



# FROGEE POLICY BRIEF 4 Insights from Armenia

December, 2021

Global gender gap in unpaid care: why domestic work still remains a woman's burden

Yaroslava Babych, ISET

Gender gap in unpaid domestic care in Armenia: new evidence in light of the COVID-19 pandemic

Aleksandr Grigoryan, AUA Knar Khachatryan, AUA

## **Abstract**

## Global gender gap in unpaid care: why domestic work still remains a woman's burden

### Page 3-7

In the wake of the COVID-19 pandemic numerous reports point to the fact that women are mainly shouldering the burden of increased domestic care duties. But even before the pandemic struck, women performed more than two thirds of the unpaid domestic care work in both developing and developed countries. The lack of gender parity in the distribution of domestic work is associated with significant economic inefficiencies, as well as considerable social and economic consequences for women – affecting their bargaining power within the household and their labor market outcomes in particular. In the brief I review the literature on both the economic and sociological factors which perpetuate the pattern of gender disparity in unpaid domestic care work. I also summarize the "recognize, reduce and redistribute" policies which could be adopted to help address the problem.

## Gender gap in unpaid domestic care in Armenia: new evidence in light of the COVID-19 pandemic

### Page 7-10

We provide new evidence on the gender gap in unpaid domestic care in Armenia, using individual level data from 2018 and 2020. Our study confirms the existence of gender inequalities in the provision of unpaid domestic care. In particular, we show that the existing gender gap increased during the COVID-19 pandemic. Compared to men, women were more likely to separate from their jobs to provide unpaid domestic care. Moreover, among women the proportion of those who separated from a job specifically for the reason of providing unpaid domestic work was larger than among men. While universally recognized policies are important to mitigate gender imbalances in unpaid domestic care in Armenia, the current situation in the country requires an additional set of measures to be taken. In particular, policies should aim at preventing mass emigration from the country and supporting companies located in remote areas which are primarily gender-balanced, but particularly sensitive to lockdowns and other measures countering the impact of the COVID-19 pandemic.



# Global gender gap in unpaid care: why domestic work still remains a woman's burden

The realities of unpaid care and domestic work have received much attention lately in policy and academic circles, especially in light of the COVID-19 pandemic (Van Houtven et al., 2020; Craig and Churchill, 2020; Duragova, 2020). Recent surveys and reports confirm that while the unpaid household work burden increased for both genders, women around the world ended up shouldering the lions' share of various household chores and care duties during the pandemic (UN Women, 2020). For many countries, prolonged lockdowns have put a sudden spotlight on the "hidden" side of people's economic lives, not typically reflected in the national accounts data. Unsurprisingly, among the main issues connected with unpaid care work is the highly gendered division of labor in the "household sector" and its consequences for the emotional and economic well-being of families. In this policy brief I explore the current state and the evolution of gender inequalities in unpaid domestic care work worldwide, and discuss the academic literature which addresses the reasons and the consequences behind them. I also discuss potential policy interventions which could promote greater worklife balance and help advance both social and family-level welfare.

## Gender gaps in unpaid care work

The term *unpaid care and domestic work* appears under many terminological guises, including "unpaid care work" "unpaid household work", "unpaid domestic care work" and others. These terms essentially refer to the same phenomenon – unpaid care activities carried out in the household. They include cooking, cleaning, washing, water and fuel collection, shopping, maintenance,

household management, taking care of children and the elderly, and others (Addati et al., 2018). For the purposes of this brief I will use the terms interchangeably, relying mainly on "unpaid care", "domestic work", or "unpaid domestic care" to describe these activities. While the value of unpaid care work is not included in the national income accounts, it can be tracked by time-use surveys carried out by national statistical offices in many countries. According to the most recent surveys, (Charmes, 2019) more than three quarters (76.4%) of unpaid domestic care work worldwide is done by women, while 23.6% is done by men. In developed countries, the women's share is somewhat lower (65%), while in developing and emerging economies, women perform 80.2% of unpaid care. Thus, according to the data, even in developed countries women perform around two thirds of the unpaid domestic care work. Currently, no country in the world seems to have achieved gender parity with regard to the unpaid care distribution in households (U.N. Women., 2019).

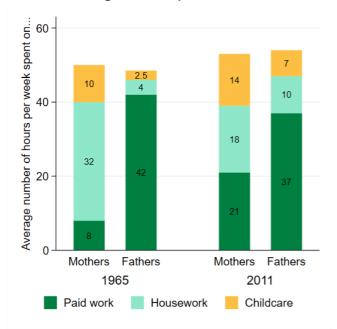
## Is there evidence of convergence in domestic care responsibilities?

Given that the first time use surveys in many countries have been conducted only relatively recently, it may be premature to make claims about changes in the distribution of domestic work and a potential closing of the gender gap. However, evidence from countries with a longer history of time use data, in particular the United States, suggests that the way mothers and fathers allocate their time between paid and unpaid work has changed dramatically between 1965 and 2011. In particular, as can be seen from the Figure 1 (from Parker and Wang, 2013), in 2011 women spent 2.6 times (13 more hours per week) more on paid work, while men spend 5 hours less than in 1965. The time spent on childcare increased for



both men and women. At the same time, domestic work hours decreased significantly for women, while somewhat increasing for men.

Figure 1. Moms and Dads, the US 1965-2011: Roles Converge, but Gaps Remain



*Note:* Based on adults aged 18-64 with own child(ren) under the age of 18 living in the household.

Source: Parker and Wang (2013).

Overall, analysis of time use survey data over a 40 year span shows a degree of convergence in unpaid care work between men and women (Kan et al., 2011; Altintas and Sullivan, 2016). However, as the Kan et al. (2011) study shows, gender inequality is quite persistent over time. In particular, men concentrate their contribution in domestic work to non-routine tasks (i.e. tasks that generally require less time, have definable boundaries and allow greater discretion around timing of performance than the more routine tasks) such as shopping and domestic travel, while women devote a bulk of their time to routine work (cooking, cleaning, care). Women's reduction in domestic work time (especially in routine tasks) may be largely due to the advancement of household technologies and higher acceptance/demand for women's participation in the labor market (Gershuny, 1983, 2004). Thus, it appears that the "low-hanging fruit" of gender equality within households has already been picked, and, going forward, further shifting of domestic care responsibilities will be a more difficult task, even in developed countries.

## Factors that perpetuate unpaid domestic care as primarily women's responsibility

The factors responsible for perpetuating gender roles in domestic work can be grouped into **economic** (specialization, comparative advantage) and **sociological** (habits, traditions, social perceptions) aspects.

The economic arguments that have long been used to explain the unequal division of paid and unpaid care work rely on the theory of comparative advantage and gains specialization. Starting from the seminal work of Becker (Becker, 1985), economic models of the family suggested that a division of labor within the household is driven by different experiences and choices to invest in human capital. Becker efficient households argued that require specialization and the pattern of specialization can be explained at least in part by the differences in the initial investment in human capital (market skills for men and household skills for women) (Becker, 2009). In this model, men's advantage in paid market activities is explained by historical reasons stemming in part from the more physical nature of market work. And yet, contemporary authors point out that the nature of work has been changing over time, with less emphasis put on physical, and more on cognitive skills. Likewise, the nature of household production has been changing (Greenwood et al., 2017). Birth control gave families a better way to control the number of children (Juhn and McCue, 2017). These should make men and women's changes



productivity more equal, and consequently reduce the gender gap between men and women in both types of work. And yet, despite the fact that in developed countries women often achieve higher educational attainment then men (Goldin, Katz and Kuziemko 2006; Murphy and Topel, 2014), it has not been enough to eliminate the gender gap in wages and in the division of unpaid domestic work. Moreover, as the study based on 1992 Canadian data by McFarlane et al. (2000) points out, while the wife's time in housework increases when the husband spends more time in paid work, the opposite is not necessarily true for men (men do not spend significantly more time on household tasks when their wives increase their employment). Alonso et al., 2019, using a sample of 18 advanced and emerging market economies, find that various factors which determine the allocation of time between paid and unpaid work affect men and women asymmetrically. For example, being employed part time vs. full time considerably increases the participation in unpaid work for women, while for men the same increase is statistically insignificant.

Thus, a purely "pragmatic" economic argument for the household division of labor is not sufficient to explain the persistence of the unpaid care gender gap. Other sociological factors, such as gender roles determined by social attitudes and cultural norms, tend to play an important role in household labor division (Coltrane, 2000; Juhn and McCue, 2017). Moreover, one can argue that educational choices of women, which contribute to their "comparative advantage" in household production, are themselves not independent of cultural norms and attitudes. These choices tend to be shaped in early childhood and reflect how much a family would invest in/encourage a girl's education vs. that of a boy; whether boys are engaged in certain household chores - cooking,

cleaning, caring for young children, etc. (UNDP, 2020). For example, the high gender gap in unpaid domestic work in the South Caucasus can be traced to family patterns. According to survey data (CRRC, 2015) in Azerbaijan, around 96% percent of women were taught in childhood how to cook, clean the house or do laundry, while only 35% of men were taught how to cook and clean. In Georgia, close to 90% of women reported being taught how to cook, clean and do laundry, while less than 30% of men on average reported being taught these skills (UNFPA, 2014).

## The social cost of gender inequality in the unpaid care work allocation

Gender inequality is not just an issue of fairness. Inequality results in considerable resource misallocation, where productive women's potential is not fully realized. The study by Alonso et al., 2019 estimates the GDP gains associated with a potential reduction in gender inequality in domestic work to the level observed currently in Norway. Countries like Pakistan and Japan, where the initial gender gap is quite sizeable, would gain around 3 to 4 percent of GDP. Another source of inefficiency is occupational downgrading, a situation where women take jobs below their level of qualification (Connolly and Gregory, 2007; Garnero et al., 2013) in order to better balance their home and work responsibilities. The perception of women as being primarily responsible for childcare and domestic labor drives statistical discrimination in the workplace and affects the "unexplained" portion of the gender pay gap (Blau and Kahn, 2017). The pay gap, in turn, perpetuates inequality in the division of domestic labor. Moreover, perception of unequal domestic work allocation is found to be associated with lower relationship satisfaction, depression, and divorce (Ruppaner et al, 2017). In addition, earlier sociological studies found that inequity in the



distribution, rather than the amount of work, causes greater psychological distress (Bird, 1999).

#### Policies to address the gender gap

Given the sizeable economic and social costs associated with the gender gap in unpaid care work, policy makers are paying greater attention to gender equality and ways to promote work-life balance for men and women. Currently, most solutions center around "recognize, reduce and redistribute" types of policies (Elson, 2017).

The "recognize" policies acknowledge the value of unpaid care work done by women through cash payments linked to raising young children (i.e. maternity leave policies). Most countries in the world adopt publicly funded paid maternity leave policies, although the adequacy of maternity leave payments and the duration of such leaves is still a stumbling block for many countries (Addati et al., 2014). Data suggests that maternity leave of no longer than 12 months has a positive effect on maternal employment, while long leaves (over two years) increase career costs for women (Kunze, 2016; Ruhm, 1998; Kleven et al., 2019).

The "reduce" policies, aim at the provision of public services that would reduce the burden of childcare and other forms of unpaid work on women and free up their time for participation in the labor force. Among such policies are investments in publicly funded childcare services (quality pre-schools and kindergartens) and physical infrastructure to support the provision of clean water, sanitation, energy, and public transport. Empirical studies generally find a positive effect of affordable childcare on female employment rates (Vuri, 2016; Lefebvre et al., 2009; Geyer et al., 2014), but with some caveats in particular, the subsidies may be less effective for female labor supply if affordable childcare just crowds out other forms of non-parental care (such

as informal help from family members) (Vuri, 2016; Havnes and Mogstad, 2011).

Finally, the "redistribute" policies aim to promote the redistribution of household chores and childcare among men and women. Among such policies are initiatives aimed at making flexible and reduced-hour work arrangement attractive and equally available for men and women. (e.g. shifting standard weekly hours to a more family friendly 35 hours per week, as for example in France); active labor market programs aimed at retaining women in the labor market can also help reduce hours devoted to unpaid work (Alonso et 2019). Moreover, better labor market regulations (e.g. legislation to regulate vacation time, maximum work hours, etc.) would discourage the long working hours and the breadwinner-caretaker gendered specialization patterns within families (Hook, 2006). Other examples include work-life balance policies recently adopted by the EU (EU Directive 2019/1158), and are aimed at providing paid paternity leave and reserving non-transferrable portions of family childcare leave for men. These policies were found to be effective for both increasing father's participation in unpaid care and for reducing the gender wage gap within families in a number of country studies (Fernández-Cornejo et al., 2018; Andersen, 2018).

It is important to recognize that more research is needed to identify exactly how and why specific policies may benefit families, and to adapt them to the specific country context. While many of the policies outlined above will not solve the problem of the gender gap overnight, they can be an important first step towards greater global gender equality in the workplace and inside the household.



## Gender gap in unpaid domestic care in Armenia: new evidence in light of the COVID-19 pandemic

### General trends in Armenia

Evidence shows that in Armenia women of all ages, educational levels and employment statuses are less likely to work than men, and those that do have a paid job work shorter hours on average. The high inactivity rates are primarily explained family caregiving and domestic by responsibilities. Women spend comparatively more time than men on unpaid domestic work, such as household chores; caring for sick, older and disabled family members; and caring for children. The UN Women (2020) report on Armenia indicates that women spend 58.5 hours weekly on domestic work, while men spend only 28.4 hours. Employed women spend less time on domestic work (27.5 hours weekly) than inactive women (37.5 hours weekly), while men spend around 11 hours weekly on domestic tasks irrespective of their labor market status. Charmes (2019) reports that 83.2 percent of total unpaid care in Armenia was provided by women, while in its neighboring countries, Turkey two Azerbaijan, the corresponding shares were 79.1 percent and 74.9 percent.

In Armenia, social norms and attitudes play an important role in gender-related policies and societal practices. According to prevailing attitudes in the society, a woman's role is primarily associated with domestic and childcare tasks (ADB, 2019). Furthermore, there is a lot of evidence that household structure is an important driver of labor market outcomes. The World Bank (2017) study shows that marriage and motherhood are strongly associated with lower female labor

force participation. According to the same study there is a negative correlation between the number of children aged 6-14 present in the household and the participation of women in the labor market. The UN Women (2020) report shows that the largest discrepancies in labor market activity rates between men and women appear in households with children and intensify as the number of children increases.

Armenia has a high rate of emigration. As men migrate, women take more responsibility for unpaid work on family farms and in informal home-based enterprises. However, since these informal contributions are typically not registered and thus are officially unrecognized, women do not get access to social benefits such as paid sick leave and do not contribute to future pensions (UN, 2017).

## Unpaid housework and care and decisions on the labor market - evidence from 2018 and 2020

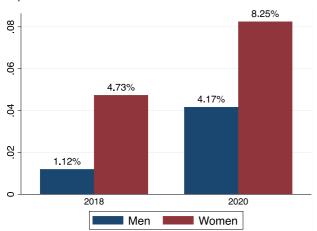
In this section we provide new evidence on the gender dimension of unpaid domestic care in Armenia, relevant for the COVID-19 pandemic. For this purpose we use the Armenian Labor Force Survey (LFS) 2018 data and the new data from November 2020 collected by the Avedisian Center for Business Research and Development (CBRD) at the American University of Armenia (AUA). According to the 2018 LFS data, among respondents who separated from their job within three months prior to an interview, 28.7 percent were women. From the CBRD 2020 data we learn that in times of crisis such as the COVID-19 pandemic women face a significantly higher likelihood to separate from a job. In 2020, 60.2 percent of individuals who separated from a job in the last three months were women.



There can be many reasons to separate from a job. In the LFS 2018 and the CBRD 2020 studies respondents were asked to choose from several options, including unpaid child/old-age care and household chores (work). Prior to COVID-19, in 2018, women were dominant in the pool of individuals who separated from a job in order to provide unpaid child/old-age care (61.5 percent), or household work (100 percent).

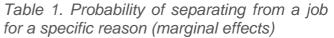
In Figure 1 we look at the proportions of men and women who separated from their job to provide unpaid domestic care, either by taking care of a child and/or old-age family member(s) or by covering household work, in the LFS 2018 and CBRD 2020 datasets. A few observations are worth noting. In 2018, among men only 1.1 percent separated from their job for the reason of unpaid domestic care, while among women this share was 4.7 percent. In November 2020, the corresponding percentages for men and women increased to 4.2 and 8.3, respectively.

Figure 1. Separating from a job to provide unpaid domestic care



 $\it Source$ : LFS 2018 and CBRD 2020 datasets.

*Notes*: Calculations are based on individuals aged 15-75 who separated from a job within 3 months prior to interview. In the CBRD 2020 data, separating from a job is considered only within three months prior to the survey, while in the LFS 2018 data such periods extend from 3 months to 3 years. For the sake of consistency, in both datasets we conduct analysis for respondents who separated from their job within the last three months.



	Unpaid	Unpaid child/old-
	domestic care	age care
VARIABLES	(1)	(2)
3.6.1	0.0272	0.0264
Male $\times$ 2020	0.0272	0.0264
	(0.0179)	(0.0170)
Female × 2018	0.0290***	0.0282***
	(0.0104)	(0.0100)
Female $\times$ 2020	0.0435***	0.0352***
	(0.0139)	(0.0134)
Education	-0.0021	-0.0025
	(0.0034)	(0.0032)
Married	-0.0045	-0.0034
	(0.0087)	(0.0083)
Rural	-0.0320***	-0.0294***
	(0.0118)	(0.0114)
Capital	-0.0287**	-0.0310**
_	(0.0139)	(0.0147)
Constant	-0.0758***	-0.0800***
	(0.0227)	(0.0214)
Pseudo R <sup>2</sup>	0.1261	0.1171
Observations	732	732

*Note*: Observations from LFS 2018 and CBRD 2020 on individuals who separated from their job within 3 months are pooled together. The estimation method is probit. The base category for interaction terms is Male  $\times$  2018. Marginal effects are reported. The proportion of women in the sample is 36.34 percent. There are 587 and 145 observations from 2018 and 2020, respectively. Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

This means that the share of women who separated from their job to provide domestic care increased during the pandemic by 3.5 percentage points, a little more than that for men (3.1 percentage points). In general, the pandemic resulted in more decisions to separate from a job for reasons of unpaid domestic work, and women continued to be more likely to separate from a job for these reasons.

To further examine the discrepancy between men and women with regard to care duties, we estimate a probabilistic regression model looking at the likelihood of separating from a job to provide unpaid domestic care in general and unpaid child/old-age care in particular (Models 1 and 2, Table 1). In 2018, compared to men, the proportion of women who separated from a job for the reason of unpaid household work was higher by 2.9 percentage points. In 2020 this proportion increased to 4.4 percentage points. Qualitatively similar results are observed in the case of unpaid child/old-age care (Model 2). This suggests that as



in regular times, also during the pandemic women were more likely to separate from work to take care of household duties, and the gap in outflow of women compared to men for this reason was higher in 2020 compared to 2018. Due to small sample sizes of individuals who separated from a job in the surveys, for both men and women the differences between 2018 and 2020 are not statistically significant. However, they are indicative of a potentially worsening gender gap both on the labor market and in the division of unpaid domestic care as a result of the pandemic.

#### Policy recommendations

Using microeconomic data our analysis confirms the existence of gender differences in unpaid domestic care in Armenia. Furthermore, we provide indicative evidence that the existing gaps have increased during the COVID-19 pandemic. Compared to men, women are more likely to separate from their jobs in order to provide unpaid domestic care, and the difference in the likelihood grew between 2018 and 2020.

In light of the "recognize, reduce and redistribute" types of policies (3-R policies; Elson, 2017), our recommendations for the Armenian government are based on the following arguments. While common 3-R policies are applicable in regular times and particularly during the pandemic, in the case of Armenia it is critical to detect the underlying (institutional) triggers for the increased burden of unpaid domestic care. The emigration rate in Armenia continues to be high, further increased due to the tightened labor market conditions and uncertainty in the country after the 44-day Nagorno-Karabakh war (September 26 - November 9, 2020). Consequently, the burden of unpaid domestic care became particularly heavy for women, as migrant workers are mainly men. Emigration is of course only one of the reasons behind the reported inequalities. Other potential factors are structural changes in the Armenian industry as a consequence of two major shocks, the COVID-19 pandemic and the 44-day war, the consequences of which still remain to be explored. Grigoryan and Khachatryan (2021), using a different dataset on Armenia from May 2020, show that women are more flexible in shifting to a remote work regime during the pandemic. This suggests that women may have a relative advantage in labor market participation in times of the COVID-19 pandemic, while aforementioned evidence suggests that this advantage may not be fully utilized due to an excessive demand for providing unpaid domestic care.

In what follows, public policies by the Armenian Government need to predominantly address country specific triggers of the disproportional burden of unpaid domestic care on women. It is highly important to increase maternity leave payments and its duration (as well as providing paid paternity leave), invest in childcare institutions and improve working conditions for women, among other world-wide recognized policies. Still, the current situation in Armenia dictates an additional set of measures, such as policies aimed at preventing mass emigration from the country and supporting companies in remote areas which are generally genderbalanced, but particularly sensitive to COVID-19 shock (such as tourism hospitality). Also, sectors capable of shifting to remote work regimes can benefit from women's flexibility towards this work mode. For example, tax incentives for switching to a remote working regime can motivate many women to sustain their employment and share the unpaid household work burden with other family members more fairly. Such targeted policies should ultimately increase the opportunity cost of unpaid domestic care for women with the expectation that familial



decisions for female member(s) will be in favor of sustaining the workplace.

### References

Addati L., Cassirer N. and Gilchrist K., (2014). "Maternity and paternity at work: Law and practice across the world", International Labour Office.

Addati L., Cattaneo U., Esquivel V. and Valarino I., (2018). "Care Work and Care Jobs for the Future of Decent Work", Geneva: International Labor Organization.

Alonso C., Brussevich M., Dabla-Norris M. E., Kinoshita Y. and Kochhar M. K., (2019). "Reducing and Redistributing Unpaid Work: Stronger Policies to Support Gender Equality", International Monetary Fund.

Altintas E. and Sullivan O., (2016). "Fifty years of change updated: Cross-national gender convergence in housework", *Demographic Research*, 35, 455-470.

Andersen S. H., (2018). "Paternity Leave and the Motherhood Penalty: New Causal Evidence", Journal of Marriage and Family, 80, 1125-1143.

Asian Development Bank, (2019). "Armenia Country Gender Assessment".

Becker G. S., (1985). "Human Capital, Effort, and the Sexual Division of Labor", *Journal of Labor Economics*, 3(1, Part 2), S33-S58.

Becker G. S., (2009). "Human capital: A theoretical and empirical analysis, with special reference to education", University of Chicago press.

Bird C. E., (1999). "Gender, household labor, and psychological distress: The impact of the amount and division of housework", *Journal of Health and Social behavior*, 32-45.

Blau F. D. and Kahn L. M., (2017). "The gender wage gap: Extent, trends, and explanations", *Journal of Economic Literature*, 55(3), 789-865.

Charmes J., (2019). "The Unpaid Care Work and the Labour Market. An analysis of time use data based on the latest World Compilation of Time-use Surveys", Geneva: International Labor Organization.

Coltrane S., (2000). "Research on household labor: Modeling and measuring the social embeddedness of routine family work", *Journal of Marriage and Family*, 62(4), 1208-1233.

Connolly S. and Gregory M., (2008). "Moving down: women's part-time work and occupational change in Britain 1991–2001". *The Economic Journal*, 118(526), F52-F76.

Craig L. and Churchill B., (2020). "Dual-earner parent couples' work and care during COVID-19", Gender, Work & Organization.

CRRC, (2015). "Gender roles in Azerbaijan: A cross-generational continuum".

Dugarova E., (2020). "Unpaid care work in times of the covid-19 crisis: Gendered impacts, emerging evidence and promising policy responses".

Elson D., (2017). "Recognize, reduce, and redistribute unpaid care work: how to close the gender gap", *New Labor Forum*, 26(2), 52-61, Sage CA: Los Angeles, CA: SAGE Publications.

EU, (2019). Directive 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/EU.

Fernández-Cornejo J. A., Del-Pozo E., Escot L. and Castellanos-Serrano C., (2018). "Can an Egalitarian Reform in the Parental Leave System Reduce the Motherhood Labor Penalty? Some Evidence from Spain", Revista Española de Sociología, 27(3), 45-64.

Food and Agriculture Organization of the United Nations, (2017). "Gender, Agriculture and Rural Development in Armenia", Country Gender Assessment Series.

Garnero A., Kampelmann S. and Rycx F., (2014). "Part-time work, wages, and productivity: evidence from Belgian matched panel data", *ILR Review*, 67(3), 926-954.

Gershuny J., (1983). "Social Innovation and the Division of Labour", Oxford: Oxford University Press

Gershuny J., (2004). "Domestic equipment does not increase domestic work: A response to Bittman, Rice and Wajcman", *British Journal of Sociology*, 55, 425–431

Geyer J., Haan P. and Wrohlich K., (2014). "The effects of family policy on mothers' labor supply. Combining evidence from a structural model and a natural experiment", *DIW Discussion Papers*, 1366.

Goldin C., Katz L. F. and Kuziemko I., (2006). "The homecoming of American college women: The reversal of the college gender gap", *Journal of Economic Perspectives*, 20(4), 133-156.

Greenwood J., Guner N., Kocharkov G. and Santos C., (2016). "Technology and the changing family: A unified model of marriage, divorce, educational attainment, and married female labor-force participation", *American Economic Journal: Macroeconomics*, 8(1), 1-41.

Grigoryan A., Khachatryan K., (2021). "Gender dimension of employment decisions during the COVID-19 lockdown: evidence from Armenia", CBRD.

Havnes T. and Mogstad M., (2011). "Money for nothing? Universal child care and maternal employment", *Journal of Public Economics*, 95(11-12), 1455-1465.

Hook J. L., (2006). "Care in context: Men's unpaid work in 20 countries, 1965–2003", American Sociological Review, 71(4), 639-660

Juhn C. and McCue K., (2017). "Specialization then and now: Marriage, children, and the gender earnings gap across cohorts", *Journal of Economic Perspectives*, *31*(1), 183-204.



Kan M. Y., Sullivan O. & Gershuny J., (2011). "Gender convergence in domestic work: Discerning the effects of interactional and institutional barriers from large-scale data", *Sociology*, 45(2), 234-251.

Kleven H., Landais C., Posch J., Steinhauer A. and Zweimuller J., (2019). "Child penalties across countries: Evidence and explanations", *AEA Papers and Proceedings*, 109, 122-126.

Kunze A., (2016). "Parental leave and maternal labor supply"., *IZA World of Labor*.

Lefebvre P., Merrigan P. and Verstraete M., (2009). "Dynamic labour supply effects of childcare subsidies: Evidence from a Canadian natural experiment on low-fee universal child care", *Labour Economics*, 16(5), 490-502.

McFarlane S., Beaujot, R. and Haddad T., (2000). "Time constraints and relative resources as determinants of the sexual division of domestic work", Canadian Journal of Sociology/Cahiers Canadiens de Sociologie, 61-82.

Murphy K. M. and Topel R. H., (2016). "Human capital investment, inequality, and economic growth", *Journal of Labor Economics*, 34(S2), S99-S127.

Parker K. and Wang W., (2013). "Modern Parenthood. Roles of Moms and Dads Converge as They Balance Work and Family", Pew Research Center's Social & Demographic Trends, Project, 14.

Ruhm C., (1998). "The economic consequences of parental leave mandates: Lessons from Europe", Quarterly Journal of Economics 113:1, 285–317.

Ruppanner L., Brandén M. and Turunen, J., (2018). "Does unequal housework lead to divorce? Evidence from Sweden", *Sociology*, 52(1), 75-94.

UNDP, (2020). "Tackling Social Norms: A game changer for gender inequalities. 2020 Human Development Perspectives".

UNFPA, (2014). "Men and Gender Relations in Georgia".

UN Women, (2020). "Analysis of the gender pay gap and gender inequality in the labour market in Armenia".

UN Women, (2019). "Progress of the world's women 2019–2020".

UN Women, (2020). "Whose time to care? Unpaid care and domestic work during Covid-19".

Van Houtven C. H., DePasquale N. and Coe N. B., (2020). "Essential long-term care workers commonly hold second jobs and double-or triple-duty caregiving roles", *Journal of the American Geriatrics Society*, 68(8), 1657-1660.

Vuri D., (2016). "Do childcare policies increase maternal employment?", *IZA World of Labor*.

World Bank, (2017). "Future Armenia: Connect, Compete, Prosper. A Systematic Country Diagnostic", Washington, DC: World Bank.



## About the authors Yaroslava Babych

ISET Policy Institute y.babych@iset.ge www.iset.ge

Yaroslava (Yasya) Babych studied at the University of Kyiv-Mohyla Academy in Kyiv. In 2000 she received a Bachelor of Arts degree from Franklin and Marshall College with a double major in Economics and in Philosophy. She graduated with Ph.D. in Economics from the George Washington University in Washington, DC, in 2011. At ISET she teaches first and second year courses in Macroeconomics and Open Economy Macro and is also leading a Macroeconomic Policy Research Center.

#### Aleksandr Griogryan

American University of Armenia aleksandr@aua.am www.aua.am

Aleksandr Grigoryan is an Associate Professor at the American University of Armenia and a CERGE-EI Foundation Teaching Fellow. He has a PhD in Economics from the University of Turin and Masters in Economics from the Institute for Advanced Studies. His research development topics, such as migration, monetary policy financial inclusion, poverty and gender. His recent publications have appeared in **Empirical** Economics, Journal of European Economics, International Economic Journal and Journal of Income Distribution.

### Knar Khachatryan

American University of Armenia kkhachatryan@aua.am

Knar Khachatryan is an Associate Professor and BA in Business program chair at the American University of Armenia. She is a Research Associate at CERMi (Belgium). She has a PhD in Management from SKEMA Business School (France) and Doctorate in Economics from University of Cote d'Azur (France). Her scholarly activity focuses on financial inclusion, poverty, gender and conflict studies. Her recent publications have appeared in Journal of Behavioral and Experimental Finance, Review of Development Economics, Journal of Eastern European Economics and Strategic Change.

## Acknowledgement

The authors would like to thank Kateryna Bornukova, Michał Myck, and Monika Oczkowska for useful comments and editing, and Kajetan Trzciński for careful proof-reading.

### freepolicybriefs.com

The Forum for Research on Eastern Europe and Emerging Economies (FREE) is a network of academic experts on economic issues in Eastern Europe and the former Soviet Union at BEROC (Minsk), BICEPS (Riga), CEFIR/NES (Moscow), CenEA (Szczecin), ISET (Tbilisi), KSE (Kiev) and SITE (Stockholm). In 2019 the FREE Network, with financial support of the Swedish International Development Cooperation Agency (Sida) initiated the Forum for Research on Gender Economics (FROGEE). Publications under the FROGEE initiative contribute to the discussion on gender inequality in the region of Central and Eastern Europe. Opinions expressed in all FREE Network publications are those of the authors; they do not necessarily reflect those of the FREE Network, its research institutes or Sida.



