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Desperate Housework: Relative Resources, Time Availability, Economic Dependency, and Gender Ideology Across Europe

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Abstract

This article investigates cross-national patterns in the gender division of housework in coresident couples. By using Generations and Gender Survey (GGS) data, we assess four key hypotheses proposed in the literature: namely, the *relative resources approach* (the partner who earns less does more housework), the *time availability perspective* (the partner who spends less time doing paid work does more housework), the *economic dependency model* (the partner who contributes proportionally less to the household income does more housework), and the *gender ideology perspective* (the beliefs on gender roles influence housework sharing in a couple), thereby verifying the presence of gender display. Our results reaffirm the significance of gender ideology, though with important differences across countries. Time availability and relative resources matter in the most egalitarian countries, whereas economic dependency matters in countries where partners contribute more unevenly to the household income.

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Looking across European societies, it seems clear that countries differ in their paths toward achieving gender equality in terms of the sharing of household chores. Whereas in the Nordic countries, couples now tend to share household tasks much more than before, many countries are lagging behind, the Mediterranean ones being the prime examples. Yet with the fall of the Iron Curtain in the early 1990s, many East European countries have, if anything, reverted to more traditional gender roles, despite their socialist legacy. In other words, gender roles are certainly changing across European societies. At the same time, European countries are facing dramatic demographic changes. Apart from below replacement fertility taking hold in most countries, there is a significant process of postponing key demographic events, such as union formation and the onset of childbearing. Moreover, family forms have become more diverse, and new family behaviors, such as divorce and out-of-wedlock childbearing, are on the rise in most European countries. These developments are landmarks of the second demographic transition. McDonald (2013) argues that new demographic behavior is closely linked with gender equity (i.e., the perceptions of fairness and opportunity of couples' gender role set in housework, care and external work; Mencarini, in press-b) and gender equality (i.e., the dynamics of couple relations; Mencarini, in press-a). In particular, "bad" demographic outcomes (i.e., low fertility intentions and realizations or higher couples disruption) might come about because equity and equality is not always well-matched in the family sphere. With this backdrop, the key aim of this article is to gain understanding of the mechanisms of the division of household work among couples across European societies. Our analysis is grounded in four key hypotheses concerning the division of routine household work, namely (a) the *relative resources approach*, where it is argued that housework division comes about as a negotiation between spouses on absolute measures of earnings, hence the more an individual earns in absolute terms, the less housework he or she does (e.g., Brines, 1993; Hersch & Stratton, 1994); (b) the *time availability perspective*, where the division of household labor is allocated according to time spent in market work (e.g., Barnett, 1994; Presser, 1994); (c) the *economic dependency model*, where partners share domestic duties according to their *relative* contribution to the household income, so who earns *relatively* less with respect to the partner, and is economically dependent on the partner, is expected to do more housework (e.g., Sørensen & McLanahan, 1987, 1991);

and (d) the *gender ideology* or *doing-gender perspective*, where the division of household work is determined by the attitudes toward gender equality and family roles (e.g., Blair & Johnson, 1992; Greenstein, 1996). Two processes linked to the latter perspective, gender display and deviance neutralization, will be explained and tested in the following sections.

For the analysis, we construct a scale that measures household work based on a battery of questions drawn from the Generations and Gender Survey (GGS). The GGS is a set of comparative surveys that include not only detailed information about household work and its division between partners, but also details about individual gender ideology, together with rich retrospective information about the individuals interviewed. The country data on which this study relies belong to Austria, Belgium, France, Germany, and Norway, but importantly, also Bulgaria, Hungary, Romania, and Russia.

Given the comparative perspective, our study resembles that of Davis and Greenstein (2004), who compared Bulgaria, Czechoslovakia, Estonia, West and East Germany, Hungary, Japan, the Netherlands, Poland, Russia, Slovenia, the United Kingdom, and the United States, using data from the International Social Justice Project (ISJP). In their study, they found strong support for the time availability and the relative resources approaches, but less support for the economic dependency approach. One important shortcoming of their study was that information on gender attitudes and behaviors was lacking in the ISJP data, so gender ideology could neither be properly assessed nor its manifold effect on housework division. Gender ideology is one of the most important predictors of household labor (Coltrane, 2000), though its effect varies strongly across societies (e.g., Evertsson & Nermo, 2004; Fuwa, 2004; Lewin-Epstein, Stier, & Braun, 2006) and between macro- and micro-level measurements (González, Jurado-Guerrero, & Naldini, 2009). Consequently, our study provides an important extension over the existing comparative literature by including information on gender attitudes and behaviors, which were lacking in the analysis done by Davis and Greenstein (2004). Here, we are able to verify the presence of gender display and deviance neutralization. Through our index of household work as our dependent variable, we estimate linear regressions for each of the country samples. Whereas the samples consist of individual-level responses, we also provide a country comparison of the aggregated measures of household division of labor and gender role attitudes.

Background

Although women have entered the labor market in great numbers during the past decades, the bulk of housework is still done by them, and men and

women perform different types of tasks within households. An unequal division of household labor has persisted in many countries, with men consistently doing less and women involved in particular types of household activities (Hook, 2010). Routine tasks, such as cooking, cleaning, and shopping for food are done far more often by women, whereas occasional tasks, such as small repairs or outdoor projects, are done by men (e.g., Blair & Lichter, 1991; Presser, 1994; Sanchez & Kane, 1996). Examining time-use surveys from 1965-2003, Hook (2010) showed that the decrease in gender specialization observed in selected countries since the 1960s was primarily attributed to the institutional context (e.g., public child care, parental leave) and to changes in the nature of housework. Although there was less time spent cooking, this was likely attributable to lower standards and the use of services or prepared substitutes than the take-up of these activities by men (Van Der Lippe, Tijdens, & de Ruijter, 2004). Hook (2010) also found that a higher prevalence of part-time work of women and long parental leaves increased gender specialization in household labor. The emergence of time diary data has contributed to our understanding of the balance between domestic work time and paid work time in couples. In many countries, the impact of time availability and relative resources prevails (Bianchi, Milkie, Sayer, & Robinson, 2000); in other countries, doing-gender behavior characterizes time allocation in domestic work (Sevilla-Sanz, Gimenez-Nadal, & Fernández, 2010). The burden is often on the female partner, but is mitigated for dual-earner couples (Mencarini & Tanturri, 2004) and decreases the more time women have spent in paid employment (Gershuny, Bittman, & Brice, 2005). Moreover, the gender gap in time allocation is influenced by institutional contexts, family policies, and employment regimes, through their impact on gender roles (Anxo et al., 2011).

A key aim in the literature involving the division of housework is to gain understanding of the gender structure operating at the micro-level. The causes of the so-called "second shift" were recognized in an interplay of gender strategy, rather than in the couples' earnings (Hochschild & Machung, 1989). Following this idea, the doing-gender perspective is called into question when economic dependency and housework division show a curvilinear relationship. This is typically captured by including a quadratic term of the woman's share of income. If the quadratic term has a negative coefficient (and is significant) on gender equality in the division of housework—as is typically reported in empirical studies—women with earnings similar to those of their husbands experience a higher level of gender equality in the division of housework, with respect to the "main earner" women. Brines (1994) defined the cause of that nonlinearity as gender display. That is, individuals want to reinforce their gender role, meaning that dependent husbands do less

housework than their less-dependent counterparts, and strongly independent women do more housework than those who are less independent. Following Brines' argument and relying on the lack of relevance of gender ideology measures for the nonlinearity of the impact of the woman's contribution to the household income, Greenstein (2000) explained the phenomenon with the concept of deviance neutralization. His argument is that highly independent women and highly dependent men perceive themselves as deviant from society and its norms, with the implication that men do less housework whereas women do more "than would be predicted under an economic dependency model" (Greenstein, 2000, p. 332)—the motivation being that they prefer to neutralize their deviance. These gender ideology processes have raised considerable debate. After being confirmed for women contributing more than half of the household income (Bittman, England, Folbre, Sayer, & Matheson, 2003) and in several comparative studies (e.g., Evertsson & Nermo, 2004; Yu & Xie, 2012), they began to lose relevance, favoring explanations involving absolute rather than relative measures of earnings (Gupta, 2007). Furthermore, it has been argued that a gender-deviance neutralization behavior might be limited to a small socioeconomic subgroup (Sullivan, 2011), and alternative explanations have been offered that involve attitudes toward family work, marital interactions, and negotiations regarding work–family balance (Risman, 2011).

Countries differ in their paths toward achieving gender equality in terms of sharing of household chores. In Eastern European countries, the Soviet influence and communism brought egalitarianism through high female labor force participation and education to cultures that were historically dominated by traditional values (Lobodzinska, 1995). But with the fall of the Iron Curtain during the early 1990s, it is frequently argued that many of the former Soviet countries reverted to a traditional male breadwinner model (Bagilhole, 2009). Davis and Greenstein (2004), using data from the ISJP on Bulgaria, Czechoslovakia, Estonia, West and East Germany, Hungary, Japan, the Netherlands, Poland, Russia, Slovenia, the United Kingdom, and the United States, found that compared with a Western country such as the United States, people in Russia and Hungary were more likely to report that husbands performed at least half of the household labor, whereas men living in Bulgaria were less likely to report performing at least half of the household labor. Russian respondents have later proved to be rather progressive regarding paid and unpaid work (Wunderink & Niehoff, 1997), while conservative on gender roles (Bodrova, 1995). In Hungary, traditional gender attitudes are widespread and husbands are not expected to be involved in housework (Oláh, 2011), as is the case in Bulgaria, despite the large number of dual-earner couples (Hofäcker, Stoilova, & Riebling, 2013). Romanian men also

report lower involvement in the household labor than their partners, and they tend to be affected by relative resources and gender ideology (Hărăguş, 2010).

Household labor in Western European countries has been investigated more vigorously, hence we know more about their patterns. Equally shared housework tends to be common in Norway, whose work–family policy aims to increase the father's involvement in household labor through a range of policies and incentives (Kitterød & Pettersen, 2006). Geist (2005) argued that for Norwegian women, time availability and relative resources were the driving forces behind the division of housework, while for Norwegian men gender ideology mattered more. The French welfare state supports employed women with childcare, but does not promote a gender-equal division of domestic and parenting work (Windebank, 2001). French fathers appear less involved in household tasks (Craig & Mullan, 2010). German men do less housework than women, but this gap varies between East and West Germany, the former being more gender equal than the latter (Cooke, 2004). In Austria, women perform most household tasks and men whose wives are employed full time participate slightly more in housework than men with part-time employed or unemployed partners; but despite this disparity, only a small proportion of women perceive this as unfair (Buber, 2002).

Although following different patterns, Western and Eastern European countries share gender inequality in the division of household labor within the couple. Relative resources, time availability, economic dependency, and gender ideology offer four perspectives to interpret the mechanisms working below the outcome of a woman's disproportionate housework load. These mechanisms may contribute differently across countries; hence, we will test the four mentioned perspectives in a cross-national comparison, by means of separate-country regression models.

Data and Measurements

The country samples are drawn from the Generations and Gender Programme (GGP), a data source of nationally comparative surveys whose core topics, include fertility, partnerships, and intergenerational and gender relations, the latter of which is expressed in terms of care relations and the organization of paid and unpaid work. Our subsample contains nine nations: Austria, Belgium, Bulgaria, France, Germany, Hungary, Norway, Romania, and Russia. Among all the countries part of the GGP, these have been chosen for their heterogeneity in terms of gender systems and their availability of variables necessary for analysis. The data were collected between 2004 and 2010, and the duration of implementing the interviews varies across samples (i.e.,

in Germany all interviews were completed within 1 month, whereas in Belgium the process lasted for approximately 3 years). Although the surveys possess rich information about household members, in particular about the respondent's partner and children, the partners are *not* interviewed. In other words, partner information is reported by the respondent. The division of household tasks is available only for coresident couples, meaning that respondents without a partner or with a nonresident partner are excluded from our samples. We also excluded same-gender partnerships. In the subsamples used for our analysis, we exclude individuals older than 60 years, which gives a working subsample of about 30,000 individuals (out of the 96,785 respondents aged from 18 to 80 years of the original samples of the nine countries).

Our dependent variable is a measure of gender equality in the division of the household work, derived by a factor analysis of the set of household tasks not involving childcare. The measure is built from five primarily routine household tasks. They were (a) preparing daily meals, (b) doing the dishes, (c) shopping for food, (d) vacuuming the house, and (e) doing small repairs in and around the house. The possible answers to those questions originally were (1) *always respondent*, (2) *usually respondent*, (3) *respondent and partner about equally*, (4) *usually partner*, (5) *always partner*, (6) *always or usually other persons in the household*, and finally, (7) *always or usually someone not living in the household*. Because respondents can be of either gender, we transformed the responses into (1) *always the woman*, (2) *usually the woman*, (3) *woman and man about equally*, (4) *usually the man*, and (5) *always the man*. We included Answers 6 and 7 in a residual category, assuming that the decision to outsource household labor represents ability and willingness to reduce the partner's workload. A low value reflects, consequently, gender inequality in the division of the household labor, where the woman is doing most of the tasks within the couple. In theory, one can also have gender inequality through very high values of this score in the sense that men are reported to do more of the household tasks. However, and not unexpectedly, the frequencies for Categories 4 and 5 are extremely low. In practice, higher values are taken as a measure of gender equality. Applying factor analysis gives strong factor loadings for all five items. As the scale of answers extended from gender inequality to gender equality in household work, every respondent was assigned, by means of regression scoring, a factor score portraying the level of gender equality in their division of household work; this was done only for those observations with none of the five items missing. The index is continuous, a characteristic that facilitates linear regression, and normalized for the aggregated sample, meaning that the overall mean is zero with negative values representing gender inequality and positive values

representing gender equality. Our index is more detailed than similar ones used in previous literature. The one used by Davis and Greenstein (2004) was based on a single and general question on "who did more household tasks," without specifying what the tasks were. However, for the nature of the data (reported overall self-assessments of household tasks sharing), our index is nevertheless measured with error, and it is not as precise as those measures derived from detailed time-use diary data (e.g., Sevilla-Sanz, Gimenez-Nadal, & Fernández, 2010).

The choice of explanatory variables follows previous studies (i.e., Davis & Greenstein, 2004), including the household characteristics, the characteristics of the woman, their partners' characteristics, and gender ideology measures. Household characteristics include a relative measure of household income, a relative measure of the partners' level of education, the number of children at home and marital status (i.e., cohabiting or legally married). The relative household income is a ratio of the individual household income to the median income in the country. The relative measure for education is defined as three categories: (a) the woman has greater educational attainment, (b) the partners have equal educational attainment, and (c) the man has greater educational attainment, the latter being the reference category. Educational attainment is based on the ISCED (International standard classification of education) scale. This measure for relative education matters for the relative resources approach, since it is widely argued that it affects the bargaining power of the individuals within the household (e.g., Coverman, 1985; Presser, 1994).

The woman's characteristics include a measure of her relative income, her employment status, and her age. Employment status is represented by three dummy variables: (a) employed full time, (b) employed part time, and (c) unemployed, with the latter taken as reference category. The variable is used to test the time availability approach. The woman's relative income is computed as a ratio of the woman's earnings to the couple's earnings (consistent with Davis & Greenstein, 2004), and measures, consequently, economic dependency. The more the woman contributes to the household income, the more the household work is likely to be equally shared. The man's characteristics are the same as those listed for the women, without the measure for relative income. In order to assess gender ideology, two important measures are included in our analysis. The first is the quadratic term of the woman's relative income, which reflects nonlinearity in the impact of women's relative income and hence might indicate gender display indirectly. The second is an index of gender equality attitudes of the respondent and hence is a direct measure of gender ideology. The index is derived from a set of statements for which the respondent expressed his or her agreement, answering on a 5-point

scale ranging from *strongly agree* to *strongly disagree*. These statements were (a) "In a couple it is better for the man to be older than the woman," (b) "If a woman earns more than her partner, it is not good for the relationship," (c) "On the whole, men make better political leaders than women do," (d) "A preschool child is likely to suffer if his/her mother works," (e) "If parents divorce it is better for the child to stay with the mother than with the father," and (f) "When jobs are scarce, men should have more right to a job than women." Again, we applied a factor analysis and obtained a powerful one-factor solution. The resulting index, predicted by regression scoring only on observations without missing items, portrays gender inequality in attitudes when there are low values and gender equality in the attitudes for high values. In other words, the higher the index, the stronger attitudes lean toward gender equality. Data on earnings were not available for some of the countries included. Consequently, we run two sets of linear regressions. In the first, we include all nine countries, for a wider cross-country comparison, but we exclude measures involving earnings. In the second round, we include the measures involving earnings to investigate the economic dependency and gender display hypotheses, but we are forced to exclude Austria, Germany, and Hungary, which do not have such information. For the regression analysis, we use ordinary least squares regression as a means to test the relevance of the four approaches explaining the division of household labor. Formally, the estimating equation is specified as follows:

$$Y_i = \beta_i X_i + \gamma_w Z_{wi} + \gamma_m Z_{mi} + \vartheta_i G_i + u_i$$

where Y_i measures gender equality in the division of routine household labor as previously defined and is regressed on household characteristics X_i, the characteristics of the woman Z_{wi}, their partners' characteristics Z_{mi}, and gender ideology measures G_i.

Results

Descriptive Statistics

Table 1 reports descriptive statistics of the variables that are part of our model, computed by country. The first two rows show country differences in the mean of the dependent variable. Keeping in mind that the variable is standardized, and that the overall mean (i.e., for all countries taken together) is close to zero, we see that Norway is the country where couples tend to share household tasks most. It is in stark contrast to Hungary, Bulgaria, and Romania, where the mean value for women is negative. There are important

Table 1. Descriptive Statistics: Mean and Standard Deviation or Frequency of Model Variables by Country.

	Austria (*N* = 3,069)	Belgium (*N* = 3,640)	Bulgaria (*N* = 6,909)	France (*N* = 4,614)	Germany (*N* = 4,566)	Hungary (*N* = 6,858)	Norway (*N* = 7,578)	Romania (*N* = 6,374)	Russia (*N* = 5,382)
Gender equality									
Gender equality in housework (women)	−0.18	0.08	−0.31	−0.14	0.17	−0.42	0.27	−0.30	−0.17
	(0.82)	(0.92)	(0.78)	(0.88)	(0.50)	(0.78)	(0.67)	(0.75)	(0.78)
Gender equality in housework (men)	0.23	0.25	−0.08	0.12	0.42	−0.06	0.56	−0.14	0.19
	(0.75)	(0.89)	(0.78)	(0.92)	(0.58)	(0.80)	(0.62)	(0.78)	(0.76)
Gender ideology									
Gender-equal attitudes (women)	0.25	0.40	−0.32	0.54	0.41	−0.47	0.98	−0.26	−0.47
	(0.62)	(0.60)	(0.57)	(0.80)	(0.78)	(0.78)	(0.67)	(0.56)	(0.56)
Gender-equal attitudes (men)	0.05	0.39	−0.46	0.49	0.21	−0.46	0.69	−0.38	−0.56
	(0.63)	(0.61)	(0.59)	(0.83)	(0.78)	(0.82)	(0.72)	(0.56)	(0.57)
Household characteristics									
Relative household income	—	1.02	1.20	1.17	—	—	1.06	1.29	1.45
		(1.19)	(1.45)	(2.15)			(0.58)	(1.61)	(3.08)
Woman has more education (%)	21	26	19	23	13	28	32	11	38
Partners have equal education (%)	49	51	67	53	56	48	39	60	34
Man has more education (%)	30	23	14	24	31	24	29	29	28
Number of children in the household	1.4	1.4	1.4	1.3	1.2	1.3	1.4	1.2	1.2
	(1.08)	(1.17)	(0.90)	(1.16)	(1.09)	(1.07)	(1.19)	(1.06)	(0.89)
Married couples (%)	70	76	87	74	85	84	72	94	83

(continued)

Table 1. (continued)

	Austria (*N* = 3,069)	Belgium (*N* = 3,640)	Bulgaria (*N* = 6,909)	France (*N* = 4,614)	Germany (*N* = 4,566)	Hungary (*N* = 6,858)	Norway (*N* = 7,578)	Romania (*N* = 6,374)	Russia (*N* = 5,382)
Woman's characteristics									
Relative income	—	0.42	0.49	0.38	—	—	0.42	0.34	0.42
		(0.30)	(0.32)	(0.25)			(0.27)	(0.29)	(0.31)
Employed full time (%)	32	40	60	49	30	29	54	52	68
Employed part time (%)	37	32	4	24	29	4	30	7	4
Level of education—ISCED scale	3.4	3.6	3.2	3.3	3.4	3.5	3.8	2.9	4.2
	(0.99)	(1.43)	(1.24)	(1.8)	(1.03)	(1.07)	(1.24)	(1.01)	(0.95)
Age	35	42	39	41	41	41	42	42	40
	(6.8)	(10.2)	(10.2)	(10.6)	(9.8)	(10.7)	(10.1)	(10.2)	(10.8)
Man's characteristics									
Employed full time (%)	91	79	66	81	81	33	87	69	79
Employed part time (%)	4	5	5	3	2	2	4	8	3
Level of education—ISCED scale	3.5	3.5	3.1	3.3	3.7	3.5	3.7	3.1	3.9
	(0.98)	(1.38)	(1.08)	(1.71)	(1.12)	(0.96)	(1.22)	(0.97)	(1.01)
Age	38	44	42	44	44	44	44	45	42
	(7.4)	(10.4)	(10.4)	(10.8)	(10.0)	(11.0)	(10.3)	(10.3)	(10.6)

Note. ISCED = International Standard Classification of Education. Standard deviations are given in parentheses.

gender differences, and men consistently report higher gender equality than women do across all countries. Despite the gender difference, the country ranking based on the mean remains largely unchanged within gender.

In the following two rows, we show the mean values for the Gender Ideology Index. Keeping in mind that the index is again normalized with an overall mean being close to zero, we find an interesting (albeit not exactly unexpected) contrast to the mean values of the dependent variable as reported in the first two rows. Specifically, women always have stronger gender equality attitudes than men. Again, we find strong country differences. Norwegian individuals have the strongest gender equality attitudes, and at the other end of the spectrum we find Romania, Bulgaria, Hungary, and Russia. Looking across these two measures, there appears to be a rather distinct pattern between the countries of the West compared with those of the East. The former include Austria, Belgium, France, Germany, and Norway, where at least in terms of gender ideology, more gender-equal attitudes seem to prevail. For the Eastern European countries, mean values of both gender ideology and household sharing are below zero. Whether Austria should be classified as gender egalitarian can, of course, be debated. If we compare it with France, it is clear that attitudes are more conservative, but in terms of actual sharing of household tasks there is not much difference. In any case, independent of the way it is measured, Austria appears considerably more egalitarian compared with the four Eastern European countries.

Looking toward the other variables, we see that Western and postcommunist countries differ in many other respects. Female part-time employment is widespread in Western countries, whereas it is nearly nonexistent in postcommunist countries. Considering both part-time and full-time work, Norwegian and French women have the highest employment rates, whereas the Hungarian, German, and Romanian women have the lowest. If we compare men's and women's employment by country, we find the highest gender gap in employment rates in Austria (26%) and Romania (18%), whereas the lowest are in Bulgaria (7%) and Norway (7%). These statistics are consistent with the woman's relative income, as within our sample, Romanian women produce the lowest share of household income (0.34) while Bulgarian women have the largest contribution (0.49), followed by Norwegian, Belgian, and Russian women (0.42).

Single-Country Regressions Results

Table 2 shows the results from our first regression analysis. Although the regression results show country-specific differences, we also see clear systematic patterns. For instance, full-time employment among women is

Table 2. Ordinary Least Squares Regression Models Predicting Gender Equality in the Division of Household Labor by Country.

	Austria	Belgium	Bulgaria	France	Germany	Hungary	Norway	Romania	Russia
Household characteristics									
Partners equal education	0.034	0.07*	−0.01	0.05	0.03*	0.04	0.00	0.05**	0.06**
	(0.032)	(0.037)	(0.031)	(0.031)	(0.016)	(0.024)	(0.021)	(0.023)	(0.028)
Woman more education	0.14***	−0.02	−0.03	0.11***	0.09***	0.00	0.06***	0.07**	0.02
	(0.040)	(0.042)	(0.036)	(0.038)	(0.024)	(0.027)	(0.022)	(0.036)	(0.028)
Number of children at home	−0.11***	−0.04***	−0.07***	−0.05***	−0.04***	−0.04***	−0.04***	−0.04***	0.01
	(0.016)	(0.013)	(0.012)	(0.012)	(0.007)	(0.009)	(0.008)	(0.010)	(0.012)
Marital status	−0.10***	−0.05	−0.06*	−0.12***	−0.14***	−0.14***	0.00	−0.02	−0.12***
	(0.035)	(0.037)	(0.034)	(0.032)	(0.023)	(0.029)	(0.021)	(0.044)	(0.030)
Woman's characteristics									
Full-time	0.42***	0.46***	0.30***	0.47***	0.34***	0.27***	0.23***	0.30***	0.18***
	(0.038)	(0.039)	(0.022)	(0.032)	(0.018)	(0.028)	(0.024)	(0.022)	(0.024)
Part-time	0.22***	0.23***	0.21***	0.28***	0.12***	0.18***	0.02	−0.05	0.07
	(0.035)	(0.039)	(0.051)	(0.036)	(0.018)	(0.055)	(0.026)	(0.046)	(0.055)
Age	−0.01***	−0.01***	−0.00	−0.01***	−0.00	−0.00*	−0.01***	0.00	−0.00
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)

(continued)

Table 2. (continued)

	Austria	Belgium	Bulgaria	France	Germany	Hungary	Norway	Romania	Russia
Man's characteristics									
Full-time	−0.24***	−0.36***	−0.03	−0.42***	−0.38***	−0.01	−0.19***	−0.09***	−0.00
	(0.065)	(0.043)	(0.024)	(0.038)	(0.020)	(0.035)	(0.032)	(0.027)	(0.029)
Part-time	0.07	−0.11	−0.01	0.03	−0.11**	0.02	−0.05	−0.17***	0.00
	(0.092)	(0.077)	(0.051)	(0.078)	(0.055)	(0.076)	(0.050)	(0.046)	(0.075)
Age	0.00	0.01	−0.00	−0.00*	0.00	0.00	0.00	−0.00	0.00
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)
Gender ideology measures									
Gender-equal attitudes	0.18***	0.25***	0.11***	0.16***	0.12***	0.16***	0.12***	0.09***	0.15***
	(0.023)	(0.025)	(0.017)	(0.016)	(0.010)	(0.013)	(0.012)	(0.018)	(0.019)
Gender of respondent	−0.41***	−0.34***	−0.25***	−0.26***	−0.27***	−0.52***	−0.33***	−0.17***	−0.37***
	(0.029)	(0.029)	(0.020)	(0.026)	(0.015)	(0.037)	(0.018)	(0.020)	(0.022)
Constant	1.10***	0.98***	0.44***	1.08***	1.02***	0.76***	1.27***	0.05	0.64***
	(0.110)	(0.104)	(0.069)	(0.091)	(0.048)	(0.085)	(0.063)	(0.079)	(0.075)
N	2,737	3,529	6,072	4,274	4,222	6,281	5,469	5,680	5,101
R^2	0.215	0.144	0.070	0.170	0.271	0.106	0.129	0.069	0.078

Note. Standard errors are given in parentheses.
*$p < .10$. **$p < .05$. ***$p < .01$.

associated with a higher level of sharing in all countries. Apart from Bulgaria, Russia, and Hungary, full-time employment among men is associated with a lower level of sharing. Considering household characteristics, we see that if the woman has higher education than the partner, only in Austria, France, Norway, and Germany is this associated with higher sharing.

Insofar as education reflects stronger bargaining power, this appears to have little effect in the Eastern European countries and Belgium. Not unexpectedly, we see that couples with children living in the household share less, and this is the case for all countries except Russia. Similarly, being married is associated with less sharing, as previously been found in the literature (Shelton & John, 1993), apart from Belgium, Norway, and Russia, where the coefficient is not significant. Finally, we see the strong impact of gender ideology. Obviously, in the cross-sectional setting that we have here, there might be a sizeable endogeneity bias, and the magnitudes of the coefficients need to be interpreted with caution. Nevertheless, we see a clear positive association, meaning that when the respondents have strong attitudes toward gender equality, they also tend to share household tasks. Interestingly, this is the case for all countries. In terms of the magnitude, we have little evidence to suggest there is an East–West divide when thinking about the importance of gender ideology. As was clear from the descriptive statistics in Table 1, women tend to report less gender-equal sharing, reflected by the rather strong negative coefficient of the gender dummy.

Table 3 provides similar regression results for those countries where we have information about earnings. First, relative household income is either not significant (Belgium and Russia) or positive, meaning that women tend to do less housework relative to men if their share of income is higher. This might because of not only a greater ability to outsource household work but also access to better domestic technologies (Heisig, 2011). We find a positive association between the woman's share of household income (taken as a proxy for economic independence) and sharing of household work. In other words, the more the woman contributes to the household income, the less household labor she does. The coefficient is however not significant for Bulgaria and Norway, which may relate to the fact that in these two countries, the mean of women's relative income is high: 0.49 for Bulgaria and 0.42 for Norway. In the last column of Table 3, we report the coefficient of the quadratic of women's relative income. This is clearly negative, all of which reflects a curvilinear relationship between economic dependency and household sharing, all of which supports the idea of gender display. Again, as women's relative income was not significant for Bulgaria and Norway, the quadratic term is also insignificant for these two countries.

Table 3. Ordinary Least Squares Regression Models Predicting Gender Equality in the Division of Household Labor by Country.

	Belgium	Bulgaria	France	Norway	Romania	Russia
Household characteristics						
Partners equal education	0.0285	0.0006	0.0272	0.0118	0.0356	0.0393
	(0.042)	(0.033)	(0.033)	(0.021)	(0.024)	(0.029)
Woman more education	−0.0389	−0.0208	0.0689*	0.0795***	0.0577	0.0176
	(0.047)	(0.039)	(0.039)	(0.023)	(0.038)	(0.029)
Relative household income	−0.0005	0.0209***	0.0114*	0.0435**	0.0376***	0.0045
	(0.015)	(0.007)	(0.006)	(0.017)	(0.007)	(0.003)
Number of children in the household	−0.0285*	−0.0656***	−0.0478***	−0.0394***	−0.0301***	0.0142
	(0.015)	(0.013)	(0.012)	(0.008)	(0.011)	(0.013)
Marital status	−0.0175	−0.0479	−0.0998***	0.0050	−0.0094	−0.1223***
	(0.041)	(0.036)	(0.033)	(0.024)	(0.047)	(0.031)
Woman's characteristics						
Relative income	0.8759***	0.0447	1.2679***	0.1397	0.5474***	0.3443***
	(0.185)	(0.126)	(0.160)	(0.115)	(0.117)	(0.133)
Full time	0.3781***	0.2746***	0.3228***	0.1945***	0.1658***	0.1279***
	(0.052)	(0.027)	(0.039)	(0.026)	(0.030)	(0.029)
Part-time	0.1195**	0.1859***	0.1793***	0.0110	−0.0786	0.0278
	(0.050)	(0.056)	(0.041)	(0.027)	(0.048)	(0.059)
Age	−0.0119***	−0.0057**	−0.0126***	−0.0112***	0.0002	−0.0028
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.002)

(continued)

Table 3. (continued)

	Belgium	Bulgaria	France	Norway	Romania	Russia
Man's characteristics						
Full time	−0.3431***	−0.0495*	−0.3783***	−0.1916***	−0.0841***	−0.0304
	(0.048)	(0.027)	(0.040)	(0.032)	(0.030)	(0.031)
Part-time	−0.1473*	0.0201	0.0419	−0.0522	−0.1237**	−0.0238
	(0.084)	(0.055)	(0.082)	(0.050)	(0.050)	(0.078)
Age	0.0033	−0.0003	−0.0022	0.0015	−0.0023	0.0006
	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Gender ideology measures						
Gender-equal attitudes	0.2420***	0.1145***	0.1475***	0.1186***	0.0871***	0.1415***
	(0.028)	(0.019)	(0.017)	(0.012)	(0.019)	(0.020)
(Woman's relative income)^2	−0.7592***	−0.0616	−1.0776***	0.0107	−0.3946***	−0.3581***
	(0.168)	(0.110)	(0.157)	(0.112)	(0.116)	(0.124)
Gender of respondent	−0.3376***	−0.2502***	−0.2889***	−0.3524***	−0.1780***	−0.3499***
	(0.033)	(0.022)	(0.027)	(0.019)	(0.021)	(0.023)
Constant	0.8409***	0.3986***	0.9091***	1.2242***	0.0077	0.6387***
	(0.117)	(0.077)	(0.097)	(0.065)	(0.086)	(0.080)
N	2,712	5,303	3,888	5,463	4,984	4,693
R^2	0.151	0.069	0.182	0.133	0.080	0.071

Note. Standard errors are given in parentheses.
*p < .10. **p < .05. ***p < .01.

Discussion and Conclusion

Our estimates reveal interesting insights into the four key hypotheses as outlined in Section 2. There is widespread support for the time availability argument. In almost all countries, we find that full-time work among women is associated with less household work. The argument also applies to men (though not in all countries): full-time employment among men brings about lower gender equality in household sharing. As for the relative resources perspective, as measured by relative educational attainment, the evidence is more mixed. In particular, it appears that it matters less in those countries that are less gender-equal. Among our samples, this refers to the Eastern European countries, where we know from the descriptive statistics that they score lower both in terms of average household sharing and in terms of attitudes toward gender equality. In all the Western countries (and also more gender-equal countries), the relative resources approach matters. However, the relative resource argument is closely related to the economic dependency hypothesis. Once income variables are added, relative resources gives way to the economic dependency hypothesis. We find support for it among all countries except those where women's relative earnings are high on average, that is, Bulgaria and Norway. Looking at the descriptive statistics, we see that Bulgaria is the country where women contribute most to household income, followed by Norway, Belgium, and Russia, with the same value. Yet these latter countries are different. In particular, women's contribution to household income has a lower standard deviation in Norway, suggesting that there, dual-earner families are more commonplace and that there are few households where women earn very little. It seems clear that an increase in women's relative income is likely to result in a lower amount of household labor for the female partner in those contexts where women are less recognized as an important earner.

Gender ideology is clearly important in all the countries considered: Stronger attitudes toward gender equality are associated with stronger gender equality in the division of household labor. The evidence regarding gender display, measured by the quadratic term of the woman's share of household income, is more differentiated. It is present only where the woman's relative income is significant, remaining absent in Norway and Bulgaria. This is, however, consistent with the literature. Evertsson and Nermo (2004), for instance, found a similar pattern for Sweden. Hence Belgium, France, Romania, and Russia show nonlinearity in the relationship between economic dependency and gender equality in the division of household labor. In these contexts, even if women are substantial contributors to the household income, they may not experience a balanced compensation in terms of gender

equality in the division of household tasks. According to our models, the most gender-egalitarian division of domestic work will be in those households in which partners contribute equally or similarly to the household income. In cases of a disproportionate contribution, women by and large end up doing more of the housework, and if their earnings are low, this happens because of economic dependency. But paradoxically, if she earns more than her partner, she will do more housework than what would otherwise be expected because of gender display. As we already explained, the effect leans to the idea of gender display because attitudes about gender equality have a strong impact in all our models. It is therefore very likely that a process of gender display is taking place for both genders in Belgium, France, Romania, and Russia. One might therefore argue that women and men "do gender" when choosing their amount of housework (West & Zimmerman, 1987) only when they are not equally contributing to household income.

Our analysis provides an important extension of Davis and Greenstein's (2004) work because we are able to control for gender ideology and thereby verify the presence of gender display and deviance neutralization. Furthermore, we assessed the country differences in the division of household labor through separate country regressions. Our results support the literature but point out different patterns. We reaffirm the importance of gender ideology, give strong support for economic dependency, and confirm time availability and relative resources theories. Nevertheless, our results identify different factors as predictors of the division of household labor that depend directly on the social context. Residing in a more gender-egalitarian or less gender-egalitarian environment pushes a couple to make different decisions. From the single-country regressions, we know that time availability is a universal factor in determining the division of household labor, but we see that the relative resources matter only for the more egalitarian countries, and when controlling for economic dependency it matters only for the most egalitarian countries—in our case, France and Norway—and we observe that economic dependency leads to gender inequality in the division of household labor in countries where women as main-wage earners are rare.

Cross-national studies on the division of household labor are clearly important for our understanding of the unfolding of the second demographic transition (SDT). Building on the SDT idea, McDonald (2013) has argued that gender equality and gender equity play a critical role for demographic outcomes. The key idea is that institutions are often unable to cope with the dynamics of gender inequality in household production. That is, despite women gaining higher education and greater financial independence, gender roles tend to persist in the family sphere. The argument is that the variation in gender equality with respect to equity might be important in explaining

demographic outcomes. Men have not compensated women's reduced time input in household production as they are increasing their time spent in the labor market (Gershuny, 2000). Thus, as women are entering the labor market in increasing numbers, they are facing an increasing burden of housework and childrearing and market work. Whereas the institutional setting at the macro level is critical (such as the expansion in childcare facilities), the unfolding of the SDT also implies greater gender equality in the household. Our analysis shows quite clearly that the country that has progressed farthest on the SDT path, in our case Norway, is also the country where men tend to participate more actively in the sharing of household tasks. In countries that are lagging behind in the SDT, men tend to participate less. In other words, sharing of household tasks, and more generally gender equality among partners, appears to be an important component of the SDT and which so far has perhaps not been given the attention it deserves.

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