embraced (Cook & Hegtvedt, 1983): Equity is a normative rule of thumb that guides social behavior.[4] Hence, if a relationship suffers from imbalances between partners' contributions and rewards, the couple's members will see it as inequitable independent of the groups, organization, or social contexts to which they belong.[5]

The equity-as-proportionality perspective would lead us to expect that divorce risk increases with the degree of inequity. This association should not vary across societies (Hypothesis 1).

The role of cultural norms

Equity theory-as-proportionality tends to neglect the partners' lives are socially embedded (Adams, 1963, 1965; A. Homans, 1974; G. C. Homans, 1976). The distributive justice model, going beyond the conceptualization of equity of Walster et al. (1973), argues that the principle of proportionality does not represent the only criterion for assessing equity in couple allocation (Thompson, 1991; for a critical review of Walster et al. [1973], see Sampson, 1975). Thompson's distributive justice model (1991), hereafter referred to as the distributive justice model, stresses that the identification of alternative distribution parameters is necessary to understand partners' fairness evaluations.

The multidimensional approach of the distributive justice model makes the role of normative rules explicit, emphasizing that evaluations of justice are also driven by symbolic meaning (Thompson, 1991). According to Thompson (1991), a full understanding of partners' sense of fairness requires therefore an analysis of different dimensions, such as the referents the partners use, the kinds of contributions they consider, and how they rate contributions.

Let us begin with a focus on the first element, the comparison referent. In Walster et al.'s (1973) equity theory, it is a priori assumed that the spouse constitutes the comparison referent to evaluate whether the division of work is fair (Van Yperen & Buunk, 1990). Distributive justice scholars, in contrast, argue that partners' comparison referents are socially derived (Kluwer & Mikula, 2003; Thompson, 1991). Partners' cultural context exerts a profound impact on their choice of comparison (Greenstein, 2000).

Conventional sex-role views typically produce a gendered allocation of time (Bittman, England, Sayer, Folbre, & Matheson, 2003): The wife is seen as the primary caregiver and the husband as the main breadwinner (Hood, 1983). In this context, the female partner will be less inclined to judge outcomes based on a comparison with the male partner and, instead, will be more likely to compare herself with other women (and their husband with other men). This implies that wives may perceive a division of work as fair even if their total work contribution exceeds that of their spouse (female underbenefiting).[6]

In this framework, women may identify housework as a positive outcome per se. Caring for loved ones may symbolically represent an intrinsically positive value (Hochschild & Machung, 1989) that leads wives to affirmative feelings such as familial approval, domestic peacefulness, and self-satisfaction (Mikula, 1998). In fact, studies have shown that women

who take the responsibility for housework and child care, either as housewife or as employed, are likely to experience an improvement in marital quality (Bittman et al., 2003; Cherlin, 2000; Molm & Cook, 1995). Consequently, a female overperformance in domestic work in such a context can be expected to be beneficial for marital stability, while the opposite is expected in the case of nonnormative behavior—for example, a similarity in the partners' division of paid and unpaid work.

Recent studies have documented cross-culture variation in the degree of support for gender role attitudes (Hatfield et al., 2008). In some societies, such as West Germany, the normative legitimacy of a traditional gender-based division of work persists (Breen & Cooke, 2005); in others, such as the U.S., it has eroded (Schwartz & Han, 2014). Indeed, research focusing on the U.S. suggests that societal support for the conventional gendered division of housework has weakened (Cotter, Hermsen, & Vanneman, 2011). In parallel, a significant rise in the adoption of gender egalitarian attitudes has been experienced (Schwartz & Han, 2014).

The diffusion of new values is likely to change the way women evaluate and judge fairness in the allocation of housework (Berger et al., 1972). In the U.S., the new model of reciprocal partnerships based on an active involvement of both partners in the various responsibilities of married life is becoming dominant (Cooke, 2006). This implies that partners will alter their comparison referent in favor of a more gender-symmetric division of work. In other words, women in the U.S. are likely to redefine the comparison referent and to compare their work burden with that of their male partner rather than with other women (Gager & Hohmann-Marriott, 2006).

There is some evidence for the U.S. that partners who adopt a symmetric model of marriage are more likely to share similar workloads and responsibilities; this, in turn, is associated with greater marital intimacy and emotional work (Amato, Johnson, Booth, & Rogers, 2003; Kamp Dush & Taylor, 2012). And this should enhance couple stability.

In both countries considered, male overperformance in the division of the couple's combined workload is seen as nonnormative. As a consequence, female overbenefiting should induce higher divorce risks also in the U.S.

This leads us to Hypothesis 2: We expect that in West Germany the more the female partner is underbenefiting (contributing more than receiving), the lower the risk of divorce. This should not be the case for the U.S., where we expect that female underbenefiting will heighten marital instability. In both countries, we should expect higher divorce risks when the wife is overbenefiting.

In sum, for the U.S. (but not for West Germany) we expect that an equitable division of paid and unpaid work is the best insurance against divorce.

Paid work, equity, and divorce in their cultural context

As we have already reported, the multidimensional approach of distributive justice stresses that, apart from comparison referent, partners' sense of fairness requires an analysis of other dimensions that the partners assess, outcome values and justifications.

While equity theorists assume a priori that unpaid work is valued (and preferred) as much as paid work by both partners, distributive justice scholars suggest that, under certain circumstances, this equivalence is not given (Gager, 1998). While domestic work continues to be

defined as the proper female domain, one should expect that—for women—paid work would be valued less than their unpaid work (DeMaris & Longmore, 1996; Thompson, 1991).

Even if women's gainful employment is now broadly accepted, research has shown that in more gender-traditional societies (e.g., West Germany) women demonstrate greater preference for home and children—even if they are employed (Heimer & Staffen, 1998; Hochschild & Machung, 1989). In this context, women, employed or not, may value domestic activities more because these are perceived as socially desirable (Mikula, 1998). This may result in a mismatch between the value assigned to female paid (less valued) and unpaid work (more valued). As a consequence, working wives are likely to perceive their disproportionately large input into domestic or caring work as fair (Thompson, 1991).

In the gender traditional context, it may indeed be viewed negatively if a couple adopts a symmetric division of unpaid and paid work (Wilcox & Nock, 2006). Under such conditions, full-time employed women may accept inequity, since domestic work is perceived as the most valued female responsibility. This, in turn, should help stabilize the marriage (Bittman et al., 2003; Cherlin, 2000; Molm & Cook, 1995).

In gender egalitarian nations, where female full-time employment is more normative, as in the U.S. (Cooke et al., 2013), women are expected to value their time dedicated to paid work at least as highly as their time dedicated to unpaid work (Ruppanner, 2008). In this normative context, we should also expect that husbands' contribution to household tasks will be assigned a value similar to that of wives' (Gager, 2008; Gager & Hohmann-Marriott, 2006). This logic emerges from recent U.S. studies, which show that employed women, especially if full timers, express dissatisfaction when the husband contributes little to housework, since a higher baseline of male partner's household participation is expected (Cherlin, 2000, 2004; Ruppanner, 2010; Van Willigen & Drentea, 2001; Yodanis, 2010).

Consequently, where gender-egalitarianism reigns, employed women will be less satisfied with family life when they experience a lack of fairness in the conjugal division of paid and unpaid work (Amato et al., 2003). This may induce the female partner to exit the relationship (Oláh & Gähler, 2014).

This leads us to Hypothesis 3: In West Germany, we expect a lower risk of divorce in couples where employed women is underbenefiting (contributing more than receiving); this should especially be the case for couples where both spouses dedicate similar hours to paid work. In contrast, we expect a stability premium for U.S. couples that share equally both paid and unpaid work.

Data, methods, and variables

Analytical sample and data

Both the German Socio-Economic Panel (GSOEP) and the Panel Study of Income Dynamics (PSID) are representative surveys that contain annual information on marital history, partners' employment, the division of paid and unpaid work as well as a number of sociodemographic characteristics. Weekly (PSID) or daily (GSOEP) data for paid and unpaid work hours for each member are collected for all the waves in both data sets. However, there are some measurement differences. In the GSOEP, time dedication data are provided by each partner; in the PSID, it is the head of the household who responds on behalf of the spouse (in a vast majority of

cases, the head is the husband). Moreover, the PSID does not report information on parental child care.[7] Therefore, our comparisons focus only on domestic work.

The GSOEP began in 1984 with a representative sample (interviewed annually).[8] We exclude Eastern Germany since it only entered into the GSOEP after 1990.[9] The PSID started in 1968.[10] Interviews were collected on an annual basis until 1997 and biennially thereafter. In order to obtain a comparable period, we analyze the years 1986–2010 for the PSID and the years 1986–2009 for the GSOEP.

We examine only married heterosexual couples with respondents older than 18 and younger than 50 years to capture a period in marital life when the division of paid and unpaid work is likely to be more determinant for marital quality (Higgins, Duxbury, & Lee, 1994; Jacobs & Gerson, 2004; Van der Lippe, 2007). We identify marital histories by combining retrospective and panel information. The start of the relationship can occur before the first year of our observational window: A balanced sample (composed only of couples followed from the first year of marriage) would reduce the sample size to few couples. For this reason, the onset of risk can range from the first to the twentieth couple-year. When the start of the partnership does not correspond to the actual first year of observation (left truncated), we report the duration using the actual marriage starting date. Marriage episodes are right censored at any of the following events: age 50, 20 years of marriage duration, or last available interview. The dependent variable takes the value of 1 for the year in which a marital separation occurs and zero otherwise.[11]

These restrictions produce a final sample of 5,220 couples for the GSOEP and 6,581 for the PSID (an analytical sample of, respectively, 30,432 and 46,920 couple-years). We observe 387 episodes of marital dissolution in West Germany and 1,201 in the U.S.

Explanatory variables

Inequity. Our key explanatory variable is the degree of objective inequity in spousal time allocation to paid and unpaid work taken simultaneously. To identify the degree of objective inequity, we identify the spousal allocation of time calculating the relative measures of paid and unpaid work as follows.[12]

To measure the *relative distribution of couples' paid work*, we use the percentage of time (0–100) that the male dedicates to the total weekly paid work of both partners.

As above, we use the male's share of *unpaid* work relative to the weekly total of the couple to measure *the relative distribution of couples' unpaid work*. In the PSID, the housework hours are measured at the time of the survey by asking the respondent how many weekly hours, on average, each spouse dedicates to housework.[13]

Objective inequity is based on the sum of the partners' relative paid and unpaid work hours. The measure captures the proportionality principle, according to which the ratio of outcome to input should be the same for each partner. This has been employed in prior research (DeMaris, 2010; Esping-Andersen, Boertien, Bonke, & Gracia, 2013).

If P_h represents the husband's paid hours, P_w the wife's paid hours, D_h the husband's domestic work hours, and D_w the wife's domestic work hours, we define objective inequity as follows:

$$\text{Objective inequity} = |(P_h/P_h + P_w) + (D_h/D_h + D_w) - 1|.$$

The objective inequity measure is continuous and ranges from 0, in the case where the husband's relative contribution to paid work is equal to wife's relative contribution to unpaid work, to 1, in the case where one member's relative contribution to paid and unpaid work is zero. Considering the realities of daily life (like arriving late because of traffic jams), we allow for a ($\pm$) .10 deviation from perfect proportionality (that corresponds to the value of 0)—as did Nock (2001) and Esping-Andersen et al. (2013). We term this *equity space*. The greater is the distance away from the equity space, the higher is the inequity value.

Figure 2 illustrates this graphically. Since couples are equitable when the male share of paid work hours corresponds to the female share of unpaid work hours, this means that equitable couples will fall on a declining diagonal slope of 45° with regard to paid working hours. The equity space is identified in gray in Figure 2. To give some examples, an equitable couple is one where the husband accounts for 80% of all paid work hours and the wife for 80% of all unpaid work hours (see the diamond-shaped marker in Figure 2); here the inequity variable takes the value of 0. A couple is considered inequitable if, instead, the proportions were, respectively, 40% and 60% (see the circle-shaped marker in Figure 2); in this case the inequity variable would take the value of 0.2.

Female over- and underbenefiting. If a couple is located above the "equity space," we are observing a case of *female overbenefiting*: The sum of the husband's share of paid and unpaid work hours exceeds his wife. If, instead, a couple falls below the equity space, the *female partner is underbenefiting*: The sum of the husband's share of paid and unpaid work hours is lower than his wife.

To identify the gendered effects of inequity on divorce, we use a spline regression to distinguish the objective equity variable between couples where the wife is over-benefiting from where she is underbenefiting.[14] The spline regression allows us to estimate distinct coefficients for different ranges of the equity variable.

The over- and underbenefiting variables are continuous measures and are constructed as follows: The wife's underbenefiting is equal to the inequity measure ($|(P_h/P_h+P_w)+(D_h/D_h+D_w)-1|$), when her relative contribution is greater than .1 deviation from the husband's and takes the value of zero otherwise. The wife's overbenefiting is equal to the inequity measure ($|(P_h/P_h+P_w) + (D_h/D_h+D_w)-1|$) when his relative contribution is higher than .1 deviation of the wife's, taking the value of zero otherwise.

The partners' contribution to paid work. To identify the division of paid work, we construct a continuous variable. As before, if P_h represents the husband's paid hours and P_w the wife's paid hours, we define the degree of specialization as $[P_h/(P_h + P_w)]$. The specialization variable takes the value of 1 when the husband is the sole breadwinner and 0 when the wife is the sole breadwinner.

Controls. We include the standard control variables used in divorce studies (see Lyngstad & Jalovaara, 2010): whether the current marriage is the first, years of marriage and its squared term, the wife's age at marriage and its squared term, and the age difference between the partners (whether he is older ≤5 years, whether she is older, and whether he is older more than 5 years).
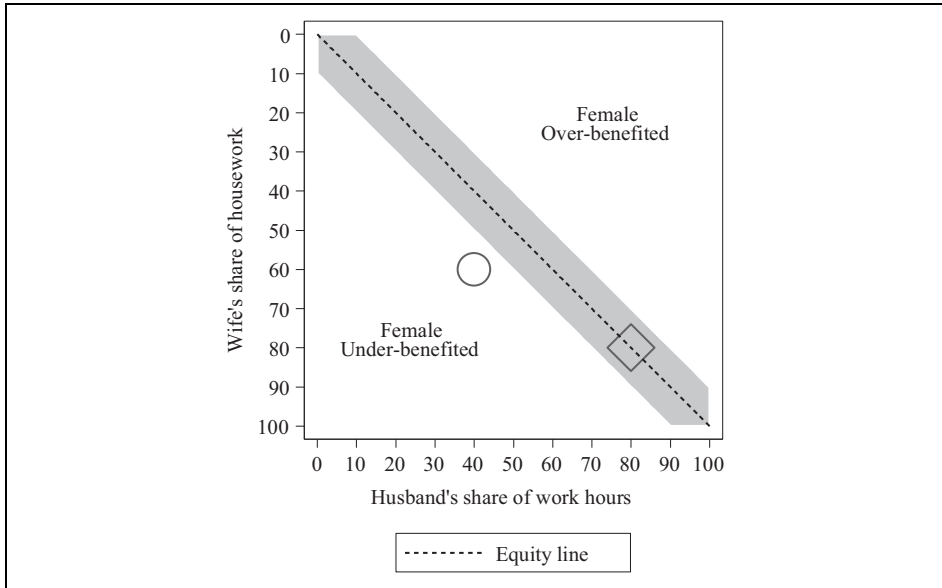
Figure 2. Representation of the equity space.

We also include both partners' level of education. We use the International Standard Classification of Education (ISCED) and distinguish three categories: lower secondary education or less (ISCED 1 and 2), upper secondary education or postsecondary non-tertiary education (ISCED 3 and 4), and completed tertiary education (ISCED 5 and 6). The West German variable in GSOEP is already coded with ISCED. Applying ISCED to PSID for the U.S., the corresponding levels are less or equal to 9th grade, between 10th grade and 15th grade (which corresponds to some high-school and some college or a 2-year college degree), and 16 years or more (4-year college degree or more).

In the U.S. models only, we also control for race, distinguishing White, African Americans, and "other" (Hispanics, Asians, and other ethnicities). In more recent years, the PSID has begun to distinguish ethnicity from race, but to ensure consistency, we use the original classification. Unfortunately, we do not have any corresponding ethnicity variable in the German data. As a consequence, we omit the race variable in the models that pool both countries.

We control also for the couple's total paid and unpaid hours, since this is standard practice in the housework literature. Finally, we control for the number of children. Tables 1 and 2 present descriptive statistics for the main variables for the two countries.

To illustrate country differences, we present the relative distribution of couple-years according to the combined shares of domestic and paid hours, and how they cluster around the "equity space" (Figures 2 and 3). These are heat maps, which graphically depict the husband's relative participation in paid work and the wife's relative contribution to housework. Each cell represents the percentage of couples in terms of how they divide paid and unpaid work. In Figure 2, for example, the bottom right corner cell shows that 8.83% of West German couple-years represent a division of paid and housework hours where the husband accounts for 90–100% of paid work and the wife for 90–100% of housework. The

Table 1. Descriptive statistics for West Germany.

West Germany	Mean	SD	Min	Max
Inequity level	0.22	0.19	0.00	1.00
Wife is underbenefitted	0.08	0.16	0.00	1.00
Wife is overbenefitted	0.14	0.18	0.00	1.00
Husband's share of paid work	0.75	0.24	0.00	1.00
Log of marriage duration	2.07	0.75	0.00	3.00
Couple's total hours of paid work	59.10	21.49	1.00	238.00
Couple's total hours of housework	31.01	18.03	1.00	190.00
First marriage	0.98	0.13	0.00	1.00
Wife's age at marriage	23.79	4.93	16.00	40.00
Marriage year (0 = 1,970)	20.01	7.77	0.00	39.00
Number of children in the household	1.51	1.04	0.00	10.00
Age difference (ref. Same age)				
Wife is older	11.98			
Wife is younger	22.92			
Wife's education (ref. ISCED 1-2)				
ISCED 3-4	58.20			
ISCED 5-6	21.43			
Husband's education (ref. ISCED 1-2)				
ISCED 3-4	53.04			
ISCED 5-6	31.38			

Note. SD = Standard deviation.

color of the cell indicates the density of each couple arrangement—measured as the percentage over all couple arrangements in the country; the darker, the greater is the incidence.

We observe that couples in both countries tend to concentrate in the right half of the quadrant: that is, female dominance in the labor market and male dominance in the housework are uncommon in both cases. Honing in on the details, we see noticeable differences with regard to paid work. First, German wives' relative participation in the labor market is significantly lower than the U.S. ones: A larger share of German couples concentrates in the bottom right corner. To illustrate, the husband's share of paid work is over 60% in the majority (70.8%) of German couple-years; in comparison, it accounts for only 42.5% in the U.S. In the U.S., the distribution of couple-years is biased toward dual-earner couples: The share of couples where the husband accounts for 40–60% of all paid work is 50.8% compared to only 25% in West Germany.

Estimation

We apply discrete-time event-history analysis using logistic regression (for a review, see Allison, 1982). We favor this over continuous-time estimation for several reasons. First, the divorce dates are recorded to the nearest month or year. Second, all the explanatory variables are measured annually. Discrete-time is the logical choice also because it allows us to include our time-varying covariates in a simple way and to account for the fact that divorce dates are measured discretely.

Table 2. Descriptive statistics for the U.S.

U.S.	Mean	SD	Min	Max
Inequity level	0.20	0.19	0.00	1.00
Wife is under-benefitted	0.14	0.19	0.00	1.00
Wife is over-benefitted	0.06	0.13	0.00	1.00
Husband's share of paid work	0.64	0.24	0.00	1.00
Log of marriage duration	2.01	0.71	0.00	3.00
Couple's total hours of paid work	73.44	23.38	1.00	201.00
Couple's total hours of housework	27.08	17.66	1.00	200.00
First marriage	0.83	0.37	0.00	1.00
Wife's age at marriage	24.70	4.93	13.00	40.00
Marriage year (0 = 1,970)	18.99	8.53	0.00	40.00
Number of children in the household	1.61	1.20	0.00	10.00
Age difference (ref. Same age)				
Wife is older	19.81			
Wife is younger	14.96			
Wife's education (ref. ISCED 1–2)				
ISCED 3–4	66.50			
ISCED 5–6	30.29			
Husband's education (ref. ISCED 1–2)				
ISCED 3–4	67.20			
ISCED 5–6	28.53			
Wife's race (ref. White)				
African American	20.68			
Other	8.09			

Note. SD = Standard deviation.

The discrete-time divorce hazard function can be defined as the probability p_{ti} that an individual i experiences an event during the year t given that no event occurred before the start of year t. We can think of the divorce hazard function as an approximation of the continuous hazard function. The models are estimated using logistic regression to fit the binary response model: $y_{ti} = \log(p_{ti} / (1-p_{ti})) = \alpha D_{ti} + \beta X_{ti}$, where D_{ti} measures the cumulative duration function and X_{ti} is a set of covariates. We specify the time dependency of the hazard by defining D_{ti} as the logarithmic function of the duration. This functional form was chosen to best fit the data. Finally, because our models include repeated events, we cluster the errors around the couple unit.

We divide the empirical part into three sections. In the first, we will test the association between inequity and divorce (Hypothesis 1). We will then present results related to Hypothesis 2, that is, whether a more inequity in the case of female underbenefiting (overbenefiting) reduces (increases) the likelihood of divorce (Hypothesis 2). Finally, we will examine whether there are differences related to the degree of female under-benefiting within different couple arrangements (Hypothesis 3).

For dual-earner couples with similar paid workloads in the U.S., we expect to find that the divorce risk increases the more that the female is underbenefiting. For West German couples whose members have similar paid workloads, we expect the opposite. Here the risk of divorce should be lower when the employed woman contributes disproportionally
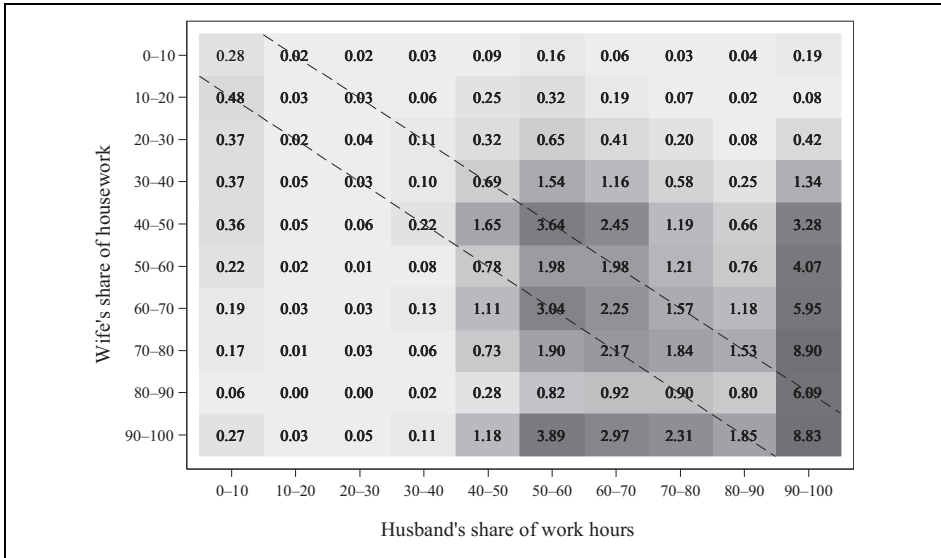
Figure 3. The distribution of couple-years according to the combined shares of housework and paid work hours. West Germany. *Note*: Dark gray squared represents higher density of couples, while light gray squared represents lower density.

to housework—and in a sense, the acid test here pertains to couples with similar levels of spousal paid work hours.

We present estimates for West Germany in Model 1 and for the U.S. in Model 2. We subsequently estimate a pooled model that includes an interaction between country and our main explanatory variable(s) (Tables 3, 4, and 5).

Empirical results

Inequity and divorce

Models 1, 2, and 3 in Table 3 summarize our main results for the first Hypothesis—whether the degree of inequity per se increases divorce risks. All the results are presented as log-odds with robust and clustered standard errors as well as the corresponding odds ratio.

The impact of inequity on the risk of divorce differs in the two countries. In West Germany, it is nil; the coefficient is near zero and not statistically significant. In the U.S., the degree of inequity has a positive and statistically significant effect on marital dissolution (<0.001 in the model)—the higher the level of inequity the higher the risk of divorce (Figure 4). The country differences are clear. This is additionally so in the pooled model (Model 3).

To facilitate interpretation, we present (in Figure 5) the average marginal effects of an increase in the degree of inequity for West German and U.S. couples. These are computed from Model 3 in Table 3. Here, we see that higher levels of inequity do not increase the risk of divorce in West Germany. In the U.S., however, a one-unit increase in
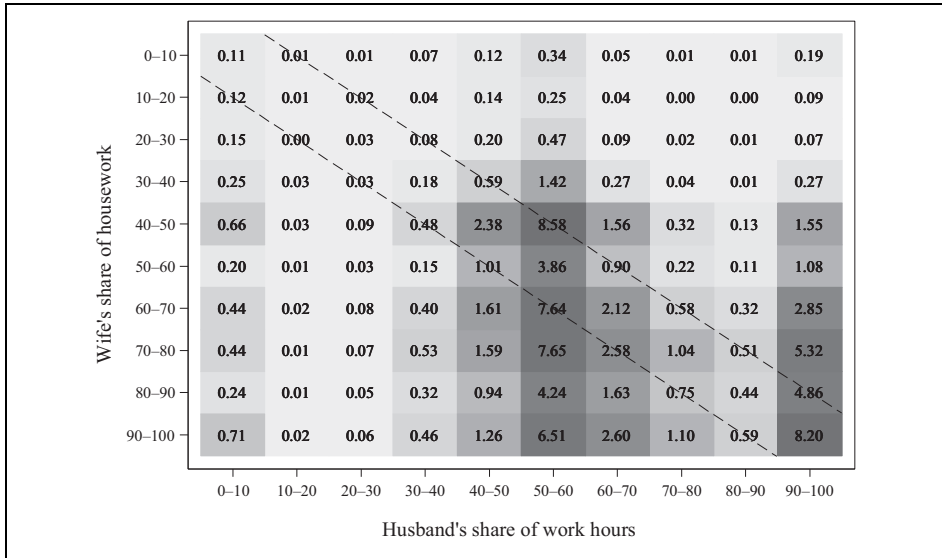
Figure 4. The distribution of couple-years according to the combined shares of housework and paid work hours. U.S. *Note*: Dark gray squared represents higher density of couples, while light gray squared represents lower density.

inequity is associated with a 1.7 percentage-point increase in the probability of divorce. Since there is no overlap between the confidence intervals for Germany and the U.S., we conclude that the average marginal country effects are statistically different. This is also confirmed by the statistically significant interaction between West Germany and the equity variable in Model 3 in Table 3.

All told, equity influences American but not German couple behavior. In other words, Hypothesis 1 receives mixed support since the marital stability premium of equity is limited to the U.S. We now turn to an exploration of whether this country difference can be explained by heterogeneous effects of equity conditional on gender and couple arrangement.

Equity and wives under- and overbenefiting

Does the association between objective equity and divorce vary by gender? To answer this question we include a "spline version" of the objective equity measure. This helps distinguish couples where the wife is underbenefiting from those where she is over-benefiting (i.e., where the husband is underbenefiting).[15] The variable female under-benefiting takes the value of zero in case of equity and of female overbenefiting, and the variable female overbenefiting takes value zero in case of equity and of female under-benefiting, respectively. Our Hypothesis 2 predicted decreasing divorce risks among German wives the more they underbenefit; for the U.S., we predicted heightened divorce propensities. In both countries, however, we expect that an increase in the level of female overbenefiting is associated with an increase in the likelihood of divorce.

Table 3. Inequity level and divorce risks in West Germany and in the U.S.

	West Germany			U.S.			Pooled		
	β	Robust SE	e^β	β	Robust SE	e^β	β	Robust SE	e^β
Objective equity	−0.017	[0.271]	0.983	0.579	[0.146]***	1.784	0.700	[0.145]***	2.014
West Germany (ref. U.S.)							−0.434	[0.096]***	0.648
West Germany × Inequity							−0.824	[0.304]**	0.439
Log of marriage duration	−0.018	[0.076]	0.982	−0.147	[0.043]***	0.863	−0.141	[0.037]***	0.868
Couple's total hours of paid work	0.006	[0.002]**	1.006	−0.001	[0.001]	0.999	0.001	[0.001]	1.001
Couple's total hours of housework	−0.001	[0.003]	0.999	−0.009	[0.002]***	0.991	−0.008	[0.002]***	0.992
First marriage	−0.584	[0.312]	0.558	−0.520	[0.091]***	0.595	−0.387	[0.084]***	0.679
Wife's age at marriage	−0.079	[0.088]	0.924	−0.254	[0.051]***	0.776	−0.184	[0.044]***	0.832
Wife's age at marriage sq.	0.001	[0.002]	1.001	0.003	[0.001]***	1.003	0.003	[0.001]**	1.003
Marriage year (0 = 1,970)	0.103	[0.033]**	1.108	0.086	[0.017]***	1.090	0.083	[0.015]***	1.087
Marriage year sq.	−0.002	[0.001]*	0.998	−0.002	[0.000]***	0.998	−0.001	[0.000]***	0.999
Age difference (ref. same age)									
Wife is older	0.398	[0.155]*	1.489	0.210	[0.080]**	1.234	0.225	[0.071]**	1.252
Wife is younger	0.084	[0.126]	1.088	0.185	[0.081]*	1.203	0.123	[0.067]	1.131
Wife's education (ref. ISCED 1–2)									
ISCED 3–4	−0.114	[0.135]	0.892	0.714	[0.237]**	2.042	0.264	[0.111]*	1.302
ISCED 5–6	−0.039	[0.183]	0.962	0.456	[0.252]	1.578	0.040	[0.133]	1.041
Husband's education (ref. ISCED 1–2)									
ISCED 3–4	−0.026	[0.145]	0.974	0.061	[0.168]	1.063	0.090	[0.107]	1.094
ISCED 5–6	−0.484	[0.186]**	0.616	−0.521	[0.189]**	0.594	−0.495	[0.127]***	0.610
Number of children in the household	0.009	[0.056]	1.009	0.104	[0.026]***	1.110	0.107	[0.023]***	1.113
Constant	−3.901	[1.194]**	0.020	−0.607	[0.721]	0.545	−1.440	[0.593]*	0.237
Person-years	30,432			46,920			77,352		
Couples	5,220			6,581			11,801		

Note. Model 2 includes race as a control variable. SE = Standard error.
*p < 0.05. **p < 0.01. ***p < 0.001.

Table 4. Inequity direction in West Germany and in the U.S.

	West Germany			U.S.			Pooled		
	β	Robust SE	e^β	β	Robust SE	e^β	β	Robust SE	e^β
Wife is underbenefitted	0.050	[0.373]	1.051	0.735	[0.147]***	2.085	0.849	[0.147]***	2.337
Wife is overbenefitted	−0.072	[0.327]	0.931	−0.145	[0.256]	0.865	0.029	[0.250]	1.029
West Germany (ref. U.S.)							−0.461	[0.096]***	0.631
WG × Wife is underbenefitted							−0.381	[0.390]	0.683
WG × Wife is overbenefitted							−0.718	[0.367]	0.488
Log of marriage duration	−0.020	[0.076]	0.980	−0.161	[0.043]***	0.851	−0.152	[0.037]***	0.859
Couple's total hours of paid work	0.006	[0.002]*	1.006	−0.003	[0.001]	0.997	−0.001	[0.001]	0.999
Couple's total hours of housework	−0.001	[0.003]	0.999	−0.009	[0.002]***	0.991	−0.008	[0.002]***	0.992
First marriage	−0.581	[0.313]	0.559	−0.520	[0.091]***	0.595	−0.387	[0.084]***	0.679
Wife's age at marriage	−0.079	[0.088]	0.924	−0.258	[0.051]***	0.773	−0.187	[0.044]***	0.829
Wife's age at marriage sq.	0.001	[0.002]	1.001	0.004	[0.001]***	1.004	0.003	[0.001]**	1.003
Marriage year (0 = 1,970)	0.103	[0.034]**	1.108	0.087	[0.017]***	1.091	0.084	[0.015]***	1.088
Marriage year sq.	−0.002	[0.001]*	0.998	−0.002	[0.000]***	0.998	−0.001	[0.000]***	0.999
Age difference (ref. same age)									
Wife is older	0.399	[0.155]*	1.490	0.210	[0.080]**	1.234	0.225	[0.071]**	1.252
Wife is younger	0.083	[0.126]	1.087	0.181	[0.081]*	1.198	0.120	[0.068]	1.127
Wife's education (ref. ISCED 1-2)									
ISCED 3-4	−0.112	[0.135]	0.894	0.706	[0.237]**	2.026	0.267	[0.111]*	1.306
ISCED 5-6	−0.037	[0.184]	0.964	0.449	[0.251]	1.567	0.045	[0.133]	1.046
Husband's education (ref. ISCED 1-2)									
ISCED 3-4	−0.025	[0.145]	0.975	0.074	[0.168]	1.077	0.099	[0.107]	1.104
ISCED 5-6	−0.481	[0.186]**	0.618	−0.485	[0.189]*	0.616	−0.469	[0.128]***	0.626
Number of children in the household	0.012	[0.056]	1.012	0.103	[0.026]***	1.108	0.107	[0.023]***	1.113
Constant	−3.912	[1.194]**	0.020	−0.412	[0.727]	0.662	−1.308	[0.597]*	0.270
Person-years	30,432			46,920			77,352		
Couples	5,220			6,581			11,801		

Note. Model 2 includes race as a control variable. SE = Standard error.
*p < 0.05. **p < 0.01. ***p < 0.001.

Table 5. Inequities and divorce risks in West Germany and in the U.S.

	West Germany			U.S.			Pooled		
	β	Robust SE	e^β	β	Robust SE	e^β	β	Robust SE	e^β
Wife is underbenefitted	−0.497	[0.576]	0.608	−0.424	[0.414]		−0.386	[0.414]	0.680
Husband's share of paid work	−1.025	[0.295]***	0.359	−3.513	[0.872]***		−3.556	[0.856]***	0.029
Husband's share of paid work sq.				4.718	[1.984]*		2.694	[0.640]***	14.791
W under × H share of paid	−0.192	[1.253]	0.825	2.753	[0.663]***		4.938	[1.951]*	139.491
W under × H share of paid sq.				−4.208	[3.178]		−4.318	[3.106]	0.013
West Germany (ref. U.S.)							−1.046	[0.509]*	0.351
WG × Wife is under-benefitted							0.274	[0.812]	1.315
WG × H's share of paid work							3.936	[1.517]**	51.213
WG × W under × H share of paid							−3.817	[1.071]***	0.022
WG × W under × H share of paid sq.							−5.544	[4.626]	0.004
WG × H's share of paid work sq.							2.890	[7.396]	17.993
Wife is overbenefitted	0.320	[0.341]	1.377	−0.340	[0.281]	0.712	−0.022	[0.214]	0.978
Log of marriage duration	−0.045	[0.076]	0.956	−0.157	[0.043]***	0.855	−0.152	[0.037]***	0.859
Couple's total hours of paid work	0.004	[0.003]	1.004	0.001	[0.002]	1.001	0.001	[0.002]	1.001
Couple's total hours of housework	−0.003	[0.004]	0.997	−0.010	[0.002]***	0.990	−0.008	[0.002]***	0.992
First marriage	−0.582	[0.312]	0.559	−0.509	[0.091]***	0.601	−0.384	[0.084]***	0.681
Wife's age at marriage	−0.082	[0.088]	0.921	−0.251	[0.051]***	0.778	−0.187	[0.044]***	0.829
Wife's age at marriage sq.	0.001	[0.002]	1.001	0.003	[0.001]***	1.003	0.003	[0.001]**	1.003
Marriage year (0 = 1,967)	0.101	[0.034]**	1.106	0.086	[0.017]***	1.090	0.084	[0.015]***	1.088
Marriage year sq.	−0.002	[0.001]*	0.998	−0.001	[0.000]***	0.999	−0.002	[0.000]***	0.998
Age difference (ref. same age)									
Wife is older	0.397	[0.155]*	1.487	0.206	[0.080]**	1.229	0.223	[0.071]**	1.250
Wife is younger	0.076	[0.126]	1.079	0.176	[0.081]*	1.192	0.113	[0.068]	1.120
Person-years	77,352			77,352			77,352		
Couples	11,801			11,801			11,801		

(continued)

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Table 5. (continued)

	West Germany			U.S.			Pooled		
	β	Robust SE	e^β	β	Robust SE	e^β	β	Robust SE	e^β
Wife's education (ref. ISCED 1–2)									
ISCED 3–4	−0.119	[0.135]	0.888	0.729	[0.236]**	2.073	0.236	[0.111]*	1.266
ISCED 5–6	−0.083	[0.184]	0.920	0.469	[0.251]	1.598	0.009	[0.131]	1.009
Husband's education (ref. ISCED 1-2)									
ISCED 3–4	−0.013	[0.145]	0.987	0.086	[0.168]	1.090	0.111	[0.107]	1.117
ISCED 5–6	−0.446	[0.186]*	0.640	−0.477	[0.188]*	0.621	−0.450	[0.128]***	0.638
Number of children in the household	0.051	[0.057]	1.052	0.099	[0.026]***	1.104	0.113	[0.023]***	1.120
Constant	−2.873	[1.223]*	0.057	0.209	[0.770]	1.232	−0.366	[0.648]	0.694
Person-years	77,352			77,352			77,352		
Couples	11,801			11,801			11,801		

Note. Model 2 includes race as a control variable. SE = Standard error.
*p < 0.05. **p < 0.01. ***p < 0.001.
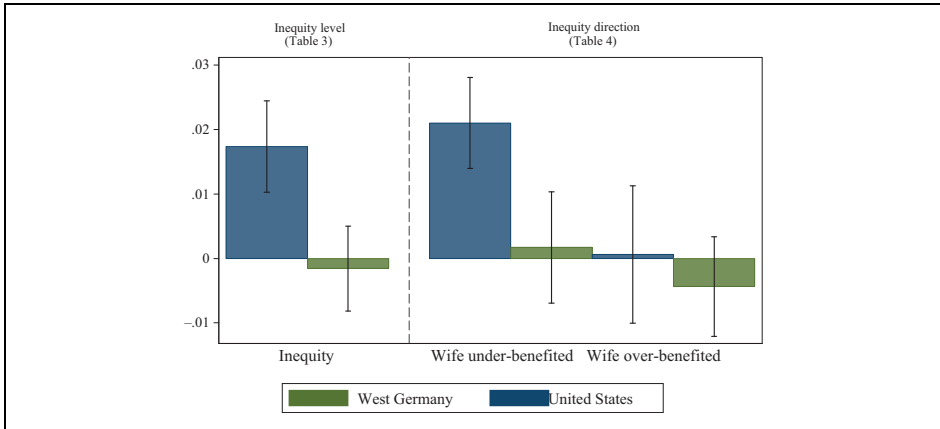
Figure 5. Average marginal effects on predicted divorce risk with 95% confidence intervals: Inequity level and inequity direction. *Notes*: The average marginal effects are based on the pooled models presented in Table 3 for inequity level and in Table 4 for the inequity direction.

The results are shown in Table 4. In Model 1, we present results for West Germany, and in Model 2 for the U.S. Model 3 reports estimations from a pooled model of the two countries. For West Germany, we do not observe any statistically significant relationship between the level of female over- or underbenefiting and the risk of divorce. This finding is in line with the first model, where we observed that the degree of inequity was not associated with divorce in West German couples.

In the U.S., however, we find a positive and statistically significant association between the level of female underbenefiting and marital dissolution. When the wife dedicates an increasingly disproportionate time to unpaid work, U.S. couples experience greater marital instability. No significant association is observed between the degree of female overbenefiting and marital dissolution. For the U.S., it appears that the significant effect of inequity reported in Table 3 is primarily driven by female underbenefiting.

To facilitate comparison across the countries, we present (in Figure 5) the average marginal effects of an increase in wives' being under- versus overbenefiting. For German couples, we observe that the level of over- or underbenefiting has no statistically significant impact on the risk of divorce.

In the U.S., however, the likelihood of divorce increases significantly when the wife contributes disproportionally more to housework, given her relative contribution to paid work. On average, a one-unit increase in female underbenefiting is associated with a 2.1 percentage-point increase in divorce risk.

Hypothesis 2 is therefore only partly confirmed. Although the results are not fully in line with the expectations of the distributive justice framework (as in Thompson, 1991), we do find that the country differences in terms of the effects of underbenefiting on divorce are statistically significant (in Figure 5, the confidence intervals for the average marginal effects of underbenefiting do not overlap, suggesting that the averages are statistically different).

Contrary to expectations, the level of female overbenefiting is not positively associated with marital dissolution in either country. In Figure 5, we see that the German average

marginal effects are negative but with large confidence intervals. In the U.S., the size effect is positive and very small with very large confidence intervals as well. The average marginal effects for female overbenefiting are not different across the two countries.

Equity and couple arrangements

To test Hypothesis 3, we estimate the effects of female under-benefitting at different levels of specialization by adding an interaction term for female underbenefiting combined with the husbands' relative contribution to paid work.

The aim is to test whether the degree of female underbenefiting has a different impact, given the couple's paid work arrangements. For both countries, we include the husband's share of paid work first linearly and subsequently with a second-order polynomial.[16] Because the relationship is linear in West Germany and quadratic in the U.S., we allow for a quadratic specification in the pooled model. In Table 5, we present three models for, respectively, West Germany, the U.S., and a pooled model. In all models, we present the log-odds and standard errors as well as the corresponding odds ratio.

In West Germany, the larger the husband's share of paid work, the lower the risk of divorce; here the male breadwinner arrangement represents the single most stable type of partnership. In contrast, the relationship between the husband's share of paid work and divorce is nonlinear in the U.S. The risk of divorce declines, reaching a minimum for dual-earner couples, and it plateaus for traditional breadwinner couples. While this finding is not central to our study, it does give us a better understanding of the cross-country differences we have uncovered.

We now turn to the interaction between the degree of female underbenefiting and the husband's share of paid work. For West Germany, the results in Model 1 suggest that the association between the level of female underbenefiting and divorce is not modified by the couple's division of paid work. Overall, the interaction is negative and not statistically significant. In the U.S., the interaction between the linear term for specialization and the wife underbenefiting is positive and statistically significant.

In logistic estimation, it is difficult to interpret interactions between continuous variables. We therefore present the results with marginal effects estimation. Figure 6 presents the average marginal effects of an increase in female underbenefiting for values of the husband's share of paid work ranging from 0% to 90%.[17] The average marginal effects of divorce are based on Model 3 in Table 5 for the U.S.

Figure 6 suggests that the average marginal effect of female underbenefiting at different values of the share of paid work does not follow the same pattern in the two countries. In West Germany, the association between the degree of female underbenefiting and marital instability is overall negative. The average marginal effects are only statistically significant when the husband contributes between 50% and 60% to paid work—that is, when there is partner-similarity in paid work. In other words, when German wives do more than their fair share of housework, dual-earner couples experience diminished divorce risks. Nevertheless, considering the size of the confidence intervals, this result should be interpreted with some caution.

Here again, the U.S. exhibits a very different logic. Reflecting the nonlinear nature of the relationship between the division of paid work and divorce, the average marginal effects follow an inverse U-shaped relationship. In dual-earner couples, a less equal division of paid
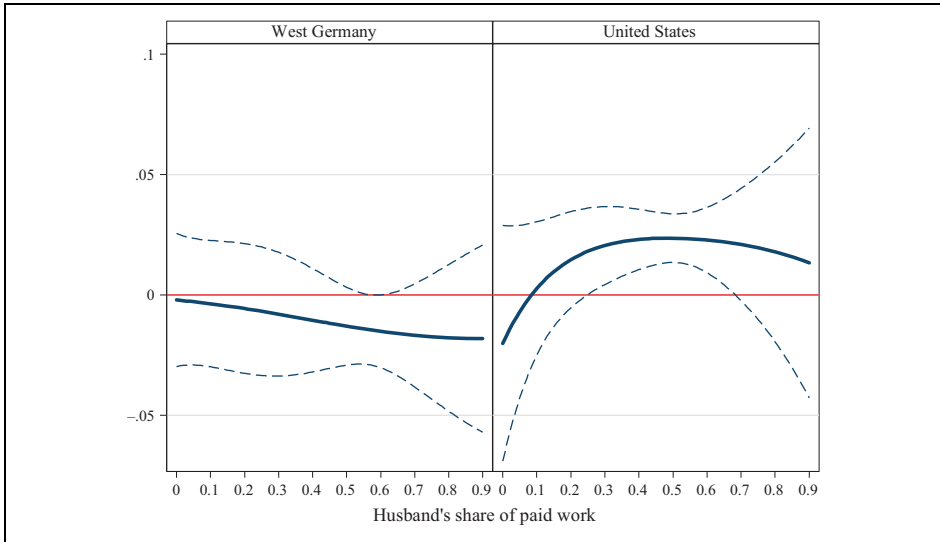
Figure 6. Average marginal effects on predicted divorce risk with 95% confidence intervals: female underbenefitting by husband's share of paid work. *Note:* The average marginal effects are based on the pooled model presented in Table 5.

and unpaid work, with the wife underbenefiting, increases the divorce risk. In Figure 6, we observe that the positive average marginal effect on divorce of an increase in female underbenefiting is statistically significant when her share of paid work falls between 30% and 65%.

These findings reveal noticeable differences in the relationship between paid and unpaid work in the two countries. In line with Hypothesis 3, we find that that the effect of female underbenefiting on divorce is distinctly different. In West Germany, adherence to traditional gender roles diminishes the risk of divorce within dual-earner couples when partners contribute similarly to paid work. And, in West Germany, it is still the conventional male breadwinner model that best guarantees marital stability. Partnership dynamics are clearly different in the U.S., where marital instability increases when (employed) wives do more than their fair share of the housework.

As a final step, we explore in more detail the association between female overbenefiting and the risk of divorce according to the male share of paid work (estimations not reported here).[18] Not surprisingly, we observe that the coefficient related to the degree of female overbenefiting is positive and significant for U.S. dual-earner couples, but this is not the case for sole male or female breadwinner couples. For West Germany, we find no significant effects.

Conclusion and discussion

We have examined the link between equity and divorce, focusing on West German and U.S. couples over the past three decades. Our approach differs from previous studies on several key points. First, we focus on the impact on marital dissolution of the allocation of paid and unpaid work simultaneously, rather than the more common focus on marital satisfaction. Second, we test the impact of equity comparing two countries, which differ regarding proper gender norms.

We examined whether the degree of inequity in couples' allocation of paid and unpaid work influences marital stability—as the equity-as-proportionality theory predicts. We found that this holds only for the U.S.; for West Germany, the degree of inequity has no effect. This suggests, first, that the impact of objective inequity on divorce varies across cultural contexts; it may be determinant for marital dissolution in some countries (e.g., the U.S.) but not in others (e.g., in West Germany). Second, this puts into question the universality of the proportionality principle as a guide to predicting couple dynamics.

We additionally sought to identify the impact of inequity depending on whether the wife is under- or overbenefiting. The distributive justice approach (as in Thompson, 1991) would predict greater marital stability the more that the female is under-benefiting—within a gender-traditional context. Indeed, this is precisely what we found for West German couples. In the U.S., the opposite occurs: The more that the wife is underbenefiting, the less stable is the partnership. Again, inequities do not have the same impact on marital stability in the two countries. Estimating female overbenefiting with a linear specification, we found no significant effect in either country.

Finally, we tested for the moderating influence of the couple's paid work arrangements on divorce risks in couples where the female is underbenefiting. In this case, our focus was on dual-earner couples. For the U.S., there is clear evidence that the more that the female is underbenefiting in dual-earner partnerships, the higher is the risk of divorce. Again, the exact opposite is the case in West Germany, especially for couples where partners divide similarly their paid work amount. Further analyses suggested that an increase of female overbenefiting in dual-earner couples is associated with a greater probability of divorce in the U.S.—but not in Western Germany.

The key to an interpretation of these findings lies in how inequity combines with a type of partnership that conforms to, or deviates from, socially sanctioned arrangements. In a nutshell, the importance of adopting equitable marital practices is salient in the U.S. In West Germany, the conventional male breadwinner model is still the arrangement that ensures marital stability the most. When couples move from the male breadwinner model to dual partnership, female underbenefiting exerts a stabilizing influence, especially for partners that contribute similarly to paid work. Our findings for the U.S. are orthogonal to the German. Here marital stability is greater in couples, where both partners are employed and where they divide fairly their domestic responsibilities.

Our results suggest that West Germany is still positioned at the early stages of gender revolution—a stage in which the adoption of equity remains negatively sanctioned. The U.S., in contrast, appears to have moved decisively toward a new normative equilibrium, one in which it is broadly accepted (and expected) that wives pursue a lifelong career and that husbands should adapt to women's new roles. This suggests that gender egalitarian norms have become pervasive throughout American society. An interesting next step would be to estimate these kinds of models on a country, like Denmark or Sweden, which has progressed even further toward gender egalitarianism.

On a final note, our study does have limitations. First of all, due to the lack of data on child care, it was impossible to build a complete measure of equity. Since previous studies have shown a strong correlation between participation in domestic work and time spent on child care (e.g., Cooke, 2006), this limitation should not have influenced our findings greatly.

In addition, we could not consider other kinds of activities performed by the spouses (e.g., emotional work). This exclusion may have biased our estimates (see De Maris, 2010). Due to data limitations, we could not include cohabiting couples. The latter may behave in a more gender egalitarian way, and it is well established that they are less stable than their married counterparts are.

Declaration of conflicting interests

Funding

Supplemental material

Supplementary material is available for this article online.

Notes

1. Research suggests that also other inputs may be considered by partners when evaluating proportionality (e.g., Gergen, 1980).
2. The principle of proportionality justice is based on reciprocity, not mutual advantage, with a motive to return benefits because of benefits received.
3. The male partner is the comparison referent for wives.
4. In this sense, subjective equity corresponds to objective equity.
5. We follow the approach of Gager (1998) according to which the division of work cannot be understood without considering paid and unpaid labor jointly. Accordingly, objective equity corresponds to a fair allocation when it is evaluated rationally—contributions to unpaid work are proportional to contributions to paid work. Subjective equity represents the sense of fairness that individuals perceive according to normative rules about what is just. Subjective and objective equity may overlap.
6. Here, subjective equity does not overlap with objective equity.
7. Notwithstanding such limitations, they were used in many studies to analyze the division of work between partners and its impact on marital outcomes in the U.S. (Brines, 1994; Cooke, 2006; Gupta, 1999). Cooke (2006, p. 457, line number 25) argues that even if the time use data in the Panel Study of Income Dynamics (PSID) are not as precise as are time diary data, results obtained using only domestic work hours "are remarkably consistent in terms of the extent of equity or compensatory behavior made evident with them."
8. We exclude the first two waves because of changes in the definition of key variables.

9. Also, East Germany represented a qualitatively different model of female participation and family life (Cooke, 2004).

10. In 2000 the German Socio-Economic Panel (GSOEP) added a major new refresher sample that significantly increased the sample size (Wagner, 2009).

11. In the PSID, when we have both the marital separation and divorce dates, we use the earliest of the two.

12. Relative measures have conceptual and empirical advantages, especially because they are more likely to capture the distributive justice aspects of the division of work within a couple (Cooke, 2006; Greenstein, 2000).

13. In the Technical Appendix, we explain how we handle missing information in the off-years after 1997.

14. Kalmijn and Monden (2012) use a similar technique to study the effects of inequity on depressive symptoms.

15. Because these measures are relative within couples, we can also interpret the wife under-benefited as the husband being over-benefited and the wife overbenefited as the husband being underbenefited.

16. The inclusion of a second-order polynomial was motivated by the lack of association between the share of paid work and divorce risk in the linear model for the U.S. Since this contradicts the existing literature, we included a quadratic term for the U.S.

17. We do not extend to values higher than 0.9 because underbenefitting cannot occur beyond these values (see Figure 1 for a visual explanation).

18. We replicated the models for Hypothesis 3 using a categorical variable instead of the husband's share of paid work. The categorical variable takes values of 1 when husband's relative contribution is higher than .1 deviation of the wife's, taking the value of zero otherwise.

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