Economic Disturbances in the COVID-19 Crisis and their Gendered Impact on Unpaid Activities in Germany and Italy¹

Abstract

This article investigates whether changes in women's and men's contributions to household income in Germany and Italy during the COVID-19 pandemic are associated with changes in unpaid work. The current health crisis represents a unique opportunity to explore these topics, because the restrictive measures imposed during the lockdown are likely to have generated an unexpected shock to both domestic work and individual ability to contribute to household income. Using data from two novel datasets collected in Germany and Italy during the pandemic, this article shows that changes to both contribution to household income and unpaid activities during the crisis have been gendered, affecting women more negatively than men. In addition, we suggest that economic disturbances during the pandemic are associated with gendered changes in unpaid work that seem to be driven by changes in bargaining power in both countries. Our results also show some support for enhanced traditionalization of domestic life among German couples during the crisis, as predicted by gender display theories, albeit only regarding childcare.

Keywords: COVID-19 pandemic; housework; childcare; gender; contribution to income.

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Introduction

This article studies how changes in couples' contributions to household income due to the COVID-19 crisis are related to changes in unpaid activities in Germany and Italy, and whether these processes are gendered. Unpaid activities, such as housework and childcare, were unequally distributed among genders before the crisis, with women devoting significantly more time to these activities than men. This is true for all educational groups, for all European countries and even for couples with female main wage earners (Bianchi et al. 2012; Chesley 2017). From the first months of the COVID-19 emergency, the pandemic has entailed a sudden economic and social shock that has deeply impacted the lives of women and men in many countries. In contrast to the 2008 economic crisis, which tended to affect male-dominated industries such as construction and manufacturing more severely, the social distancing and lockdown of the COVID-19 crisis has also strongly hit the service sector in which female-dominated occupations predominate (Hupkau and Petrongolo 2020). If the financial consequences of the COVID-19 crisis had a stronger impact on women than men, as was expected at the onset of the pandemic (Alon et al. 2020), this may have undermined the position of women in couples. However, women often work in occupations that were deemed critical in the crisis, not least in the health sector: this may have led to a de-traditionalization in couples, with the man being obliged to work from home and therefore having more opportunity to do housework and look after children, while the woman worked out of the house (Sevilla and Smith 2020).

This article addresses this issue by asking how the economic disturbances of the COVID-19 crisis have changed patterns in contribution to household income and, in turn, to unpaid activities. Furthermore, we ask whether a decrease (or increase) in the individual contribution to household income during the first months of the COVID-19 crisis is associated with changes in gender inequality in the organization of domestic life, in terms of housework and childcare. Because national economies differ in how strongly they were hit, and in how gendered the impact of the crisis was, a cross-country comparison provides a better insight into these processes. Using two original national datasets, collected in May and early June of 2020, amounting together to over 5,000 respondents, we compare

Germany and Italy. The two countries are similar in that their welfare regulations adhere to rather conservative family models. However, while female labor market participation has increased tremendously over recent decades in Germany, Italy continues to have comparatively low female employment rates (Eurostat 2020)². Both countries have been economically hit by the pandemic and have suffered massive closures with enormous effects on citizens. However, the legal regulations on the restrictions of movement have been much more severe in Italy; the economic effects of the crisis have also been, so far, stronger in Italy than in Germany (GDP loss of 5.3% in the first quarter of 2020 in Italy and of 2.2% in Germany).³

Understanding whether the COVID-19 crisis has led to gendered patterns in changes in income contribution, and how these changes impact on gendered patterns of unpaid activities is an important part of the larger societal challenge of reducing gender inequalities, particularly in countries like Germany and, more so, Italy where women are under-represented in the labor market and overengaged in the domestic sphere.

Theoretical expectations: bargaining or gender display?

Previous research on the division of unpaid work among partners has discussed various theoretical mechanisms to explain how couples share unpaid activities, such as housework or childcare. The general argument of bargaining theories is that the partner with the lower income has a weaker bargaining position in intra-household debates on who spends time on unpaid activities: this would lead to a higher involvement of the economically weaker partner in housework (and childcare). From this, one would expect that men and women whose relative income was reduced by the COVID-19 crisis would (proportionally) increase their participation in housework and childcare while an increase of relative income in the pandemic would decrease the involvement in domestic work. Other theoretical approaches have argued that activities such as employment, housework and childcare are

² https://ec.europa.eu/eurostat/data/database

³ https://ec.europa.eu/eurostat/web/covid-19/data

part of an interactive process of "doing gender" (West and Zimmermann 1987). While employment is considered an essential part of a male identity, housework and childcare are thought to be an arena for confirming female identity. For this reason, individuals who cannot display their gender identity in one area, e.g. women who earn more than their partners, will tend to compensate for this "failure" by displaying exaggerated gender-adequate behavior, for example by performing more housework (Bittman et al. 2003). Men who do not live up to the normative expectation that they should be the breadwinner will resort to even more traditional behavior. Following this line of reasoning, one would expect women to increase their housework and childcare time if their income contribution increased during the COVID-19 pandemic, whereas men will decrease their housework and childcare time, if their income contribution was (substantially) reduced. Sullivan (2011) criticized this theoretical perspective in light of unconvincing evidence provided in the literature. The pandemic, however, offers a unique opportunity to study the relationship between relative income and unpaid work because, due to the restrictions imposed by the lockdown, employed women and men underwent significant, abrupt and involuntarily changes in their working hours, schedules and modality. Indeed, the sudden exogenous shock generated by the pandemic provides an opportunity to test how quickly the balance in families can change. In parallel, it allows us to contribute to the discussion on whether (well-established) gender interactions within couples are more influential than individual income contribution in the short term.

Although these theoretical processes are thought to be universal, we can expect that institutional contexts impact on them (Kulic and Dotti Sani 2020). In the following paragraphs, we will speculate on the role of country specificity in how the COVID-19 pandemic affects gender inequality in the household.

Different countries – different pandemic

In early welfare state typologies, Germany and Italy have been described as conservative welfare states (Esping-Andersen 1990). However, the two countries differ in how women are integrated in

the labor market: in Germany, women's employment rate has increased in the West and has been continuously high in the East (for the entire country it increased from 57% in 1993 to 77% in 2019); in Italy, by contrast, it has remained on a comparatively low, albeit increasing, level (54% in 2019 as compared to 39% in 1993) (Eurostat 2020)⁴. In Germany, however, women, and especially mothers, are more likely to work part-time. Thus, while the male breadwinner arrangement is still fairly widespread in Italy, the dominant model, at least for West Germany, is that of a modified male breadwinner model, i.e. a man working full-time and a woman in part-time work (Dotti Sani and Scherer 2017). This leads to differences regarding time spent on unpaid work: while Italian women hold the record for time involved in unpaid work (5:30 hours per day), their German counterparts are less involved (4:00 hours per day). Men in both countries fall behind, with 2:45 hours per day in Germany and 2:27 hours per day in Italy (Eurostat 2019).⁵ In reaction to feminist critiques that argued that Esping-Andersen's (1990) typology hides important country differences regarding gender equality (Lewis 1992), Esping-Andersen (1999) later identified a fourth, Mediterranean, welfare state regime with a higher degree of familialism (Esping-Andersen 1999). The argument is that in Mediterranean regimes, such as Italy, people rely much more on their extended family than in conservative ones, such as Germany, and women's labor market participation in Italy strongly depends on grandparental support (Arpino et al. 2014).

The COVID-19 pandemic is often described as a unique crisis with dramatic consequences for global society. The governments in both countries responded by imposing strict lockdowns and shutting down productive activities and schools, although the lockdown was stricter in Italy with a ban on leaving premises that was never in place in Germany. Companies had to decide whether to allow employees to work from home, put them on governmental assistance or lay them off (Barbieri, Basso and Scicchitano 2020; Kohlrausch and Zucco 2020).

⁴ https://ec.europa.eu/eurostat/data/database

⁵ https://ec.europa.eu/eurostat/de/web/time-use-surveys/data/database

In Italy, according to the Italian National Institute for the Analysis of Public Policies, half of private companies stopped their activities in April, with more than 42 percent of workers being affected (Centra, Filippi and Quaranta 2020). Accordingly, the Italian government introduced measures to sustain those who were employed with permanent contracts. In contrast, the large proportion of workers with precarious employment conditions were not protected: around 600,000 workers with fixed-term contracts faced instability and the risk of unemployment because of uncertainty about whether their contracts would be renewed. Because Italian women are disproportionally employed in fixed-term contracts (Barbieri *et al.* 2015), the pandemic likely made women more vulnerable, exacerbating gender inequalities in the labor market. Indeed, recent survey evidence indicates that Italian women were more likely to experience a job interruption during the months of the lockdown (April–June) and that self-employed women were especially worried about losing their income-generating activity (SPS TREND 2020).

In Germany, around 5 percent of German employees were affected by lay-offs (Adams-Prassl *et al.* 2020) and the shock due to the pandemic has been cushioned through existing short-time work schemes (Kohlrausch and Zucco 2020). Furthermore, emergency laws were passed that further extended the schemes across companies, allowing employees to work less while being compensated by the state for the lost hours. Also, a higher prevalence of part-time jobs among German women could have potentially made adaption during the lockdown easier than for most employed women in Italy, with the latter more likely to work full-time. Emergency assistance for the self-employed in Germany was also put in place ⁶. Although job losses were equally distributed across genders and the chances of income loss for those who remained employed were equal for men and women, the perceived probability of losing a job was higher among German women (Adams-Prassl *et al.* 2020).

A lack of outside help in the care of children was another consequence of the COVID-19 crisis. Schools and childcare facilities were closed by March 5th throughout Italy and by March 18th in all

https://www.bundesregierung.de/breg-de/themen/coronavirus/info-unternehmen-selbstaendige-1735010

federal states in Germany. A scattered and partial re-opening of schools occurred in some parts of Germany starting from late April, while in Italy the first child-related services to re-open were summer camps in mid-June. The stronger lockdown in Italy made it impossible to involve grandparents in caretaking, while the milder lockdown regulations in Germany still allowed it, although it was strongly discouraged by the authorities in both countries.

In order to hypothesize about the gendered impact of the COVID-19 pandemic on unpaid activities, we combine the knowledge of how the health crisis has developed in Germany and Italy – and its assumed gendered impact – with the pre-existing conditions in the two countries. Because of the comparatively higher gender inequality in both the Italian labor market and in domestic arrangements in Italian households prior to the pandemic, as well as a potentially stronger gendered impact of the health crisis on employment in Italy, we hypothesize that the pandemic is associated with a) enhanced traditionalization of domestic life in Italy in line with the "doing gender" perspective and b) greater evidence in support of the bargaining perspective in Germany.

Data and methods

In both countries, online surveys were conducted by specialized agencies (Kantar in Germany and SWG in Italy). The questions were designed by the authors for the German survey and then translated into Italian. The German survey targeted individuals aged 18 and over living in private households and used a quota sampling procedure ensuring that the distributions in the sample of age, gender, federal state, and education were comparable to the ones in the population. Double selection probability was set for East Germans to allow for comparisons between both parts of the country. The data were collected through on online survey procedure, using the Payback online panel of Kantar, by the Surveylab at the University of Konstanz⁷. The whole sample counts 3,258 respondents and the data was collected from May 14th to June 3rd, 2020. Data for Italy derive from the ResPOnsE COVID-

⁷ https://www.exc.uni-konstanz.de/en/inequality/research/covid-19-and-inequality-surveys-program/

19 project, a rolling cross-section online survey carried out between April 6th and July 10th, 2020 by the SPS TREND Lab of the University of Milano (Vezzoni *et al.* 2020). The data used in this article derive from the rotating module on gender inequalities fielded from 15 to 28 May. Respondents aged 18 and above were extracted from an opt-in online panel of SWG. The sample is stratified by macroarea of residence and quota sampling was applied to ensure that the sample resembled the population in terms of gender and age group. Overall, 2,436 people participated in the rotating module.

Because not all individuals have the same probability of participating in online surveys, certain categories of subject are less likely to be represented compared to surveys with face-to-face interviewers. Indeed, lower educated subjects were slightly underrepresented in Germany and more so in Italy. Therefore, post-stratification weights are applied to adjust the samples in both surveys. The weights are calculated through a procedure that allows us to reproduce the population distribution in terms of different variables of interest. Following the procedure adopted by the European Social Survey (ESS 2020), our post-stratification weights are built using the cross-classification of gender, age group, education, and macro-area of residence. For both countries we retrieved the population distributions from the National Statistical offices (ISTAT for Italy and the Federal Statistical Office of Germany). For the German survey, the weights also adjust for the oversampling in East Germany.

Sample and variables

Given our research questions, we reduced our analytic sample to include only individuals below the age of 65 who have a partner. All the information regarding partners is indirect and derived from individual-level responses. After listwise deletion of missing cases on the variables of interest, the sample for Germany contains 1,404 cohabiting and married individuals, among which 528 individuals with children below the age of 16. The sample for Italy consists of 914 partnered individuals, 415 of which have a child of 16 or younger.

Respondents are asked about changes in their time use regarding (1) housework (including activities such as cooking, cleaning, washing) and (2) childcare ("Since the corona crisis, how has the

number of hours that you spend in a typical workday on the following activities changed?"). The variables are treated as continuous outcomes ranging from 1 (strongly decreased) to 7 (strongly increased). To simplify the interpretation of the results, we rescaled the variable so that it ranges from -3 to +3, with 0 indicating no change in behavior.

After the respondent's gender, the main independent variable is the change in the contribution to household income since the onset of the pandemic, which has five categories: dropped sharply, dropped somewhat, stayed roughly the same, slightly increased and increased strongly. Because relatively few respondents reported a strong increase in their contribution to household income, the variable is subsequently recoded into three categories: contribution dropped, remained the same, or increased. To test how changes in income contribution during the crisis changed domestic routines, we run linear regression models with the change in housework and childcare time as dependent variables. Our main predictor is the change in the respondent's contribution to household income and its interaction with gender.

Control variables are harmonized for the two surveys to provide a meaningful comparison between the two contexts. Each model in the analysis controls for the sex and the age of respondents (expressed in six categories: 18–24, 25–34, 35–44, 45–54, 55–64). The models further control for whether respondents are married or registered in civil unions, or cohabiting; whether they have any children, and in which regions they live. The education level of the respondent is also included in the analysis, expressed as low (ISCED 0–2), medium (ISCED 3–4) and high education (ISCED 5 and above). Because men and women holding traditional values in terms of gender roles might display particularly gendered behaviors, we also control for a variable that captures this dimension and is often used for this scope: "When jobs are scarce, men should have more right to a job than women" (strongly disagree or disagree as reference vs. agree or strongly agree). Household income levels are controlled for with a categorical variable taking the following values: <1500 euro, 1500–2600, 2600–4000, and >4000. Furthermore, we control for the partners' relative financial contribution to the household income prior to the pandemic. The question was: "How would you describe your contribution to

family income before the Coronavirus crisis started?" with five responses: 1) I earned much more than my partner, 2) I earned a little more than my partner, 3) My partner and I earned about the same amount, 4) My partner earned a little more than me, 5) My partner earned much more than me. Additional robustness checks were performed including the partner's education and the respondent's working hours during the COVID-19 pandemic and excluding the variable tapping gender roles; the results remained substantially unchanged. Table 1 reports summary statistics for all the variables included in the analysis.

The COVID-19 crisis, income contribution loss and unpaid activities: are the patterns gendered?

Table 1 shows that the percentage of respondents whose income contribution declined during the crisis is larger among women than among men both in Germany (30.3% for women vs. 28.5% for men) and Italy (46.4% for women vs. 37.7% for men). However, the gender difference in the prevalence of a loss in relative income due to the crisis is higher for women in Italy (8.7 percentage point difference) than in Germany (1.8 percentage point difference).

[Table 1 here]

In terms of domestic activities, Figure 1 shows the weighted distribution of the dependent variables by gender and country. As can be seen in the upper panel, a large percentage of German men (~50%) and women (~40%) did not change the time spent doing housework during the COVID-19 crisis. The activity that changed the most for Germans was childcare, as 30% of fathers and 60% of mothers strongly increased the time spent caring for their children.

The patterns for Italy (lower panel of Figure 1) are rather different. Italians increased their housework time considerably: nearly 20% of men and 40% of women report a strong increase in time spent doing domestic chores, and close to zero report a decrease in this activity. Childcare time also

⁸ Additional analyses show that the loss in income contribution is mostly due to changes in labour market conditions.

increased considerably in Italy: 30% of fathers and nearly 50% of mothers strongly increased their time spent on this activity.

[Figure 1 here]

Consequences of the COVID-19 crisis for unpaid activities

Figure 2 plots the predicted values of changes in domestic activities by gender and change in income contribution in both countries⁹. Asterisks indicate whether the differences between women and men within each category of change in income contribution are statistically significant.

[Figure 2 here]

German respondents who reported a decrease in their income contribution saw an increase in their contribution to housework, whereas respondents who did not change or increased their income contribution reported virtually no change. This pattern reflects the expectation of bargaining theories that the partner who decreases his or her financial contribution to the household income has less power to "buy out" of housework. For Germany, there are no gender differences in how respondents increase their housework under changing conditions. In Italy, however, we see a larger increase in housework among those who decreased their income contribution. Furthermore, this pattern is gendered, because women who decrease their financial contribution increased their contribution to housework significantly more than men. Women are more likely to report a greater increase in housework than men even among respondents whose income contribution did not change during the crisis. For those who increase their income contributions, the gender gap is reversed, but not statistically significant.

We also see significant gender differences in changes in childcare time in Germany. While both women and men who saw a decrease in their income contribution increased childcare time to a similar extent, women who report that their income contribution has not changed or has increased during the

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⁹ Predictions are derived from the models in Tables A1 and A2 in the Online Appendix.

crisis have increased their childcare time significantly more than men in the same categories, reflecting theoretical expectations that see childcare as a means for women to "display" their gender. In Italy we also observe a generalized increase in childcare time. However, contrary to bargaining theories that would predict similar changes among both genders, women who saw a decrease in their income experienced a somewhat larger increase in childcare compared to men, suggesting that bargaining occurs at different absolute levels for men and women. To sum up, the evidence shows that the effect of the pandemic in two specific country contexts is not fully in line with our initial expectations. Indeed, there is no evidence of 'doing gender' during the pandemic in Italy. In contrast, some evidence for it is found among German women in terms of childcare, a result that also emerged in other recent reports (Müller et al. 2020).

Conclusions

Overall, the economic disturbances of the COVID-19 crisis have had a gendered impact on changes in income contributions and unpaid activities in Germany and Italy. This is especially the case in Italy, where the gender gap both in income contribution loss during the crisis and unpaid work is substantial, and less so in Germany, where gendered patterns are mostly visible in childcare.

Our analyses generally support bargaining theoretical arguments, in that reduced bargaining power, due to a drop in income contribution, leads both genders to spend more time on domestic work. We see however also some support for enhanced traditionalization of the domestic life of couples during the crisis. In Germany, childcare seems to be the activity where the gender gap has grown during the pandemic, in line with "gender display" theory, while in Italy the increase in housework and childcare in relation to losses of income contribution was stronger for women as compared to men, suggesting gendered differences in bargaining levels for this category. Our analysis therefore provides evidence that forced circumstances may alter the balance in families in the short run. Of course, we do not know and cannot test with this data whether these experiences are likely to modify the behavior of families in the long run too. Furthermore, the specific situation of the

pandemic might lead to reactions among couples that would be different if the exogenous shocks were due to some other cause different from the pandemic, examples being other forms of economic shocks, wars or natural disasters.

We acknowledge three limitations of our study that could potentially influence the direction of our results. First, we rely on subjective reports rather than data from time-use diaries and some evidence suggests that individuals may misreport their contributions to domestic work (Kan 2008). Second, although we have satisfied a number of criteria that have been proposed to ease retrospective questions for respondents (e.g. focusing on past behavior that is close in time, naming a concrete anchor such as "before the COVID-19 crisis") (Hipp *et al.* 2020), the survey questions on past unpaid activities may still be subject to bias. Third, although existing research suggests that high-quality optin online surveys provide reliable estimates that are comparable to those obtained through other sampling techniques (Ansolabehere and Schaffner 2014), we acknowledge that this approach may limit the generalizability of our results.

To conclude, economic disturbances during the COVID-19 crisis seem to have led to gendered changes in unpaid activities that are partly driven by changes in bargaining power and are therefore a direct consequence of the unequal situations of men and women outside of the domestic sphere. This ultimately highlights the role of state institutions in protecting gender equality in the labor market as a key to maintaining egalitarian gender arrangements in unpaid activities. In particular, policies designed to protect the employment of women during this and (potential) future crises and that provide women with equal opportunities to work and protect their wages can be powerful tools to actively shape gender roles in the household, both in the short and the long run. Moreover, securing equal opportunities for both women and men to return to employment in the post-pandemic future is essential to create more balance within household arrangements. Finally, the results of this analysis suggest that the burden of childcare disproportionally falls on women, particularly if they are the ones who bear the economic consequences of the pandemic. In order to secure women's return to paid

work, one of the main challenges for authorities in the two countries in the upcoming months will be to ensure that childcare facilities and schools re-open and stay open.

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Tables and figures

Table 1. Summary statistics – Socio-demographics (%). Sample sizes are 1404 for Germany and 914 in Italy. Post-stratification weights are applied.

Variables	Germany	Italy		Germany	Italy
Sex			Macro-area		
Women	53.7	51.4	West Germany	80.9	
Age			East Germany	19.1	
18–34	26	23			
35–44	23	20.2	North Italy		48.1
45–54	27.1	27.1	Center		16.7
55–64	23.9	29.6	South Italy		35.1
Civil status					
Married or civil union	78.6	74.6			
Education					
ISCED 1–2	11.3	33			
ISCED 3-4	66.3	44.5			
ISCED 5–8	22.4	22.5			
Children					
Yes	68.9	65.1			
Household income					
Under 1500	5.1	27.7			
1500–2600	13	31.2			
2600–4000	30	21.2			
Above 4000	29.5	6.2			
No answer	22.4	13.6			
When jobs are scarce, men					
have more right to a job than					
women	10.4	1606			
Agree or strongly agree	19.4	16.06			

	Germany		Italy	
	Women	Men	Women	Men
Change in contributions since Covid-19				
Decreased	30.3	28.5	46.4	37.7
Remained the same	66.2	67.2	50.1	57.7
Increased	3.4	4.4	3.5	4.6
Relative contribution prior to Covid-19				
A lot more than partner	8.6	45.3	5.3	35.4
More than partner	9.4	23.2	6.6	23.3
About the same	13.2	17.2	28.1	27.7
Partner more	21	9.7	18.8	10
Partner a lot more	47.8	4.6	41.1	3.6

Figure 1. Changes in housework and childcare time since the COVID-19 pandemic among men and women in Germany and Italy. Post-stratification weights are applied.

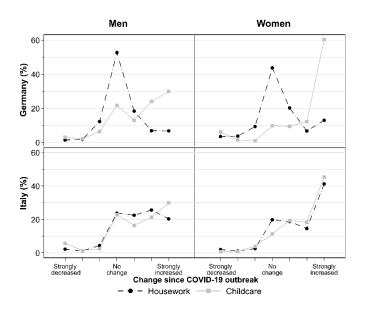


Figure 2. Predicted values of change in housework and childcare time since the COVID-19 pandemic, conditional on changes in contribution to household income among men and women in Germany and Italy. Predictions are calculated from models 2 in Tables A1 and A2 in the Online Appendix. Asterisks indicate whether the differences between the predicted value for women and men in the same income group are statistically significant. Post-stratification weights are applied.

