



**Osservatorio MU.S.I.C. Working Paper Series** 

# Cultural influences on the gender division of household labor. Evidence from migrant populations in Europe

Renzo Carriero

n° 04-2017

# Cultural influences on the gender division of household labor. Evidence from migrant populations in Europe.

# Renzo Carriero, Università di Torino

Il working paper riflette il testo originale presentato dall'autore nel seminario del 25/05/2017 organizzato dall'Osservatorio MU.S.I.C. (discussant Raffaele Guetto - Università di Trento e Chiara Pronzato - Università di Torino).

Per la grafica della copertina si ringrazia Federica Turco

Osservatorio sul Mutamento Sociale e Innovazione Culturale (MU.S.I.C.) Dipartimento di Culture, Politica e Società Lungo Dora Siena 100 - 10153 Torino mail: osservatorio.music@unito.it telefono: 011 6702628





### ABSTRACT

Does culture influence the gender division of household labor? Many family scholars are convinced that this is the case, but they can rarely make robust causal inferences because regressions of individual behavioral data on attitudes data (the most frequently performed kind of analysis) suffer from spuriousness and reverse causation problems.

In this contribution I address this issue by applying a method derived from epidemiology and recently imported in economics (Fernandez 2011) and sociology (Polavieja 2015). Culture is measured at the countries of origin among natives and then imputed to immigrants of those cultures observed in different destination countries. Immigrants are assumed to have inherited at least in part the cultural traits of their national origin. In this way their behaviors, by construction, cannot affect their culture.

For this analysis, I used ESS data (round 5) on migrant families and their division of household labor matched with EVS data (wave 4) on cultural traits observed at their countries of origin (N = about 2000 immigrants resident in 28 host countries, coming from 43 different European origins). I found that several cultural traits, that are expressions of traditional gender role arrangements, significantly and substantially affect the division of household labor of migrants.

Keywords: Epidemiological Approach, Housework, Ancestry Culture, Instrumental Variable Regression

In the last decades, the gender division of household labor attracted much scholarly attention because in modern, rationalized societies, with high level of female employment, one would expect men's participation in housework to be equal to women's. This is not the case even in egalitarian Scandinavian countries, notwithstanding a generalized trend towards equal contributions by women and men (Altintas & Sullivan, 2016). So, why does the gender division of household labor change so slowly? One possible explanation is that it is a phenomenon with deep cultural roots and, as such, it does not change so fast. Many family scholars are convinced that this is the case, but they can rarely provide robust evidence of a causal impact of culture. Culture indeed is embedded in the social and economic environment surrounding social actors, hence it is difficult to say whether individuals react to different constraints and opportunities or act upon different preferences, beliefs and values which were molded by their culture. On top of that, people's preferences and beliefs may change as a results of their own behaviors. Therefore, the challenge to provide true causal (as opposed to correlational) evidence of the impact of culture on the gender division of household labor remains open.

In this article I tackle this issue by applying a method, derived from epidemiology and recently imported in economics (Fernandez 2011) and sociology (Polavieja 2015), which helps to deal with the embeddedness of culture. This method uses data on immigrants from different nations living in Europe to assess the effects of culture on their household labor arrangements. Culture is measured at the countries of origin among natives and then imputed to immigrants from those cultures observed in different destination countries. Immigrants are assumed to have inherited at least in part the cultural traits of their national origin. In this way, by construction, culture cannot be affected by other institutional or economic factors of the social environment nor individuals' behavior can affect their culture. I found that several cultural traits, that are expressions of traditional gender role arrangements, significantly and substantially affect the division of household labor of migrants. Even if my findings do not disprove that other factors may explain this phenomenon, they give more robust credit to theories that postulate an important role of housework's symbolic meaning (for gender identity) in determining the division of household labor.

The article is organized as follows. In the next section, I outline the main theoretical frameworks underpinning scholars' work on the gender division of household labor and point to the empirical problems that cultural explanations entail. After that, I describe

the research design that allows to overcome such problems. Then I present the data, variables and models' specification. Subsequently, I report the results which I discuss in the concluding section.

### THEORETICAL BACKGROUND

To understand and explain the gender division of household labor, social scientists basically rely on two main kinds of theoretical perspectives: a rational-choice account and a cultural (or symbolic interactionist) account<sup>1</sup>. Within the former, household labor has a pure instrumental value (as commodity) and the process of its allocation is gender neutral. Economist Gary Becker (1965) maintained that the resulting allocation ensues from differences in returns from specialization in market work or household labor between men and women, whatever the reasons of such differences (i.e., "biological" or "social"). In making such statement, Becker assumed family decision making as fundamentally "consensual" (unitary model), whereas subsequent economic theorizations and rational-choice sociological accounts abandoned this view and considered couple's partners as fundamentally self-interested (Brines, 1993; Lundberg & Pollack, 1996; Manser & Brown, 1980; Sorensen & McLanahan, 1987). Under the alternative view, the division of household labor is considered the outcome of a bargaining process between partners which is based on power resources, mainly of economic nature (i.e., wages and incomes). The partner with more resources will be more successful in obtaining a more favorable division of housework from the partner, using the implicit threat of divorce<sup>2</sup>.

The cultural account of the gender division of household labor, in sharp contrast with the rational-choice approach, assumes that housework has a strong symbolic meaning for men and women, not only at personal (individual), but also at group (macro) level, and that the allocation of household labor is not a gender neutral process. If women do more housework than men, it is not because they have fewer power resources or because they have more incentives to specialize in household labor. On the contrary, the empirical evidence seems to suggest that housework, far from being a simple commodity, is a means to display own gender identity (Bittman, England, Folbre,

<sup>&</sup>lt;sup>1</sup> I refer here to micro-level explanations because in the end individual women and men practice a gender division of household labor, even if at the macro-level can be located the sources of differences between individuals such as labor market regulations, welfare policies, cultural endowments, and so forth.

<sup>&</sup>lt;sup>2</sup> Divorce is an external threat point. Alternatively, it is also possible a within-marriage threat point in terms of non-cooperative equilibrium in which a public good like household labor is undersupplied.

Sayer, & Matheson, 2003; Brines, 1994; Greenstein, 2000; Killewald & Gough, 2010; Kühhirt, 2011). When women do the chores (or men avoid them), they are showing to themselves and to their partner – not necessarily in fully conscious way – that they are committed to fulfill their proper gender identity. Why does housework have such a function in building gender identity? Because in most cultures there (still) exists (and resists) the patriarchal idea that housework is women's work and paid job is men's. Thus, if women (and men) interpret and act towards housework in this way, it means that, to a certain extent, they have internalized such norm and consider housework as a key component of proper female identity<sup>3</sup>. The crucial question then becomes: what is the source of this social norm? Actually, without an external source (*à la* Durkheim) that legitimizes housework as an appropriate means to perform gender in everyday life, it would be hard to explain the division of household labor in terms of gender identity. Therefore, one obvious sociological answer to the previous question is: culture.

Unfortunately, the notion of culture is one of the most used and, at the same time, variously defined of the sociological conceptual toolkit. Without pushing the concept of culture too far (thus excluding aspects of the social structure and institutions), we can safely consider culture as consisting of shared beliefs, values and norms within a group (Kroeber & Kluckhohn, 1952). More disputed is the relationship between culture and individual behavior. Two contrasting views confront themselves in the sociological literature: one, attributable to Weber and Parsons, sees culture as a fundamental motivator of human action, whereas the other, expressed for instance by Swidler (1986), looks at culture as the repertoire of shared justifications used to make sense of action (see Vaisey, 2009 for a discussion of this opposition). In other words, and with much simplification, according to the former view, culture can be considered as an independent variable, while according to latter culture is better understood as a dependent variable. Needless to say that, for the purpose of this study, the first view is much more adequate.

Embracing the point of view of culture as independent variable means that culture can affect behaviors in different ways. It can shape individual preferences and beliefs, make some goals more valuable than others (values), or render some behaviors more

<sup>&</sup>lt;sup>3</sup> If a social norm is internalized, noncompliance causes psychological discomfort. Alternatively, people abide by the norm, even if they have not internalized it, when there are sufficient positive or negative sanctions that sustain its application.

desirable/costly than others (norms). This suggests that individuals socialized to different cultures should follow different behavioral patterns. However, such conceptualization of the effects of culture can be easily subjected to strong criticisms for being too much deterministic, and in fact this is one of the reasons why it lost appeal in many sociological theorizations. Nonetheless, if one properly acknowledges the probabilistic nature of the relationship between culture and individual behavior, and is willing to subscribe to a notion of culture that embodies consciously stated values and beliefs as well as unreflective moral intuitions (Vaisey, 2009), that conceptualization remains true for many sociologists who are dissatisfied with the rational-choice perspective, but still have explanatory (and not merely interpretive) ambitions about human behavior.

To put forward this type of explanatory endeavor in the specific field of interest concerning this study, it is appropriate to consider that cultures evolve across time and space and differ in the way they support gender egalitarianism or, conversely, sustain gender inequality. Moreover, along this evolutionary path, cultures are reinforced or hindered by (i.e. co-evolve with) institutions and policies that regulate individuals' and families' life. This is witnessed by the systematic patterns of correlation existing between public attitudes towards the role of women in society and macro-level outcomes such as female (and mothers') employment rate and gender pay gap (Fortin, 2005) which are likely to be influenced not only by labor market policies and economic transformations, but also by the concomitant (or even antecedent) diffusion within culture of new ideas about women. Based on this reasoning, it can be easily hypothesized that people who were socialized to more gender egalitarian cultures (or "gender ideologies", as they are usually termed in the field literature) tend to put into practice a more gender equal division of household labor, although the observed relationship will be (hopefully!) far from being perfect (Cunningham, 2001)<sup>4</sup>. The specific cultural element that causes such pattern of association is not easy to uncover. The socialization to certain cultures might affect women's and men's preferences about paid and unpaid work or their beliefs about parental childcare. Cultures may contain norms that discourage women's paid employment, particularly mothers', and encourage their primary role within the family. Cultures can be distinguished also for

<sup>&</sup>lt;sup>4</sup> An individual's gender ideology is not shaped by parental socialization only (as many scholars who oppose such Parsonsian view rightly maintained) but also by subsequent experiences in various social groups and interaction settings.

the value they attach to family and values in turn can orient individual choices. However, the distinctions among these various cultural elements and their channels of influence on behaviors are difficult to draw.

At the empirical level, many studies have shown a correlation between measures of egalitarian gender attitudes and the division of household labor, as reported by two important literature reviews (Coltrane, 2000; Lachance-Grzela & Bouchard, 2010) and later research (see, e.g., Aassve, Fuochi, & Mencarini, 2014; Grunow & Baur, 2014). In some works, the effect of gender attitudes (i.e., culture) was measured both at individual and group level (e.g., nation) in multilevel analysis (Geist & Cohen, 2011; Voicu, Voicu, & Strapcova, 2009). All these studies and, in general, research that attempt at identifying an effect of culture on individual behaviors rely on correlational evidence. A measure of individual behavior is usually regressed on a variable capturing some aspect of the culture to which the subject was socialized, be it his/her religion, parental cultural background, or, more often, the answers s/he gives in response to a few attitude or value questions which are deemed to reflect his/her culture<sup>5</sup>. Of course standard socio-demographic controls such as age, education, occupation, marital status and so, as well as other control variables suggested by the specific topic of interest are also included in the regressions.

This methodological strategy, however, cannot allow for a proper identification of cultural effects. As well explained by Polavieja (2015), there are basically two reasons why the regression coefficient of a cultural variable may not reflect a true causal effect. In the first place, the relationship between the cultural variable (e.g., attitude towards working mothers) and individual behavior (e.g., share of household labor performed) could be due to a third variable or set of variables that operate in the social environment. For instance, it might be that people with pro-working mothers attitudes live in a context where social policies strongly favor the employment of women with children. This in turn makes women likely to see a working mother as "normal" and, at the same time, incentivizes them to invest more in paid work than in household labor. Secondly, even if we hold constant the characteristics of the social environment and still find an association between the cultural variable and individual behavior, we

<sup>&</sup>lt;sup>5</sup> It must be acknowledged that attitudes are less general and more concrete than cultural traits such as values (Hitlin & Piliavin, 2004). Moreover, the notion of attitude has an individual component that culture has not. Despite these differences, it can be assumed that answers to attitude questions, especially when phrased in general rather than individual terms (like the ones presented later in this article), capture quite well a cultural trait.

cannot rule out the possibility of reverse causality. People may adjust their attitudes in response to their objective circumstances to make sense of them (ex-post rationalization). For instance, having given up paid work due to a lack of affordable childcare services, a woman may turn to household labor out of necessity and end to believe that, after all, it is best for her children if their mother does not work (Kroska & Elman, 2009). That is why, to cope with reverse causality, a few studies analyzed longitudinal data where attitudes were measured at an earlier time point than behavior (Carlson & Lynch, 2013; Evertsson, 2014). Notice, though, that this does not eliminate the problem altogether because attitudes might have been influenced by even earlier behaviors.

Spurious correlation and reverse causality are very challenging difficulties in the study of cultural effects. Ideally, only an experiment manipulating an individual's culture (or attitudes) could solve them, but it is obviously unfeasible and unrealistic. Another method, originally developed in epidemiology and recently applied in economics by Fernandez (2011) and in sociology by Dinesen (2013) and Polavieja (2015), helps to deal with these issues<sup>6</sup>. The method leverages on a key property of culture: its *portability*. As culture is incorporated into people's mind, it moves with them. When people leave the social environment where they were socialized, they bring with them, in the new social environment, their original cultural "baggage", i.e. the set of shared belief, values and norms they received from multiple socialization experiences within the groups they belonged to. For this reason, research on migrant populations is particularly interesting because immigrants represent the subjects of a sort of "natural experiment" (Dinesen, 2013)<sup>7</sup>. When they move to the host countries, they carry with them their inherited culture and this could affect their behaviors without being influenced by the social environment of origin (i.e., their country of origin). Yet, the new environment is likely to change, sooner or later, immigrants' culture as well (see Goldscheider, Goldscheider, & Bernhardt, 2011 for a case related to household labor practices and attitudes). That is why culture should not be measured on immigrants themselves - here is the methodological novelty - but on their same-origin non-migrant fellow nationals and then imputed to the former. Practically, immigrants' culture is predicted from observations of their counterparts who remained at the countries of

<sup>&</sup>lt;sup>6</sup> Both Fernandez' and Polavieja's contributions investigate the effects of culture on female labor market participation.

<sup>&</sup>lt;sup>7</sup> There can be of course problems with selection into migration (see below).

origin. Thus, culture becomes an ascribed characteristic like parental social class. In this way, by construction, cultural variables cannot be affected neither by concomitant or antecedent characteristics of the social context where immigrants live (spurious correlation is ruled out), nor by their actual individual behaviors and circumstances (reverse causality is ruled out).

The empirical strategy just sketched assumes that immigrants inherited, at least partially or even only minimally, the culture they were exposed to (mainly through parental socialization) when they were living in their countries of origin. This seems plausible and can be tested indeed: if the same cultural variable measured on non-migrants is available also for the immigrants themselves, then a simple correlation coefficient can tell us to what extent immigrants and their same-origin non-migrant fellow nationals are culturally close<sup>8</sup>. Moreover, this empirical strategy does not necessarily imply a mechanical and deterministic effect of culture on immigrants' subsequent behaviors. Rather, any effect has to be considered of a probabilistic nature and subject to empirical test. It would be wrong, however, to assume that immigrants are in all respects similar to their non-migrating fellow nationals and that they all have absorbed to the same extent the specific traits forming their cultures of origin. To avoid this simplifying assumption, the imputation procedure must take cultural heterogeneity into account. This will be illustrated in the next section that provides details on the application of this method to the gender division of household labor.

#### **RESEARCH DESIGN**

To investigate the effect of culture on the gender division of household labor, I used the European Social Survey (round 5), which provides information on the division of household labor, matched with the European Values Study (wave 4), which contains attitude variables related to family and gender roles. Each national sample in ESS is designed in order to represent the actual resident population including immigrants living in the country. Respondents are asked information about their own and their parents' country of birth in order to reconstruct their national origin. From ESS, I selected only immigrants whose national origin falls within the scope of EVS (43 nations), whereas I excluded those with non-European origins (e.g. American or

<sup>&</sup>lt;sup>8</sup> The method proposed by Polavieja (2015) actually relies exactly on this possibility. However, the applicability of his method is limited by data availability (see next section).

African). To impute national cultural traits to ESS immigrants, I relied on summary measures of EVS variables computed on native non-migrant cases only (i.e. people born in the country from parents born in the same country). However, as already mentioned, it would be implausible to assume that all immigrants from the same nation inherited a given cultural trait to the same extent. Therefore, the imputation procedure must take into account the heterogeneity that is likely present in each national culture. To this purpose, for each nation, I calculated the summary measures of EVS variables through logistic regressions predicting a given cultural trait with age, sex, education and parental education. Each ESS immigrant has been imputed a predicted value of a given cultural trait based on their own sex, age, education, parental education, and national origin. Results from the imputation step are reported in the Appendix.

At this point, the subsequent analysis follows two different paths according to the kind of available data. For cultural traits measured in EVS only, the predicted values described above are simply entered as main independent variable in regressions predicting the gender division of household labor among immigrants. For cultural traits that happened to be measured in both EVS and ESS, the predicted values are used as instrumental variable predicting immigrants' own values on that specific cultural trait (the instrumented variable) which in turn predicts their division of household labor. The predicted values, by construction, are exogenous to immigrants' own values on the cultural trait. Thus, as explained in Polavieja (2015, pp. 173-174), predicted values satisfy the so-called *exogeneity condition* necessary for a valid application of instrumental variable estimation. Moreover, to the extent that they are correlated with immigrants' own values, predicted values meet the *instrumental relevance* condition. Finally, the inclusion of parental background as predictor of the cultural trait makes likely that also the *exclusion restriction* condition is satisfied (see Polavieja, 2015, pp. 188, endnote 117).<sup>9</sup>

Compared to the design used by Polavieja (2015), this design allows for greater variance in cultural traits because national origins are not restricted to the ones present in one survey (28 nations in ESS), but extend to all the nations (43) covered by EVS. However, the possibility of instrumental variable estimation is granted only for the

<sup>&</sup>lt;sup>9</sup> In the instrumental variable estimation, the exclusion restriction condition serves to ensure that the instrument (in this case, predicted values) has no influence on the dependent variable (gender division of household labor) other than through the instrumented variable (immigrants' own values on the cultural trait).

cultural traits that happened to be measured in both surveys (actually one in my case). For the traits measured only in EVS, this research design permits to solve the issues of spuriousness and reverse causality that typically affect observational studies – as predicted values are completely exogenous to immigrants and their effect in not biased – although it does not ensure that the effect of predicted values captures only a cultural mechanism<sup>10</sup>. The existence of the latter can be inferred by including control variables that help to exclude alternative mechanisms.

### DATA, VARIABLES AND MODELS' SPECIFICATION

As mentioned, ESS provides data on time devoted to household labor and control variables, while EVS provides data on attitudes to family and gender roles which represent the cultural traits. In ESS there are 6401 immigrants, defined as individuals born abroad or born in the host country to foreign-born parents (coming from the same country). However, a division of household labor can be calculated only for people who live with a partner (married or cohabiting). Moreover, the research design presented above requires to select only immigrants from an EVS nation. This reduces the useful sample to less than 2000 cases (the actual number depending on listwise deletion of cases with missing values, see Table 1).

Country	No. of immigrants	No. of different national origins	Most frequent national origin	Country	No. of immigrants	No. of different national origins	Most frequent national origin
Israel	279	20	Russia (80)	Denmark	45	17	Turkey (7)
Switzerland	173	22	Germany (39)	Spain	42	13	Romania (20)
Estonia	154	10	Russia (119)	France	42	10	Spain (11)
Germany	143	24	Poland (28)	Netherlands	34	13	Turkey (10)
Greece	141	10	Albania (81)	Cyprus	29	10	Greece (11)
Ireland	122	20	Poland (52)	Russia	29	6	Ukraine (14)
Croatia	94	5	Bosnia (86)	Lithuania	23	4	Russia (10)
Austria	90	15	Bosnia (22)	Czech Republic	22	6	Slovakia (15)
Belgium	75	20	Italy (15)	Finland	18	10	Russia (4)
Slovenia	68	7	Bosnia (36)	Slovakia	16	3	Czech Republich (8)
Sweden	67	18	Finland (19)	Hungary	13	4	Romania (9)
Great Britain	66	19	Ireland (15)	Bulgaria	11	4	Romania (6)
Ukraine	55	8	Russia (42)	Poland	11	6	Germany (4)
Norway	51	16	Poland (11)	Portugal	3	3	Belgium (1)
Total	1916	43	Russia (304)				

Table 1. List of ESS countries, number of immigrants included in the analysis in each country, number of different national origins, and most frequent national origin (number of cases in parenthesis)

<sup>10</sup> Moffit (2005, p. 96) nicely illustrates this point in a non-technical form, with general reference to the instrumental variable framework.

# ESS variables

The wife's share (%) of household labor is calculated from answers to the following questions: "About how many hours a week, in total, do you personally spend on housework?"; "And what about your spouse or partner? About how many hours a week does s/he spend on housework?" Housework includes "things done around the home such as cooking, washing, cleaning, care of clothes, shopping, maintenance of property, but not including childcare or leisure activities". Given that respondents provided estimates also for their partner, a gender bias may affect their housework reporting (Kan, 2008; Press & Townsley, 1998). That is why I control for respondent's gender in all the regressions. Notice, however, that the dependent variable is a couple level variable.

Immigrants are defined as first generation if born abroad, second generation if born in the host country from foreign-born parents (coming from the same country), or "one and half" if born abroad, but arrived at the host country when they were less than 13 years old. Language assimilation is a dummy for whether the respondent speaks the host language at home.

Wife's and husband's education (ISCED classification) is recoded as equivalent years of schooling. The same applies to parental (respondent's father) education.<sup>11</sup> For cases with missing values on father's education I used mother's or imputed the mean value. Wife's and husband's employment status is coded 1 if s/he is employed and 0 otherwise.

The urban/rural setting where the immigrant resides is described by the following (self-reported) categories: big city, suburbs or outskirts of big city, town or small village, country village or farm/home in countryside.

# EVS variables

The EVS contains several attitude questions related to family and gender roles. I chose the following three:

1) When jobs are scarce, men have more right to a job than women. (Agree or disagree?)

<sup>&</sup>lt;sup>11</sup> Parental variables (father's education and mother's employment status), as well as language assimilation and generation status variables refer to the respondent (either wife or husband) because information on both couple's partners is not available.

2) A job is alright but what most women really want is a home and children. (Agree strongly, agree, disagree, or disagree strongly?)

3) Do you think that a woman has to have children in order to be fulfilled or is this not necessary?

The first two items represent, in different ways, a key idea of patriarchal cultures according to which housework is women's work and paid job is men's. The third one presents maternity as a necessary condition for women's fulfilment and thus, implicitly, suggests that family and household labor are women's "natural" domain.

Item 1 was fielded with practically equivalent wording also in ESS, but the response categories were a five-point Likert scale instead of simply two (agree or disagree). I used this item in the instrumental variable regression (see below).

For the imputation step through logistic regressions, I recoded item 1 into 1=agree and 0=disagree, and item 3 into 1=needs children and 0=not necessary. For item 2, I chose to recode it into 1=strongly agree and 0 otherwise. In this way, I obtained a sharper distinction among national cultures in the extent they emphasize women's primary role in the family<sup>12</sup>.

Descriptive statistics of all the EVS and ESS variables are reported in the Appendix.

# Models' specification

The effect of culture on the gender division of household labor passes through multiple channels (preferences, beliefs, social norms, values) that influence family decision making on how to divide the housework, how much time devote to paid work, how many children to raise, and so forth. Thus, it is important that model specification includes only variables that can be considered clearly antecedent to the outcomes of family decision making (e.g. whether the wife has a paid job, how many hours works, how many children has, etc.), otherwise the estimated effect of culture is likely to be biased. For this reason, I entered in the models respondent's age, wife's education, and respondent's parental (father's) education which may affect the way an immigrant was socialized to the culture of origin. When analyzing immigrants' data, it is also important to take into account differences due to their integration in the host society: time spent in the host country (i.e., being first, one and half, or second generation),

<sup>&</sup>lt;sup>12</sup> Using the alternative dichotomization (1=agree or strongly agree and 0 otherwise) yields predicted values that in the subsequent analyses are less strongly and less significantly associated to immigrants' gender division of household labor.

whether they speak the language of the host country at home and the type of urban setting where they reside. To a certain extent, these variables could be considered as mediators of the effect of culture on the gender division of household labor, but all in all they appear to be as concomitant variables. I entered them as second block of controls.

In the instrumental variable (2-stage least square) regression model the main independent variable is immigrants' own answer to the first item ("when jobs are scarce...."). Given that the latter is endogenous, it is instrumented by the predicted cultural trait values and all the above mentioned control variables. In the ordinary regression models, the other two cultural traits (predicted values) are used one by one as main independent variables together with the above mentioned controls. In this case, they are not instrumented (like in the previous case) because they are exogenous by construction. However, as mentioned in the research design section, this does not allow to rule out other intervening mechanisms (e.g.: bargaining). For this reason, in the ordinary regression models I include also wife's employment status, husband's education and employment status, and the number of children.

The standard errors of all regression coefficients are adjusted to account for clustering of immigrants within destination countries.

## RESULTS

Table 2 reports results from the instrumental variable estimation. The cultural trait is represented by the level of agreement (5-point scale) with the statement: "When jobs are scarce, men have more right to a job than women". Model 1 shows that higher scores on this variable are associated with a higher share of wife's household labor<sup>13</sup>. To the extent that the predicted values of this cultural trait are considered as valid instruments, one can attach causal significance to this association. In support of the instrumental relevance condition of predicted values, the correlation with immigrants' own values has been calculated and it is 0.3. This means that immigrants' own attitudes about men's priority in the job market have a common root in their cultural origins. For comparison purpose, model 2 reports the OLS regression version of model

<sup>&</sup>lt;sup>13</sup> Notice that the wife's share of household labor is a couple-level variable, while the cultural variable is attributed to the respondent (either wife or husband). Although this is an unsurmountable data limitation, there are no reasons to expect inconsistent findings. The wife's share of household labor can be expected to increase if either partner supports men's priority on paid jobs.

1. It can be seen that the effect of the attitude variable is much *lower* (actually four times lower). This testify how biased standard estimations can be. The downward direction of the bias, however, is not of help in determining whether reverse causality or spurious correlation yields the bias. Indeed, that depends on what is the prevalent "socializing" effect of household labor on attitudes towards men's priority on the job market. If doing much housework leads to have more patriarchal attitudes and doing little to have less, then reverse causality would bias OLS estimates downward. But if the socializing effect is just the opposite, then reverse causality would produce upwardly biased estimates.

Table 2. Effect of culture on wife's household labor share among immigrants: instrumental variable regression results.

•	Model 1 (IV-regression)			Model 2 (OLS regression)		
	Coef.	Std.err.	P-value	Coef.	Std.err.	P-value
When jobs are scarce, men have more right to a job than						
women*	8.46	2.82	0.003	2.04	0.52	0.001
Wife's age (years)	-0.13	0.05	0.006	-0.1	0.04	0.018
Wife's education (years)	0.05	0.38	0.894	-0.4	0.23	0.088
Respondent's gender (female)	6.19	1.58	0.000	5.09	1.32	0.001
Parental (father's) education (years)	0.08	0.12	0.520	-0.04	0.14	0.780
Respondent's generation (ref.: first)						
One and half	3.52	1.45	0.016	2.41	1.48	0.114
Second	0.91	1.49	0.542	1.08	1.23	0.388
Urban setting (ref.: big city)						
Suburbs or outskirt of big city	2.11	1.57	0.181	0.21	1.22	0.863
Town or small village	1.58	1.7	0.352	-0.04	1.46	0.981
Country village or farm/home in countryside	1.87	1.94	0.335	0.41	1.58	0.795
Speaks host country language at home	4.85	1.91	0.011	3.14	1.57	0.056
Constant	44.09	14.72	0.003	69.07	6.17	0.000
N	1862			1861		

\*: 1-5 scale, higher scores mean increasing agreement

Notes: instrumental variables for first stage of IV-regression (model 1) are predicted cultural trait values and all the other control variables included in the model. Endogeneity test is significant at P=0.026

Instrumental variable estimation is no longer possible for the other two cultural trait items because they were not fielded in ESS. Thus, predicted values from EVS enter directly in the OLS regression models (Table 3). Results show that in one case (model 1) the effect of the inherited cultural trait of interest ("what women really want is a home and children") is in accordance with expectations, although not statistically significant at conventional levels. In the other case ("a woman has to have children in order to be fulfilled"), the effect is positive and significant (model 2). In both cases, the effects remain of about the same size when further intervening variables are added to the models (models 3 and 4 respectively). This suggest that the predicted cultural trait variables should capture true cultural effects.

Table 3. Effects of in	herited cultural tra	aits on wife'	s household	labor share	among imn	nigrants:	ordinary
regression results							

	Μ	odel 1		N	lodel 2	2	Μ	lodel 3		Μ	odel 4	
	Coef.	SE	Р	Coef.	SE	Р	Coef.	SE	Р	Coef.	SE	Р
What woman really want is home and children*	0 0	6 1 4	0 162				0.01	5 5	0 1 1 7			
What women read abildren to be fulfilled**	0,0	0,14	0,103	7.00	2.04	0.050	0,91	5,5	0,117	0.00	2.2	0.040
women need children to be fulfilled	4 74	4 00	0.004	7,96	3,91	0,052	4 00	4.04	0 000	8,33	3,3	0,018
Respondent's gender (Female)	4,71	1,22	0,001	4,66	1,2	0,001	4,03	1,21	0,003	3,96	1,2	0,003
Wifes' age	-0,1	0,04	0,017	-0,11	0,04	0,007	0,06	0,05	0,185	0,05	0,04	0,234
Wife's years of education	-0,48	0,21	0,029	-0,47	0,2	0,029	-0,47	0,21	0,032	-0,47	0,21	0,033
Respondent's parental education (years)	-0,07	0,14	0,642	-0,05	0,13	0,717	-0,11	0,14	0,445	-0,09	0,13	0,489
Respondent's generation (ref.: first)												
One and half	1,76	1,6	0,282	1,71	1,49	0,262	1,89	1,52	0,226	1,85	1,42	0,203
Second	1,1	1,24	0,381	1,08	1,21	0,381	0,61	1,24	0,624	0,58	1,23	0,64
Urban setting (ref.: big city)				-					-			
Suburbs or outskirt of big city	0.09	1.2	0.939	0.49	1.19	0.683	0.71	1.18	0.552	1.15	1.18	0.336
Town or small village	-0.54	1.43	0.707	-0.13	1.54	0.934	-0.54	1.43	0.71	-0.08	1,49	0.958
Country village or farm/home in countryside	0 69	1 67	0 684	1 33	1 93	0 498	0.27	1 49	0 856	0.96	1 67	0 569
Speaks host country language at home	2,91	1 61	0,081	3 15	1,63	0,065	2 11	1 54	0 184	2,35	1 57	0 146
Wife's employment status	_,• .	.,	0,001	0,.0	.,	0,000	-8 97	1.36	0,000	-8.88	1.37	0,000
Husband's employment status							11 47	1 50	0,000	11 58	1 58	0,000
Husband's education (years)							0	0.18	0,000	0.02	0.17	0,000
N of childron agod 0 17							214	0,10	0,300	2 16	0,17	0,300
Constant	744	E 07	0 000	70.20	6.24	0 000	2,14	0,47 E 74	0,000	2,10	0,4J	0,000
Constant	74,4	5,87	0,000	70,38	0,31	0,000	63,92	5,74	0,000	59,3	5,77	0,000
Ν	1883			1883			1873			1873		
*: predicted values (probability "strongly agree") **: predicted values (probability "need children")												

# Robustness checks

The findings just presented could be driven by the overrepresentation of certain migrant groups within the sample or by the presence of "outlier" or "extreme" national cultures (i.e.: particularly traditionally or non-traditionally oriented compared to others). I then performed a few robustness checks of previous results. Firstly, I re-run the regression models excluding the most numerous migrant group (i.e. Russian), the second most numerous (i.e. Bosnian), and the country hosting most immigrants in the sample (i.e., Israel with 265 cases, 76 of whom are from Russia). Results are largely and substantially the same (not shown, available upon request). Secondly, for each cultural trait, I excluded cases from the cultural origins with the two highest and the two lowest values on the summary measure<sup>14</sup>. Results from this control are reported in Table 4. Only the effect of the third cultural trait ("women need children") survives to this test, while the other two effects become not significant and considerably smaller in size. This means that, for those particular traits, a few cultural origins drive the observed effects. Specifically, cases with a Turkish origin (126 cases) are responsible for most part of the effects on both items. This does not invalidate my findings, but puts them in the right perspective.

<sup>&</sup>lt;sup>14</sup> The summary measure in this case is the simple percentage of cases agreeing with each given statement, calculated among the native population within each EVS national sample.

Table 4. Effects of cultural traits after excluding "extreme" cultural origin	Table 4.	Effects of	cultural	traits a	after	excluding	"extreme"	cultural	origin
---	----------	------------	----------	----------	-------	-----------	-----------	----------	--------

Cultural trait label	Coeff.	Std. err.	P-value	Excluded cultural origins	N
When job are scarce*	4.24	3.02	0.159	AZ, TR, SE, DK	1706
Women really want home and children**	2.36	5.86	0.691	TR, MD, DK, GB	1703
Women need children**	7.75	3.70	0.046	GE, AZ, SE, NL	1809

\*: IV-regression coefficient. Control variables as in Table 2.

\*\*: OLS regression coefficient. Control variables as in Table 3.

Finally, I controlled for whether the observed effects resist after excluding first generation immigrants, that is those who are more likely to be influenced by their culture of origin. I found that the effect of the first item ("when jobs are scarce") remain practically unchanged (not shown, available upon request) although it loses statistical significance, which is quite expected given that the sample size shrunk by two thirds. For the other two items instead, the effects become smaller and not significant.

#### **DISCUSSION AND CONCLUSION**

In this article I tried to answer an old question – does culture influence the gender division of household labor? – in a new way. Using a research strategy based on data from migrant populations, I showed that culture does matter indeed. Couple members from less egalitarian and more traditional gender role countries tend to practice a division of household labor where the wife is responsible for a higher share of the housework. Although based on attitude questions to measure culture, the evidence provided here is free from typical problems of spurious correlation and reverse causality, unlike most previous studies. Thus, the findings presented here add robust evidence to the theories that postulate an important role of housework's symbolic meaning within traditional family roles in determining the gender division of household labor. Within those theories, the meaning of housework for individual's gender identity is considered crucial (Berk, 1985; Deutsch, 2007; West & Zimmerman, 1987). However, there must be an external source that legitimizes and enables this function of housework, otherwise the explanation would be circular and would not clarify why individuals attribute such meaning to housework. Culture is exactly the enabling factor, as it contains the social norms and values that regulate family relationships and assigns meaning to "objects" such as household labor.

The research design devised in this article relies on immigrants as subjects of a "natural experiment" and the idea that, when they move, they bring with them the cultural traits inherited from the social context of origin (i.e. their national origin). Of

course, migration is not a randomized experiment. It entails self-selection issues that could undermine the generalizability of the findings because immigrants may differ from their non-migrant counterparts on key characteristics relevant to the gender division of household labor. The problem then becomes to determine to what extent findings on immigrants are representative of non-migrants too.

In the first place, immigrants could be selected on the basis of their own culture if, for instance, only those with the most gender egalitarian ideas are likely to migrate (or vice versa). If this were the case, there should be nearly zero correlation between immigrants' own attitudes and their fellow nationals'. As mentioned above, this is *not* the case at least for the first cultural trait examined here, while for the others it cannot be ascertained. But if predicted values were completely uncorrelated with immigrants' own values, it would be hard to find an effect on the division of household labor. As Fernandez (2011, p. 496) put it, "the epidemiological approach is biased towards finding that culture does not matter". If a cultural effect is detected indeed, then it should be a conservative estimate.

In the second place, immigrants could be selected on the basis of the gender division of household labor itself. For this to represent a bias, it would require that people with egalitarian arrangements were more likely to emigrate from countries with traditional gender division of household labor; whereas people with traditional arrangements were more likely to emigrate from countries with more egalitarian divisions of household labor. On theoretical grounds, it is not easy to find a justification for this hypothesis. On empirical grounds, it could be ascertained to what extent immigrants and their native non-migranting counterparts from the same origin are similar in terms of gender division of household labor. However, data availability prevents to conduct such a test in this study.

In the third place, immigrants could differ from non-migrants on endogenous characteristics associated with their culture or their division of household labor, such as female labor force participation or family structure. Also in this case, the bias introduced by this possible selection effect arises when people with different characteristics (compared to people who remained at the home country) emigrate from different countries. A systematic test of this hypothesis is not possible because of data limitations. The exclusion of first generation immigrants from the analysis should provide evidence of this selection effect because second generation immigrants cannot influence the decision making of their (first generation) parents. As shown above (see

17

robustness checks), at least in the case of on cultural trait the exclusion of first generation immigrants does not substantially alter the findings.

To conclude, the results presented here highlighted a fairly robust causal role of culture in determining the gender division of household labor, but they do not disprove that other causal factors may influence it. For instance, although the cultural explanation is somewhat at odds with the rational choice explanation, it does not imply that actors do not make any instrumental considerations when deciding how to allocate their time. This would be a mistaken conceptualization of the effect of culture, one that has been already criticized for its deterministic character (Wrong, 1961). Cultural factors, instead, may interact - weaken, strengthen or suppress - with rational choice evaluations of each single actor and this should be taken into account in the design of policies aimed at equalizing the gender division of household labor. The premises of such policies often rest on the idea that actors make purely instrumental considerations toward paid and unpaid work. However, this study and many previous ones actually testify that this is not necessarily true. This implies that, on the short run, the effect of such policies may not be evident; on the long run, however, policies can contribute to change culture and, through this, to modify behaviors, giving rise to the so-called policy feedback mechanism (Pierson, 1993).

## APPENDIX

Table A1. Summary statistics of cultural trait predicted values (probabilities), by national origin

	"When jobs	are scarce, r	nen have more	e right to a job	"A job is a	alright but what	most women	really want is a	"A womar	n has to have ch	ildren in order	to be fulfilled"
	than women"			0 ,	home and	children"		,				
National origin	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max
AL	0.317	0.083	0.171	0.468	0.192	0.061	0.080	0.331	0.909	0.036	0.783	0.980
AM	0.580	0.051	0.537	0.642	0.315	0.025	0.291	0.341	0.801	0.021	0.782	0.830
AT	0.297	0.162	0.066	0.557	0.148	0.085	0.029	0.320	0.428	0.118	0.226	0.596
AZ	0.820	0.042	0.760	0.854	0.373	0.166	0.227	0.549	0.938	0.014	0.921	0.953
ВА	0.340	0.104	0.108	0.576	0.139	0.033	0.077	0.269	0.753	0.051	0.617	0.881
BE	0.158	0.123	0.038	0.319	0.126	0.079	0.057	0.251	0.286	0.094	0.185	0.466
BG	0.250	0.145	0.067	0.535	0.209	0.027	0.165	0.280	0.765	0.138	0.446	0.947
BY	0.244	0.076	0.128	0.407	0.204	0.047	0.125	0.320	0.780	0.063	0.639	0.888
CH	0.145	0.050	0.102	0.200	0.136	0.086	0.042	0.210	0.453	0.241	0.179	0.632
CY*	0.582		0.582	0.582	0 446		0 446	0 446	0.659		0.659	0.659
CZ	0.331	0.090	0.153	0.483	0 173	0.045	0 100	0.258	0.699	0.073	0.503	0 795
DE	0.156	0 113	0.027	0.525	0.096	0.065	0.022	0.326	0.501	0 123	0.283	0.762
	0.023	0.033	0.002	0.118	0.033	0.015	0.006	0.056	0.803	0.042	0.259	0.882
FF	0.020	0.040	0.002	0.132	0.000	0.041	0.000	0.000	0.637	0.042	0.467	0.742
FS	0.163	0.040	0.030	0.391	0.173	0.041	0.062	0.315	0.007	0.143	0.407	0.657
FI	0.030	0.027	0.040	0.089	0.062	0.000	0.002	0.010	0.089	0.059	0.200	0.218
FR	0.000	0.027	0.004	0.348	0.002	0.000	0.021	0.170	0.000	0.000	0.020	0.703
GB	0.075	0.000	0.010	0.340	0.134	0.001	0.071	0.311	0.307	0.054	0.444	0.756
CE	0.077	0.000	0.017	0.521	0.041	0.030	0.000	0.130	0.120	0.001	0.007	1 000
GE	0.427	0.001	0.310	0.511	0.311	0.030	0.200	0.300	0.900	0.010	0.910	0.047
	0.320	0.149	0.109	0.000	0.209	0.090	0.100	0.407	0.701	0.133	0.309	0.947
	0.130	0.050	0.039	0.313	0.007	0.017	0.000	0.129	0.460	0.099	0.310	0.090
	0.144	0.073	0.040	0.307	0.201	0.000	0.119	0.409	0.094	0.007	0.705	0.900
	0.171	0.000	0.074	0.331	0.120	0.009	0.039	0.242	0.211	0.071	0.115	0.340
	0.021	0.007	0.011	0.027	0.000	0.027	0.037	0.100	0.515	0.040	0.202	0.303
	0.221	0.096	0.044	0.473	0.130	0.051	0.049	0.231	0.552	0.092	0.333	0.002
	0.193	0.137	0.053	0.413	0.147	0.039	0.077	0.219	0.604	0.065	0.467	0.703
LU	0.032		0.032	0.032	0.063		0.063	0.063	0.202		0.202	0.202
LV	0.141	0.056	0.084	0.261	0.135	0.058	0.077	0.256	0.788	0.096	0.654	0.941
MD	0.363	0.028	0.334	0.422	0.390	0.043	0.326	0.443	0.901	0.022	0.865	0.929
	0.103		0.103	0.103	0.188		0.188	0.188	0.624		0.624	0.624
MK	0.392	0.168	0.113	0.703	0.233	0.051	0.126	0.341	0.818	0.056	0.704	0.894
NL	0.043	0.045	0.011	0.175	0.034	0.017	0.018	0.066	0.043	0.031	0.018	0.148
NO	0.027	0.023	0.006	0.061	0.063	0.041	0.015	0.135	0.114	0.017	0.092	0.146
PL	0.221	0.084	0.086	0.487	0.123	0.030	0.089	0.210	0.563	0.103	0.412	0.800
PT	0.209	0.073	0.050	0.314	0.076	0.025	0.043	0.137	0.516	0.117	0.319	0.714
RO	0.243	0.055	0.142	0.370	0.312	0.031	0.221	0.379	0.843	0.058	0.670	0.953
RS	0.260	0.069	0.161	0.431	0.141	0.024	0.102	0.203	0.785	0.043	0.716	0.879
RU	0.305	0.106	0.162	0.607	0.291	0.038	0.208	0.401	0.872	0.035	0.755	0.933
SE	0.010	0.006	0.003	0.020	0.031	0.022	0.008	0.084	0.044	0.017	0.018	0.067
SI	0.105	0.113	0.034	0.235	0.109	0.080	0.050	0.201	0.310	0.157	0.155	0.470
SK	0.296	0.092	0.119	0.491	0.165	0.054	0.072	0.308	0.551	0.057	0.427	0.674
TR	0.573	0.081	0.349	0.705	0.386	0.032	0.307	0.458	0.767	0.076	0.510	0.886
UA	0.288	0.120	0.111	0.619	0.342	0.035	0.269	0.429	0.922	0.025	0.850	0.966

\*: sd cannot be computed because there is only one case from this country Note: predicted values are obtained from logistic regressions (one for each EVS countries) using age, sex, education and parental (father's) education as predictors. Complete regression output is available from the author upon request

Fable A2. Descriptive statistic	s of variables used	d in the estimations of	f cultural effects
---------------------------------	---------------------	-------------------------	--------------------

Variable	Obs	Mean	SD	Min	Max
Wife's share of household labor (%)	1916	70.31	21.28	0	100
When jobs are scarce (ESS observed values)	1892	2.60	1.26	1	5
Wifes' age	1896	47.45	15.52	18	86
Wife's years of education	1904	12.16	3.90	5	18
Respondent's gender (Female)	1916	0.55	0.50	0	1
Respondent's parental education (years)	1916	9.49	4.24	5	18
Respondent's generation					
First	1916	0.66	0.48	0	1
One and half	1916	0.15	0.35	0	1
Second	1916	0.20	0.40	0	1
Urban setting					
Big city	1915	0.32	0.47	0	1
Suburbs or outskirt of big city	1915	0.14	0.35	0	1
Town or small village	1915	0.29	0.45	0	1
Country village or farm/home in countryside	1915	0.25	0.43	0	1
Speaks host country language at home	1916	0.72	0.45	0	1
Wife's employment status	1916	0.50	0.50	0	1
Husband's employment status	1916	0.63	0.48	0	1
Husband's education (years)	1898	12.18	3.75	5	18
N. of children aged 0-17	1916	0.67	0.99	0	8

#### REFERENCES

- Aassve, A., Fuochi, G., & Mencarini, L. (2014). Desperate Housework: Relative
  Resources, Time Availability, Economic Dependency, and Gender Ideology Across
  Europe. *Journal of Family Issues, Online First*(doi: 10.1177/0192513X14522248).
- Altintas, E., & Sullivan, O. (2016). Fifty years of change updated: Cross-national gender convergence in housework. *Demographic Research*, *35*, 455-469.
- Becker, G. (1965). A Theory of the Allocation of Time. *The Economic Journal, 75*(299), 493-517.
- Berk, S. F. (1985). *The gender factory: The apportionment of work in American households*. New York: Plenum Press.
- Bittman, M., England, P., Folbre, N., Sayer, L., & Matheson, G. (2003). When Does Gender Trump Money: Bargaining and Time in Household Work. *The American Journal of Sociology*, *109*(1), 186-214.
- Brines, J. (1993). The exchange value of housework. *Rationality and Society, 5*(3), 302-340.
- Brines, J. (1994). Economic Dependency, Gender, and the Division of Labor at Home. *The American Journal of Sociology, 100*(3), 652-688.
- Carlson, D. L., & Lynch, J. L. (2013). Housework: Cause and consequence of gender ideology? Social Science Research, 42(6), 1505-1518. doi: http://dx.doi.org/10.1016/j.ssresearch.2013.07.003
- Coltrane, S. (2000). Research on Household Labor: Modelling and Measuring the Social Embeddedness of Routine Family Work. *Journal of Marriage and the Family, 62*(4), 1208-1233.
- Cunningham, M. (2001). Parental Influences on the Gendered Division of Housework. *American Sociological Review, 66*(2), 184-203.
- Deutsch, F. M. (2007). Undoing Gender. Gender & Society, 21(1), 106-127.
- Dinesen, P. T. (2013). Where You Come From or Where You Live? Examining the Cultural and Institutional Explanation of Generalized Trust Using Migration as a Natural Experiment. *European Sociological Review, 29*(1), 114-128. doi: 10.1093/esr/jcr044
- Evertsson, M. (2014). Gender Ideology and the Sharing of Housework and Child Care in Sweden. *Journal of Family Issues, originally published online 24 February 2014*.
- Fernandez, R. (2011). Does Culture Matter? In J. Benhabib, M. O. Jackson, & A. Bisin (Eds.), *Handbook of Social Economics* (Vol. 1A, pp. 481-510). North-Holland: Elsevier.

- Fortin, N. M. (2005). Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries. Oxford Review of Economic Policy, 21(3), 416-438. doi: 10.1093/oxrep/gri024
- Geist, C., & Cohen, P. N. (2011). Headed Toward Equality? Housework Change in Comparative Perspective. *Journal of Marriage and Family,* 73(4), 832-844. doi: 10.1111/j.1741-3737.2011.00850.x
- Goldscheider, F., Goldscheider, C., & Bernhardt, E. M. (2011). Creating Egalitarian Families among the Adult Children of Turkish- and Polish-Origin Immigrants in Sweden. *International Migration Review, 45*(1), 68-88. doi: 10.1111/j.1747-7379.2010.00839.x
- Greenstein, T. (2000). Economic Dependence, Gender, and the Division of Labor in the Home: A Replication and Extension. *Journal of Marriage and the Family, 62*(2), 322-335.
- Grunow, D., & Baur, N. (2014). The Association between Norms and Actions The Case of Men's Participation in Housework. *2014*, *39*(3).
- Hitlin, S., & Piliavin, J. A. (2004). Values: Reviving a dormant concept. *Annual Review of Sociology, 30*, 359-393.
- Kan, M. Y. (2008). Measuring Housework Participation: The Gap between "Stylised"
  Questionnaire Estimates and Diary-based Estimates. *Social Indicators Research*, *86*(3), 381-400.
- Killewald, A., & Gough, M. (2010). Money isn't everything: Wives' earnings and housework time. Social Science Research, 39(6), 987-1003. doi: http://dx.doi.org/10.1016/j.ssresearch.2010.08.005
- Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. *Papers. Peabody Museum of Archaeology & Ethnology, Harvard University, 47*(1).
- Kroska, A., & Elman, C. (2009). Change in attitudes about employed mothers: Exposure, interests, and gender ideology discrepancies. *Social Science Research*, 38(2), 366-382. doi: http://dx.doi.org/10.1016/j.ssresearch.2008.12.004
- Kühhirt, M. (2011). Childbirth and the Long-Term Division of Labour within Couples: How do Substitution, Bargaining Power, and Norms affect Parents' Time Allocation in West Germany? *European Sociological Review*(Advance Access published April 13 DOI:10.1093/esr/jcr026), 1-18.

- Lachance-Grzela, M., & Bouchard, G. (2010). Why Do Women Do the Lion's Share of Housework? A Decade of Research. *Sex Roles, 63*(11-12), 767-780.
- Lundberg, S., & Pollack, R. A. (1996). Bargaining and Distribution in Marriage. *Journal of Economic Perspectives, 10*(4), 139-158.
- Manser, M., & Brown, M. (1980). Marriage and Household Decision-Making: a Bargaining Analysis. *International Economic Review, 21*(1), 31-44.
- Moffitt, R. (2005). Remarks on the analysis of causal relationships in population research. *Demography, 42*(1), 91-108. doi: 10.1353/dem.2005.0006
- Pierson, P. (1993). When Effect Becomes Cause: Policy Feedback and Political Change. *World Politics, 45*(4), 595-628.
- Polavieja, J. G. (2015). Capturing Culture: A New Method to Estimate Exogenous Cultural Effects Using Migrant Populations. *American Sociological Review*, *80*(1), 166-191. doi: 10.1177/0003122414562600
- Press, J. E., & Townsley, E. (1998). Wives' And Husbands' Housework Reporting. *Gender* & *Society*, *12*(2), 188-218. doi: 10.1177/089124398012002005
- Sorensen, A., & McLanahan, S. (1987). Married Women's Economic Dependency, 1940-1980. *The American Journal of Sociology*, *93*(3), 659-687.
- Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review*, 273-286.
- Vaisey, S. (2009). Motivation and Justification: A Dual-Process Model of Culture in Action. *American Journal of Sociology, 114*(6), 1675-1715.
- Voicu, M., Voicu, B., & Strapcova, K. (2009). Housework and Gender Inequality in European Countries. *European Sociological Review*, 25(3), 365-377. doi: 10.1093/esr/jcn054
- West, C., & Zimmerman, D. H. (1987). Doing Gender. Gender and Society, 1(2), 125-151.
- Wrong, D. (1961). The Oversocialized Conception of Men in Modern Sociology. *American Sociological Review, 26*(2), 183-193.