

RESEARCH PAPER

TIME TO CARE: UNPAID WORK AND GENDER INEQUALITY IN GEORGIA



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UN WOMEN

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TABLE OF CONTENTS

ACRONYMS, ABBREVIATIONS AND DEFINITIONS OF TERMS

Acronyms and abbreviations

GDP	Gross domestic product
GEL	Georgian lari
GTUS	Georgia Time Use Survey
ILO	International Labour Organization
IV	Instrumental variables
SDG	Sustainable Development Goal
SNA	System of National Accounts
SUR	Seemingly unrelated regression
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women

Definition of terms

Fixed effects	A group-specific constant term in a regression model. It is an effect that is constant over time.
Gender pay gap	This refers to the difference between the hourly wages earned by men and women in the labour market, expressed as a percentage of men's wage.
Instrumental variable (IV)	IVs are used when an explanatory variable of interest is correlated with the error term, in which case standard regressions give biased results because of endogeneity, selection bias, measurement error or the presence of unmeasured confounding effects. A valid instrument is one that induces changes in the explanatory variable but has no independent effect on the dependent variable. The use of IVs enables the estimation of causal relations using observational data.
Labour market work	Work activities performed by an individual that includes employment-related work, whether formal or informal, and subsistence production. It refers to activities included in the System of National Accounts (SNA).
Long-term care	Refers to a variety of services designed to meet a person's health or personal care needs when they can no longer perform everyday activities on their own during a short or long period of time. Long-term care is provided by different caregivers in different settings, e.g. at home by unpaid family members and friends, in a facility such as a nursing home, or in the community in an adult day-care centre.

Marginal effects	Refers to the effect of a small change in an independent variable on the predicted dependent variable.
Motherhood penalty	A phenomenon by which women's pay decreases once they become mothers. This is due in part to the fact that women are more likely than men to take time away from the workforce or to reduce their work hours because of caregiving responsibilities.
Multinomial logit regression	A regression model of decisions among multiple choices.
Non-productive activities	This refers to personal activities such as learning, socializing, satisfying physiological needs, etc. In the International Classification of Activities for Time Use Statistics (ICATUS), they include the following categories: (1) learning; (2) socializing and communication, community participation and religious practice; (3) culture, leisure, mass media and sports practices; and (4) self-care and maintenance.
Probit regression	A regression model of decisions among two choices.
Productive activities	An activity that satisfies the third-person criterion (i.e. the activity can be delegated to another person and yield the same desired result), such as the production of goods and services for pay, for profit or for one's own final use. In the International Classification of Activities for Time Use Statistics (ICATUS), they include the following categories: (1) employment and related activities; (2) production of goods for own final use; (3) unpaid domestic services for household and family members; (4) unpaid caregiving services for household and family members; and (5) unpaid volunteer, trainee and other unpaid work.
Purchasing power parity	The rate at which the currency of one country would have to be converted into that of another country to buy the same amount of goods and services in each country.
Seemingly unrelated regression (SUR)	Multiple regression models in which the error terms (i.e. unobserved variables) are not independent from one another.
Time poverty	Refers to the state or condition involving very long working hours that leaves little or no discretionary time for rest, leisure and socializing. Time poverty has important adverse repercussions for a person's economic opportunities, health and well-being.
Tobit regression	A regression technique in which the dependent variable is censored. For example, time spent on an activity can be zero or positive but not negative. Here, time is censored at zero.
Unpaid care work	Unpaid work activities performed by individuals within a household or community for the benefit of its members, including the care of persons (direct caregiving) and domestic work chores (indirect care work) such as cleaning, cooking meals, doing laundry, grocery shopping, etc.
Work intensity	Work intensity has several definitions in the literature. The study by Pichetpongsa (2004) refers to the length of an average (paid and unpaid) working day and the incidence of 'likely to be stressful' overlapping work activities. The latter involves the simultaneous performance of two or more work activities that either require attention and/or energy or that are monotonous and repetitive.

EXECUTIVE SUMMARY

Care work is crucial in the functioning of the economy and the survival and maintenance of societies; daily care activities range from cooking, doing laundry, housecleaning and washing dishes to caring for children, the sick, the disabled and frail, older persons. The fact that most of this work is unpaid has made it statistically invisible to policymakers. The reduction of women's heavy care work has been accorded relatively low political priority since caregiving is assumed to be primarily the responsibility of the family and to have little impact on economic development. Hence, gender inequalities in the care burden remain unaddressed.

The global COVID-19 pandemic has unravelled the evolving care crisis, and its full impact on various sectors of the economy are reminders of the need to establish robust care systems. In Georgia, the Government implemented a well-coordinated early response system and strict lockdown measures at the start of the pandemic. Nonetheless, the pandemic has created disruptions to livelihoods and essential services, including schools, day-care centres and other care facilities. Women and girls are particularly affected by the increased burden of care work.

Given the persistence of traditional gender norms, women shoulder a disproportionate amount of the household work burden, which serves as a barrier to greater engagement in public life. It is not surprising that gender gaps in labour market outcomes continue to persist in Georgia, with female labour force participation rates lagging behind that of men. The collection of time use data can help inform policymakers about the time constraints that individuals face. It can help reveal the full extent of economic activities performed by women and men, including unpaid care work. Women in particular incur a time cost and experience the strain of performing multiple roles. Thus, any inquiry into the welfare of individuals involves not only knowing about people's incomes and consumption but also understanding their use of time. Time use data are necessary to our under-

standing of well-being and can inform policy regarding the time-based constraints and challenges in attaining the Sustainable Development Goal (SDG) of gender equality.

Using the 2020–2021 Georgia National Time Use Survey (GTUS) subsample of 2,610 working-age (25–62 years old) women and men, this report employs several data analysis techniques to address the following questions:

- 1 Is there a relationship between labour force participation and the amount of unpaid domestic and care work performed by women and men?
- 2 What determines the amount of labour market work time, unpaid work time and leisure/social time spent by women and men? Of particular interest is the way time allocation is influenced by the care needs of children and persons with functional difficulties.
- 3 Who is likely to be time-poor? Are women more likely than men to be time-poor and to have a poor work-life balance?

The findings show that caregivers spending at least 3.3 hours (200 minutes) of direct caregiving per day are less likely to participate in the labour market than those who do unpaid work for less than 200 minutes per day. The probability of participating in the labour force declines even more—by an additional 41.3 per cent—if the individual is a female caregiver.

Individuals in households with care needs tend to spend less time in labour market and subsistence production work and more time in unpaid work. Specifically, the care of children under the age of 10 increases both women's and men's unpaid work time; however, the increase for women is nearly four times greater than the increase for men. Moreover, the care needs of older children (aged 10–17) and that of persons with functional difficulties increase women's weekly unpaid work time but not that of men.

Access to care support, particularly the support provided by other women aged 16–74 in the household, increases the time spent by these individuals, especially women, in labour market activities while reducing unpaid domestic and care work. Access to external care support, however, does not have any statistically significant effect. A possible explanation for this is that the GTUS data collection period coincided with the first 15 months of the COVID-19 pandemic. The pandemic led to restrictions and even lockdowns across Georgia, especially in the early months of the pandemic, and closed some childcare services, crèches and kindergarten for a certain period, making it difficult for households to use outside care services or assistance.

The GTUS data analysis also shows the prevalence of performing overlapping or simultaneous activities as a coping strategy among women as they take on multiple roles that compete for their time. The presence of children under the age of 10, for example, increases the time spent on parallel care work activities, while the presence of in-house care support, such as other able-bodied women in the household, reduces the duration of parallel care work activities in all types of households.

Women also perform overwhelmingly more supervisory care than men. They provide anywhere from a weekly average of 13.6 hours (818.4 minutes) for those in households with person(s) with functional difficulties, to 17.8 hours (1,065.4 minutes) for women in households with young children.

In addition, women are more likely to experience long working hours as they perform both paid and unpaid work and hence are more time-poor than men. Being time-poor in this study refers to individuals who lack time for adequate rest and leisure due to long working days. Using the time poverty threshold of 60 work hours per week, we find that 52 per cent of women and 40.9 per cent of men in Georgia are time-poor. This is confirmed by the probit analysis results indicating that women have a 22 per cent higher probability of being time-poor than men. The presence of in-house care support, on the other hand, reduces the probability of being time-poor by 18 per cent.

Finally, the results indicate that time poverty is correlated with ‘feeling rushed’, suggesting that the tensions and stresses that individuals, particularly women, experience are likely due to long working hours and multiple demands on their time.

The conundrum that women in Georgia face highlights the need for a coordinated set of gender-sensitive macroeconomic, labour and care policies in order to break this cycle of time deprivation and low female labour force participation.



INTRODUCTION

1.1 SIGNIFICANCE OF UNPAID CARE AND THE CHALLENGES AHEAD

Caring for children, older persons, the sick or disabled family members and performing domestic chores (such as cleaning and cooking) are essential activities in all societies. This unpaid contribution of women is acknowledged specifically in Sustainable Development Goal 5, on the attainment of gender equality and the empowerment of women and girls. Target 5.4 of SDG 5 explicitly calls for recognizing and valuing unpaid care and domestic work. Yet policies are often made without considering the impact of these activities. As a result, the dual responsibilities of income earning and family caregiving for many employed women inevitably create stress and tension, making it hard to maintain a decent work-life balance.

Because unpaid work is missing from policy discourses, the realities that women face are being ignored, namely the unequal burden of care work within households and its impact on the economic empowerment and well-being of women, who bear the brunt of that burden. Unpaid care work is critical but remains ‘invisible’; hence, gender inequalities in the care burden remain unaddressed.¹ At the same time, policymakers can take the demand for care for granted partly because a signif-

icant aspect of it is met by unpaid labour whose supply, largely determined by socially ascribed gender roles and norms of feminine obligations, is relatively inelastic.² These deep-seated social norms and gender stereotypes shape people’s perceptions of who is responsible for meeting care need, so much so that women’s responsibility for care work is taken for granted in most societies and by policymakers as an unquestioned part of daily living.³ The reduction of women’s heavy care work has been accorded relatively low political priority since caregiving is assumed to be primarily the responsibility of the family and to have little impact on economic development.

The global COVID-19 pandemic has challenged this view. The unravelling of the care crisis during the pandemic and its full impact on various sectors of the economy are reminders of the need to establish robust care systems—those that recognize the valuable contribution of caregivers and address the current imbalance in the division of care work between women and men and in the share of care responsibilities between families, governments and the private sector.

1.2 NATIONAL CONTEXT

In Georgia, the Government implemented a well-coordinated early response system and strict lockdown measures at the start of the pandemic. Nonetheless, the pandemic has created disruptions to livelihoods and essential services, including schools, day-care centres and other care facilities, as it has in the rest of the world. Women and girls were particularly affected by the consequences of the lockdown measures due to the increased burden of domestic work. According to UN Women's gender assessment of the COVID-19 situation in Georgia, about 42 per cent of women report spending more time on at least one extra domestic task, compared to 35 per cent of men.⁴ Children also experienced an increase in their domestic workload due to school closures, and employed women were more likely than men to shift towards working from home.

These findings are not surprising, given the persistence of gender norms regarding women's and men's ascribed roles as primary caregivers and breadwinners, respectively. This has created a tremendous challenge for women to participate in the labour market and, at the same time, achieve a healthy work-life balance. Georgia has experienced steady economic growth over the past decade, averaging 4 per cent growth per annum between 2011 and 2021, and the poverty rate declined from 59 per cent in 2011 to 42 per cent in 2021.⁵ Although these developments have expanded opportunities to many, especially women, gender biases continue to be embedded in household relations, communities and labour markets, especially as women progress in their careers.⁶ Traditional gender roles influence not only how household decision-making is made but also the extent to which household chores and care work are shared within the household, with women doing most of the cooking, cleaning and childcare tasks.⁷ In fact, female respondents to a 2020 International Men and Gender Equality Survey (IMAGES) cited household and care responsibilities as the main barrier to greater engagement in public life.⁸

It is therefore not surprising that gender gaps in labour market outcomes continue to persist in

Georgia. The female labour force participation rate in the past decade, which ranged between 40 and 46 per cent, lagged behind men's rate (62–67 per cent).⁹ According to the 2021 UN Women Country Gender Equality Profile of Georgia, the difference in economic inactivity between women and men (59.6 per cent versus 38 per cent, respectively) is significantly greater at women's reproductive age. The National Statistics Office of Georgia also noted that the gender gap in employment rates is widest for men and women aged 25–34 and 55+ years. These gaps overlap with the life-cycle stages of women when they face heavy demands for caregiving, including childcare during reproductive years and care for older persons with functional difficulties later in life. The gender pay gap remains significant as well. In 2020, the ratio of women's wages to men's wages increased by 3.8 percentage points between 2019 and 2020 (to 67.6 per cent).¹⁰

To its credit, Georgia is part of a growing number of countries that have developed institutional mechanisms for the advancement of women at the national and local levels. The mechanisms include an extensive social protection system that, in 2020, was financed by 27.4 per cent of the total government budget.¹¹ However, the existing system remains inadequate and ineffective, especially for employed women. A significant number of them, namely those working in the informal sector such as domestic workers, are excluded from receiving social protection benefits—for example, the pension scheme. Maternity protection is also weak for women working in the private and public sectors (except for civil servants).¹²

While there are promising trends—including a growing commitment by the Government towards building a more equitable future—a better understanding of the nature of unpaid care work and its link with female labour force participation, the incidence of time poverty and women's well-being is urgently needed in order to develop more gender-sensitive economic policies and accelerate change towards gender equality.

1.3 ROLE OF TIME USE DATA IN UNDERSTANDING WOMEN'S UNPAID WORK

Time use data can be useful in examining new research questions and the policy initiatives that are aimed at supporting the provision of care or alleviating the heavy unpaid care work burden. These data allow researchers to keep track of what is happening to unpaid care work, along with labour market work hours, especially since demographic and health transitions and economic forces indicate that care needs are growing.¹³ An accurate measurement of unpaid work can inform policy-makers about the time constraints that individuals face when participating in the labour force, as well as in community and civic activities.

Care work or unpaid care work in this report refers to productive activities that involve direct, personal care activities, such as feeding and dressing a child or helping a person with functional diffi-

culties take a bath, as well as indirect care activities, such as doing laundry, cooking and washing dishes.¹⁴ Such work can be performed as a primary activity, a parallel activity that is performed simultaneously with primary activities, or a supervisory care activity. The latter refers to being present or remaining in proximity to a dependant, whether a child, a frail older person or a sick or disabled individual, in order to be available or 'on call' while performing a non-care activity.¹⁵ For example, childminding can be performed while cooking, gardening or eating in a restaurant. By revealing the full extent of economic activities performed by women and men, time use can illuminate the lack of 'free time' and the strains incurred by women who are 'time-poor' in particular.

1.4 REPORT OBJECTIVES AND STUDY FOCUS

This report has two objectives. First, it aims to demonstrate that the 2021 Georgia Time Use Survey (GTUS) provides useful information that allows a better understanding of the consequences of heavy care work using the lens of people's time. It argues that how people use their time underpins policy priorities.¹⁶ These priorities include the reduction of women's unpaid work burden; meeting the care needs of children, the sick and frail older persons; attainment of a healthy work-life balance; and improved well-being.

Second, the report aims to inform Georgian policymakers on the unequal burden of caregiving in terms of time and intensity and its consequences on women's labour force participation and well-being by conducting an analysis of the 2020–2021 GTUS data. Using these data, the report addresses the following questions:

- 1 Is there a relationship between labour force participation and the amount of unpaid domestic and care work performed by women and men?
- 2 What determines the amount of labour market work time, unpaid work time and leisure/social time spent by women and men? Of particular interest is the way time allocation is influenced by the care needs of children and persons with functional difficulties.
- 3 Who is likely to be time-poor? Are women more likely than men to be time-poor and to have a poor work-life balance?

The analysis focuses on the 2020–2021 GTUS sample of 2,610 working-age, able-bodied¹⁷ women and men aged 25–62 living in multi-person households whose time diaries were recorded and collected for both a weekday and a weekend day. The GTUS is the first national time use survey conducted in Georgia. It was implemented between September 2020 and September 2021 to take account of the seasonal influences that affect the time use of respondents.¹⁸ The data analysis presented in this report involves a combination of simple t-tests, kernel density distributions and several regression analyses. It makes use of probit, seemingly unrelated regression (SUR), tobit and multinomial logit approaches to answer the research questions.

The report is organized as follows. Chapter 2 provides an overview of the relevant literature. In Chapter 3, we discuss the data sampling, the activity classification used in the analysis, and some caveats since the GTUS was conducted during the first 15 months of the COVID-19 pandemic. It also describes the pertinent characteristics of the sampled women and men and their households. Chapter 4 presents the weekly time use patterns of the respondents for primary, parallel and supervisory care activities. Chapter 5 provides the methodology used in answering the research questions as well as the main results of the study. A brief discussion of policy implications in Chapter 6 concludes the report.



LITERATURE
REVIEW

Gender and time use scholars as well as feminist and labour economists have argued that the amount of time spent by women in performing household chores and care work can diminish women's viable opportunities in the labour market.¹ This could mean accepting part-time jobs with shorter hours and/or flexible hours, such as home-based, informal-sector work, even though it means lower wages and having little to no benefits. It could also mean withdrawing from or simply not participating in the labour market. Folbre (2018) points out the following:

Women's specialization in care helps explain why they remain economically vulnerable in the family, earn lower wages than men in the labor market, and find it difficult to influence public policy. Mothers earn considerably less than other women, controlling for their human capital characteristics, including experience and hours worked (Blau and Kahn 2016). But many of these control factors are themselves indirect manifestations of unequal responsibilities for care and the cultural devaluation of care work. (p. 6)²

The theory of time allocation demonstrates that there are trade-offs in the use of time by an individual on a given day. If one spends more time on caregiving, then one must reduce the time spent on other activities, such as labour market work, socializing and leisure.³ Nevertheless, the extent to which unpaid work⁴ affects a person's engagement in the labour market would also depend on other factors including the household's care needs, namely the demand for caregiving services and access to care support. The latter refers to (a) in-house care support, such as other female household members and live-in paid help; and/or (b) external care support, such as the support provided by relatives, neighbours and friends living outside the household, as well as by crèches, kindergartens, day-care centres, nursing homes and other institutional facilities. The amount of unpaid work also depends on a variety of factors, such as the sex, life-cycle stage, marital status, educational attainment, area of residence, ethnicity and health status of the individual.

Evidence of the trade-off between work and non-work activities is mixed. Some studies argue that women's massive entry into the labour force in recent decades has not been followed by a more even distribution of the responsibility for domestic chores and care between women and men.⁵

As a result, women's participation in paid work has been associated with an increased double burden, decreased leisure and lower well-being. For example, MacPhail and Dong (2007) use data

on workers in township and village enterprises (TVEs) in China to show that, holding all else constant, an increase in the number of hours spent in paid work is associated with a reduction in the hours spent in domestic work for men—but not for women. Other studies, on the other hand, indicate that while there remain marked gender gaps in paid and unpaid work in almost all countries, gender differences in the total amount of work have declined with the rise in per capita income, and an equal distribution of total work between women and men has been achieved in several high-income countries.⁶

Studies that empirically examine the effect of unpaid work on the labour supply have to overcome the problem of potential endogeneity before causality can be inferred. This is because individuals make decisions about the amount of time to spend in caregiving jointly with decisions about the time they spend in other activities, such as in the labour market.⁷ For example, a full-time employed person will have less time to spend in caregiving than a part-time employed person or someone who is not in the labour force at all. In the case of cross-sectional data, some individual and unobservable characteristics can be associated with caregiving, such as strong empathy skills, and the extent to which women and men agree with patriarchal, gender-ascribed roles. The direction of the bias is, a priori, difficult to predict; as a result, the direction of causality cannot be inferred.

To address this issue of endogeneity the decision to participate in the labour force is simultaneously estimated with the probability of providing care by using instrumental variables (IV) for identification.⁸ For example, Bolin, Lindgren and Lundborg (2008) analyse the effect on the labour market effect of providing informal care to one's elderly parent(s) using a cross-national database called the Survey of Health, Ageing, and Retirement in Europe, which contains data on approximately 22,000 Europeans over the age of 50 and their spouses. The study makes use of the characteristics of a respondent's parents, such as their age and health status, and the number of siblings of the respondents, as the IV to identify the effect of informal care.⁹ It finds that informal care reduced the probability of employment among women and men and that informal care reduced the number of hours worked when analysing women and men together.¹⁰

Another solution is to use panel data that can also reduce the bias by directly following the same individual over time and thus mitigating the effects of unobserved characteristics affecting both care choice and employment decisions. For instance, Meurs and Giddings (2021) use the longitudinal Generations and Gender Survey for Bulgaria to examine the impact of changing care demand on employment status. Using a fixed effects model to identify the impact of time-invariant unobservable characteristics of individuals on caregiving decisions, and thereby examine its effect on participation in paid work, they find "that living with an elderly or disabled person has a negative impact on participation in paid work for women, but not for men".¹¹ A study by Cortés and Pan (2020) uses the 1976–2017 Panel Study of Income Dynamics data to demonstrate that several potential explanations for the remaining gender disparities in labour market outcomes are related to the fact that children impose significantly larger penalties on the career trajectories of women than men.¹²

To date, a number of studies have used time use data to examine whether or not unpaid care work reduces women's labour supply.¹³ They apply the SUR method to estimate the trade-off between different activities that women and men engage in and examine the role of different factors that could affect the allocation. For example, a study by Solberg and Wong (1992), which is based on the 1977–1978 U.S. Family Time Use Survey data, finds that when young children are present, women's labour supply decreases and housework increases; but this is not the case for men. A study by Dong and An (2012) finds that having young children reduces paid work time and increases unpaid work time for both women and men, but it results in a greater reduction in non-work time for women than for men. With regard to the effect of marriage, they find that it decreases paid work time for women and increases paid work time for men. However, marriage increases unpaid work time for both women and men, but the increase is greater for women than for men by a wide margin. The SUR approach is useful if the data is cross-sectional and if a valid IV to correct the endogeneity problem does not exist.

A plethora of studies have also acknowledged that a significant share of caregiving activities are performed as parallel, overlapping or simultaneous.¹⁴ Their omission creates a serious bias in the measurement of the amount of time spent in caregiving: for example, the time spent in childcare tends to be underestimated. Floro and Pichetpongsa (2010), for example, show that performing two or more tasks at the same time has been an important coping mechanism among women in dealing with time pressure. The length of time in which one performs parallel care work is also an important determinant of the effect on a person's well-being. The longer the time a woman performs caregiving while also engaged in a primary activity, the greater the amount of stress she experiences.

Similarly, supervisory care is an important yet often ignored form of caregiving. While some care activities are active in the sense that they require the caregiver to pay close attention to children's behaviour or to perform basic tasks such as feeding, dressing or bathing for a person with functional difficulties, a significant amount of care takes the form of passive or 'on-call' availability.¹⁵ It makes significant temporal demands so that the amount of time spent in caregiving exceeds the amount of time spent in primary unpaid care work activities. That is, supervisory care represents a responsibility that constrains the time allocated to other tasks.¹⁶ Hence, in this report, not only are the determinants of women's and men's time allocation across primary activities being examined but also those that determine the duration of parallel and supervisory activities.

Time poverty is a serious constraint on individual well-being as it prevents having adequate rest, enjoying leisure and/or taking part in community or social life. The notion was first introduced by Claire Vickery (1977), who argued that official poverty measures do not correctly measure household needs because they neglect the importance of the labour time necessary to meet them. In other words, poverty can be assessed in terms of the lack of time as well. Vickery (1977) then developed a method for identifying households whose combined money income and available time are deemed insufficient to provide a standard of living above the poverty line. In recent years, several studies have developed different time poverty measures to identify those who work long hours out of necessity, not out of choice, such that they are deemed to be 'time-poor'.¹⁷ Bardasi and Wodon (2006), for example, defined time poverty as the lack of enough time for rest and leisure after considering the time spent performing productive and paid activities as much as on the time spent in unpaid household activities and other related activities, such as fetching water and wood.¹⁸ According to a 12-hour time poverty threshold, Gammage (2010) estimates that in 2000 in Guatemala, an average of 33 per cent of women and 14 per cent of men were time-poor. Abdourahman's cross-country comparison also showed that women are more likely to be time-poor especially in rural areas, due in large part to prevailing pa-


triarchal norms.¹⁹ The findings of Srivastava and Floro (2017) also show that women are likely to be both unemployed (or underemployed) and time-squeezed than men. Little or no access to public infrastructure and basic services such as safe water, health centres and public transport are shown to be important determinants.

Studies have also shown that persons who are time-poor are likely to cope by multitasking or performing secondary work activities in conjunction with another (primary) activity, such as childminding alongside cooking, or childcare alongside labour market work.²⁰ The multiplicity of roles that women perform, as income earners and principal housework and care providers, has led to the construction of a 'work intensity' measure.²¹ Consistent with the concept of poverty as capability deprivation, work intensity measures the time spent in doing two or more tasks at the same time or frequently switching between them within a given time slot. The longer the time an individual performs two or more simultaneous tasks, the greater the amount of stress generated from the work process, especially when the activities at hand require continued concentration or energy. While time poverty can be measured using time information on the primary activities, the collection of secondary activities is also important because women are more likely to engage in overlapping tasks. Arora's (2015) time use study in northern Mozambique, for example, finds that the daily work hours of women increase from 11.70 hours to 12.42 hours on average when parallel activities are considered, while men's total work time remains virtually unchanged (increasing from 6.42 to 6.46 hours).

The growth of women's labour force participation amid slow changes in the household division of labour has created a tremendous challenge for women to achieve a healthy balance between market and household work, on the one hand, and other important aspects of life, such as socialization and leisure, on the other.²² The challenge of finding a healthy work-life balance has brought attention to the persistent gender inequalities in society and within the household, as well as to such employment and care policies as paid family leave, labour flexibility and public investment in

childcare and long-term care (LTC) services. Using time use data collected among Thai home-based workers in Bangkok's informal settlement areas, Pichetpongsa (2004) shows how time use patterns can serve as crucial indicators of quality of life. By measuring the work intensity index using information on the length of a working day (i.e. total time spent in unpaid and paid work) and time spent in overlapped work activities, he demonstrates that the work intensity index statistically predicts the subjective well-being of the respondents as measured by their response to the question "How satisfied are you at present with your life as a whole?" What mattered for the respond-

ents' subjective well-being was not money income per se but earnings per hour. Income only brought happiness or life satisfaction to respondents only if they did not have to work very long hours to earn it. The work intensity measure also substantially explains why women have lower subjective well-being than men. Another study uses a unique data set that combines the 2009 National Thailand TUS data and the 2009 National Thailand Labor Force Survey data; it shows that married women in Thailand, especially those in rural areas, face greater challenges in balancing labour market work and unpaid domestic responsibilities than their male counterparts.²³

A large, stylized number '3' is the central graphic element. It is composed of three thick, dark blue strokes. The top stroke is horizontal, the middle stroke is diagonal, and the bottom stroke is a large curve. The number is set against a background that is split horizontally: the top half is a medium blue and the bottom half is a light green.

2020-2021 GEORGIA
TIME USE SURVEY DATA

The data used in the study derive from the 2020–2021 GTUS data set. The survey was implemented by the National Statistics Office of Georgia in 3,680 private households in Tbilisi and across 10 regions.¹ The households were selected based on a three-stage stratified cluster random sampling method. In the first stage, primary sampling units (PSUs) were selected from each region, which are census area units. In the second stage, 10 households were selected within the identified PSUs using a systematic sampling method.² Finally, all household members aged 15 and older in the selected households were included in the sample during the third stage.

The TUS includes both household and individual questionnaires in addition to a time use diary module. The household questionnaire, which was completed by an informed adult household member, collects demographic information on all members of the household, including information as to whether any member has functional difficulties. In addition, it collects information on childcare arrangements, household composition, household income, housing and assistance received by the household. The individual questionnaire collects demographic, employment, education and health information as well as time use experience on all household members aged 15 and older. The time use questionnaire collects information on the activities that each respondent engages in and how much time is spent performing each activity, using the self-administered, paper-based interview method.³ Each TUS respondent is asked about the activities that he or she is engaged in during a 24-hour period on a weekday and a weekend day. These activities, performed by each respondent aged 15 and older in the sampled household, are recorded in a 24-hour diary that has been divided into 10-minute slots.

The time use diary asks open-ended questions about the activities that the person had performed during the diary day. If this was not possible, the sampled respondents were asked to fill in the diary either the next day or a few days later. The diary also collects information on parallel activities by asking the question “What else were you doing?” as well as the context in which the activity is performed by asking the question “Were you alone or

together with somebody you know?” The respondent is thus able to report at least two activities per time slot. The contextual information allows for the estimation of an important form of caregiving that is often missed in standard time use surveys, namely supervisory care.

For this report, the data analysis focuses on a subpopulation of the household sample that excludes single-person households. Further, we include those individual respondents within the subpopulation’s 1,278 households who are of prime working age (25–62 years old), do not have any functional difficulties, are either married or unmarried, and are living in households with dependants. Dependants include children under 15 years of age and persons with functional difficulties, including frail, older persons. In addition, the 2,610 individual respondents in the subpopulation have complete diaries for a weekend day and a weekday, which are ordinary days (i.e. not holidays). This allows for the estimation of the weekly time allocation of the respondents whereby a week comprises five weekdays and two weekend days.

There are a few caveats about the GTUS data used in this report that need mentioning. First, the time use survey was collected during the COVID-19 pandemic. As a result, there are no data or information in the GTUS that would have allowed us to identify whether household members allocated their time in the usual (pre-pandemic) manner or whether their behaviour regarding the performance of labour market work and unpaid care work was influenced by COVID-19-related restrictions and by the pandemic’s impact on employment, schooling, care services and health. Therefore, the analysis may have yielded unexpected results due to the possible effect of the pandemic on the time spent in various activities. For example, the time spent in caring for children at home may be higher and the use of or access to outside care services lower compared to the pre-pandemic period because schools and day-care centres were closed. It may also be the case that the labour force status of respondents may have changed or that they had been working remotely due to COVID-19-related guidelines, enabling them to multitask.

Second, we aggregated the nine categories of activity into four broader groups to conduct the empirical analysis using regression methods. Guided by the 2016 International Classification of Activities for Time Use Statistics (ICATUS) and the Harmonised European Time Use Survey (HETUS) method, we first distinguished productive (work) and non-productive (personal) activity by defining productive activity as an activity that, conceptually speaking, one could pay someone else to do.⁴ We next divided productive activities into those that would or would not be included in the calculation of GDP based on the System of National Accounts (SNA). The SNA includes in its calculation all production of goods, regardless of whether the goods are sold on the market or not, but it includes only the services that are performed for the purpose of generating income. Thus, the activities in categories 1 and 2 (employment and related activities; production of goods for final use) that are included in the GDP calculation are classified as labour market work. The activities in categories 3, 4 and 5 (unpaid domestic services; unpaid care services for household and family members; unpaid volunteer, trainee and other unpaid work), which are excluded from the SNA, are classified as total unpaid work. The activities in categories 6, 7 and 8 (learning, socializing, community participation, etc.; culture, leisure, mass media, sports) are classified as free-time activities. Category 9 (self-care and maintenance) serves as the fourth group.

Our empirical analysis makes use of sampling weights when computing regression coefficient






estimates to compensate for certain aspects of the sampling and data-collection process. The GTUS is based on a stratified random sampling method, whereby some demographic groups may have been undersampled due to a high non-response rate caused by the COVID-19 pandemic. The weights ensure that each group is correctly represented in the population.

Sample characteristics

Tables 3.1 and 3.2 present the household and individual characteristics of the unweighted sample data.⁵ Table 3.1 indicates that more than two thirds of the households in the sample (69.6 per cent) have a householder and a spouse or unmarried partner—referred to as a ‘couple household’—and have dependants and/or non-dependants. About 18 per cent of couple households have dependants only, while 10.2 per cent have no dependants. Many of the sampled households (53.8 per cent) have children aged 0–14 years old, while 35.8 per cent have a person or persons with functional difficulties (including frail, older persons and sick or disabled individuals). The average household size is 4.2 with a mean dependency ratio of 0.58. Nearly two thirds of the households live in urban areas, of which 33.7 per cent live in the capital, Tbilisi. The other 34 per cent reside in the rural areas. Of the households with children under 15 years of age, 12.8 per cent receive some form of childcare assistance or support, of which the majority (10.6 per cent) are looked after in a public institution.

TABLE 3.1

Selected characteristics of sample households, unweighted (n = 1,278)

Characteristics	Number of households	Percentage of total
 Household type		
Single-parent household with dependants	15	1.17
Couples with no dependants	130	10.17
Couples with dependants only ^a	227	17.76
Couples with dependants and non-dependants ^b	890	69.64
Other households with dependants	16	1.25
 Household composition ^c		
Households with able adults only	328	25.67
Households with children aged 0–4 only	285	22.30
Households with children aged 0–14	688	53.83
Households with frail, elderly, sick or disabled members	458	35.84
 Net monthly income ^d		
GEL < 400	117	9.15
GEL 400–670	259	20.27
GEL 671–1,000	360	28.17
GEL 1,000–1,550	242	18.94
GEL > 1,550	232	18.15
Data unavailable	68	5.32
 Location of residence		
Tbilisi	431	33.72
Other urban area	412	32.24
Rural area	435	34.04
 Households with children under 15 years of age receiving childcare assistance		
Looked after in a public institution	135	10.56
Looked after in a private institution	10	0.78
Looked after by a private person	27	2.11
Total ^e	164	12.83

Source: 2022 Georgia Time Use Survey.






- ^a All children under the age of 18 and disabled/elderly household members are considered dependants.
- ^b This category includes households consisting of an able-bodied relative (e.g. aunt, uncle, grandmother, grandfather, brother, sister, etc.) and dependant(s).
- ^c The total exceeds 1,278 because some households belong to two household composition categories.
- ^d As of 1 October 2021, GEL 1 = USD 0.319.
- ^e The total includes households that use more than one type of childcare assistance.

Table 3.2 indicates that women and men comprise 44 per cent and 55.4 per cent, respectively, of the sample, the majority of whom (81.6 per cent) are married. The sample is almost evenly distributed across the four age groups between 25 and 62 years old. About a third (36 per cent) of the women and men in the sample have attained higher educational qualifications. The majority (60.7 per cent) have received at least upper secondary ed-

ucation or vocational and professional training. Women are more educated than men. For the most part, 89.1 per cent of the sampled respondents are Georgian; the second and third largest ethnic groups are Azerbaijani (5.10 per cent) and Armenian (3.2 per cent); and the rest of the sample (2.6 per cent) includes Abkhazians, Ossetians, Russians and other minority groups.

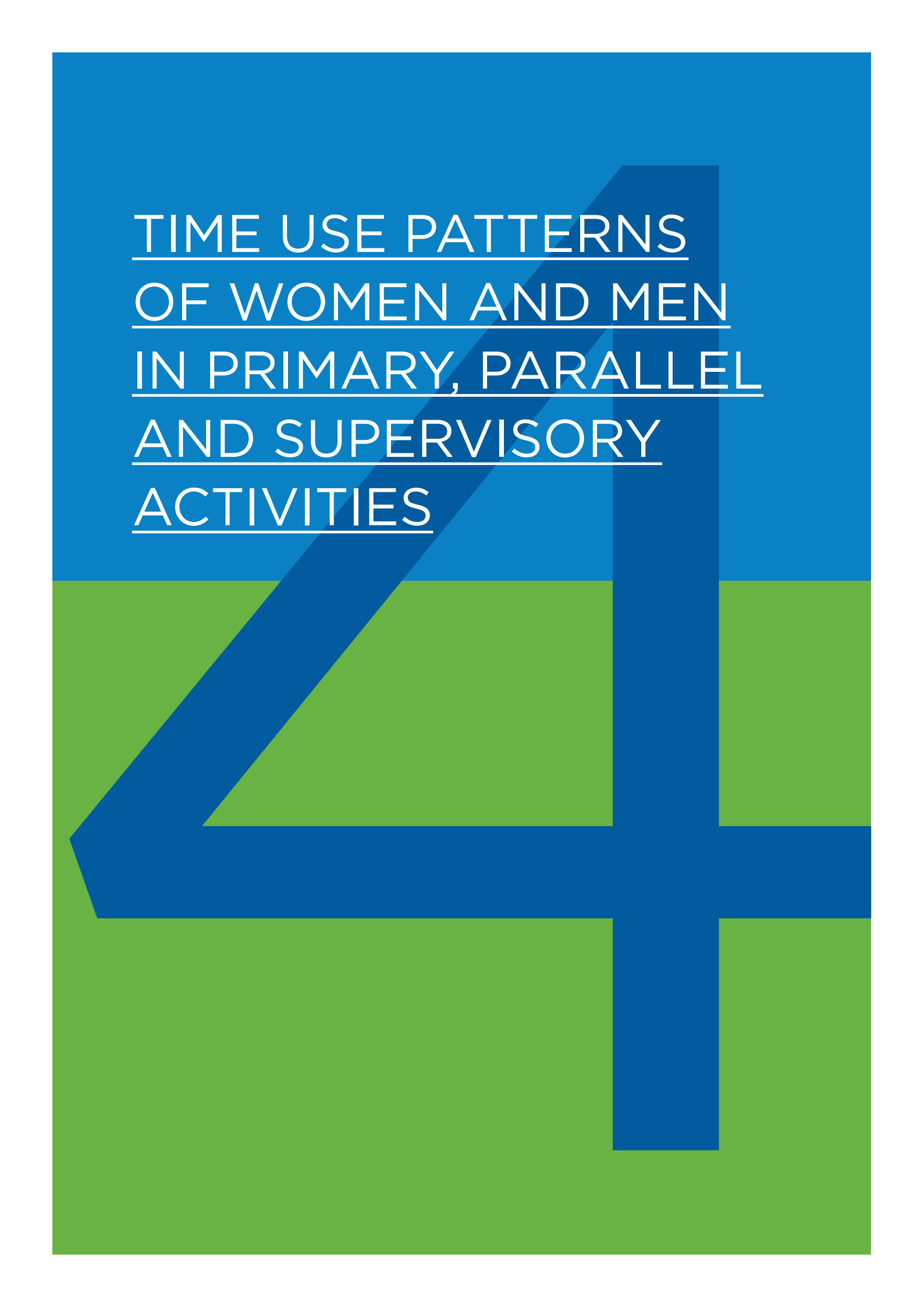
TABLE 3.2
Selected characteristics of sample respondents, unweighted (n = 2,610)

	All		Women		Men	
	Number	Percentage of total	Number	Percentage of total	Number	Percentage of total
♀♂ Sex						
Female	1,163	44.56	n/a	n/a	n/a	n/a
Male	1,447	55.44	n/a	n/a	n/a	n/a
👪 Marital status						
Married	2,129	81.57	1,158	80.03	971	83.49
Not married	481	18.43	289	19.97	192	16.51
👤 Age (mean = 43.967)						
25–34 years	622	23.83	350	24.19	272	23.39
35–44 years	727	27.85	403	27.85	324	27.86
45–54 years	704	26.97	389	26.88	315	27.09
55–62 years	557	21.34	305	21.08	252	21.67

 Education level						
No education or pre-primary education	1	0.04	–	–	1	0.09
Primary education or lower secondary education	75	2.87	38	2.63	37	3.18
Upper secondary education	1,062	40.69	509	35.18	553	47.55
Vocational/professional training	522	20.00	333	23.01	189	16.25
Higher education	950	36.40	567	39.18	383	32.93
 Ethnicity						
Georgian	2,326	89.12	1,293	89.36	1,033	88.82
Abkhazian	1	0.04	–	–	1	0.09
Armenian	84	3.22	49	3.39	35	3.01
Azerbaijani	133	5.10	67	4.63	66	5.67
Ossetian	26	1.00	15	1.04	11	0.95
Russian	9	0.34	8	0.55	1	0.09
Other	31	1.19	15	1.04	16	1.38
 Health status						
Have long-standing illness	256	9.81	153	10.57	103	8.86
 Labour force status						
Employed full-time	980	37.55	480	33.17	500	42.99
Employed part-time	512	19.62	206	14.24	306	26.31
Unemployed	334	12.80	168	11.61	166	14.27
Not in the labour force	784	30.04	593	40.98	191	16.42
 Time pressure						
Always feel rushed	944	36.17	585	40.43	359	30.87
Sometimes feel rushed	1,180	45.21	634	43.81	546	46.95
Almost never feel rushed	486	18.62	228	15.76	258	22.18

The majority (41 per cent) of women in the sample are not in the labour force, compared to 16.42 per cent of men. The majority (43 per cent) of male respondents, on the other hand, work full-time. However, the unemployment rate among men is higher than that among women (14.3 per cent versus 11.6 per cent). In terms of time pressure,

a greater proportion (40.4 per cent) of women reported that they always feel rushed, compared to 30.9 per cent of men. On the other hand, more than a fifth of men (22.2 per cent) reported that they are almost never rushed, compared to 15.8 per cent of women.



TIME USE PATTERNS
OF WOMEN AND MEN
IN PRIMARY, PARALLEL
AND SUPERVISORY
ACTIVITIES

The time use patterns of the men and women presented in this report consider all activities reported in their diaries. They include not only primary activities but also those that are performed as a parallel activity, as well as supervisory care provided by the respondent. Parallel activities refer to those activities performed simultaneously or alongside another (primary) activity. For example, a male respondent is watching television (parallel activity) while eating (primary activity), or a mother is watching her children (parallel activity) while cooking (primary activity).

Supervisory care is a distinct form of caregiving that is often neglected or omitted in the design of time use surveys. While some childcare work or caring for a sick, disabled or frail older person is active—that is, it requires the caregiver to pay close attention when giving assistance—a significant amount of care work takes the form of passive or ‘on-call’ availability. This is referred to in the literature as supervisory care.¹ That is, it represents a responsibility that constrains the time allocated to other tasks.²

The 2021 GTUS time use diary module includes a ‘with whom’ question for each main activity reported in each time slot, which enables the estimation of supervisory care. The array of responses to this question helps identify the household member who is with the respondent during the activity. When combined with the information on the respondent’s relationship to the different members in the household roster and the physical and mental functionality of that member, one can establish whether the household member in question is likely to need supervisory care. The

estimation of supervisory care time in this report involves a few steps. First, it considers the contextual information that accompanies each primary activity time slot in order to determine whether or not a dependant is present while the respondent is performing the primary activity. It also takes into account whether or not another able-bodied adult is present who can be ‘on call’ or supervise the dependant. Next, we estimate the time spent in supervisory care by adding the time spent by the respondent in primary activities whenever any one of the following circumstances is true:

- 1 The response to the ‘with whom’ question is ‘children (up to the age of 10)’, and there is no other household member present.
- 2 The response to the ‘with whom’ question is ‘partner’ or ‘parent’, this member has functional difficulties, and there is no other household member present.
- 3 The response to the ‘with whom’ question is ‘other household member’, his or her state of functionality can be established, and there is no able-bodied partner, parent or other household member present.

In using the procedure described above, the problem of overestimating supervisory care, which typically arises with the ‘with whom’ variable, is minimized or avoided altogether. It ascertains that the respondent is together with the dependant while performing a primary activity and that there are no other able-bodied adults present who can share the responsibility for supervising or being on call.³

Table 4.1 presents the participation rates and weekly time spent by women and men in primary, parallel and supervisory care activities. T-tests were conducted to examine the statistical significance in gender differences, the results of which are also reported in the table. Accounting for the time allocated to primary and secondary activities, the results show a pattern consistent with the finding of the UN Women Country Gender Equality Profile of Georgia (2021) and other time use studies. Men spend the largest part of their waking hours in labour market work, while women's time is spent largely on domestic work, caregiving and the household shopping. Table 4.1 shows that

women engage in primary labour market work activities to a lesser extent than men, both in terms of participation rate (62.1 per cent versus 84.2 per cent) and average time spent. Participating men on average spend 50.5 hours on labour market work, compared to participating women's weekly average of 36.5 hours. Most women (97.2 per cent) and more than half of men (53.5 per cent) perform domestic chores as a primary activity. It is interesting to note, however, that nearly 12 times more women (7.3 per cent) than men (0.6 per cent) perform additional domestic chores as a parallel or overlapping activity.

TABLE 4.1
Participation rates and average weekly time (hours per week) spent in primary, parallel and supervisory care activities of respondents, by sex

	👩 Women		👨 Men	
	Participation rate ^a (percentage)	Mean duration ^b (hours)	Participation rate ^a (percentage)	Mean duration ^b (hours)
I. Primary activities				
1 Labour market work	62.1	36.5	84.2***	50.5***
a. Employment-related	41.1	43.9	66.5***	53.3***
b. Production for own use	31.9	14.4	35.1*	20.4***
2 Unpaid work	98.3	38.4	70.2***	11.5***
a. Unpaid domestic services for household	97.2	28.4	53.5***	8.5***
b. Unpaid caregiving for household	50.9	18.3	32.5***	7.3***
c. Unpaid volunteer work	17.1	3.3	16.3	6.3***
3 Learning	1.2	17.1	0.9	12.9
4 Free time	99.2	29.0	99.7*	38.3***
a. Socializing, community participation, etc.	74.8	10.4	72.9	14.0***
b. Leisure	97.2	21.6	98.9***	28.3***
5 Self-care	100.0	78.9	100.0	79.2

II. Parallel activities				
① Labour market work	8.0	3.5	16.0***	3.8
a. Employment-related	7.1	3.5	15.7***	3.7
b. Production for own use	1.0	3.4	0.3**	9**
② Unpaid work	11.0	4.2	1.0***	4.2
a. Unpaid domestic services for household	7.3	3.2	0.6***	4.1
b. Unpaid caregiving for household	4.5	4.8	0.4***	4.4
c. Unpaid volunteer work	0.1	7	0	–
③ Learning	0	–	0	–
④ Free time	78.0	14.7	73.2***	13***
a. Socializing, community participation, etc.	47.1	5.9	44.3	6.4
b. Leisure	65.4	13.3	58.5***	11.4***
⑤ Self-care	30.0	2.4	22.9***	2.8*
III. Supervisory care (while performing the following primary activities) ^c				
① Work (labour market work and unpaid work)	49.5	13.9	16.4***	6.5***
a. Labour market work	2.5	8.2	3.3	7.5
b. Unpaid work	49.3	13.6	13.8***	5.9***
② Study	0.1	6.3	0.4	5.2
③ Leisure	56.7	18.4	50.6***	16.4**
Any primary activity	61.0	28.4	52.0***	18.1***

Note: Female-male difference different from 0 at: *** 1 per cent level, ** 5 per cent level and * 10 per cent level.

^a The percentage of women and men in the total sample who have performed at least 10 minutes of primary, parallel or supervisory care activities in a one-week period.

^b The mean time spent by individuals who performed at least 10 minutes of primary, parallel or supervisory care activities in a one-week period.

^c Supervisory care is estimated for all types of primary or parallel activities except for unpaid caregiving. This is to avoid double counting.

Table 4.1 also shows that direct care is another activity that reveals gender differences. Whether as a primary or parallel activity, women have a much higher participation rate than men (50.9 per cent and 4.5 per cent, respectively, in primary unpaid caregiving; and 32.5 per cent and 0.4 per cent, respectively, in parallel unpaid caregiving). The amount of time women spend on primary direct care per week—on average 18.3 hours—is substantially greater than that of men (7.3 hours on average). With regard to parallel direct care activities, participating women and men reported an average of 4.8 and 4.4 hours per week, respectively. Both women and men participate in unpaid voluntary work, with men spending nearly double the weekly time spent by women (6.3 hours versus 3.3 hours, respectively). Women allocate less time than men (21.6 hours versus 28.3 hours) with respect to primary free-time activities. However, a greater proportion of women spend their free time in the form of parallel activities, compared to men (78 per cent versus 73.3 per cent). This suggests that much of women’s free time involves performing other activities, such as minding their children while visiting a friend or walking to the park.

The time spent by women and men in supervisory care while performing primary activities is also

presented in Table 4.1. These care activities are classified according to the type of primary activity being performed when the dependent person is present. The estimates show that a greater proportion of women provide supervisory care while doing primary work activities, which are mostly another unpaid work activity, compared to men (49.5 per cent versus 16.4 per cent). Another striking observation is that women who provide at least 10 minutes of supervisory care spend on average 28.4 hours per week on it, while men spend about 18.1 hours per week. Women spend twice as much time on supervisory care as men do (13.9 hours versus 6.5 hours per week on average) while being engaged in labour market and unpaid work activities. In terms of supervisory care performed during free-time activities, such as watching television or visiting relatives or friends, women and men spend on average 18.4 hours and 16.4 hours per week on it, respectively.

The above results suggest that supervisory care activities, especially for women, are not trivial. When such activities are omitted from time use data analyses, the amount of unpaid labour used in caregiving is underestimated. In the chapter that follows, we explore the varied factors that may influence individuals’ decisions to overlap activities.

A large, stylized number '5' is the central graphic. It is composed of a dark blue outline and a lighter blue fill. The top horizontal bar is a solid dark blue rectangle. The vertical stem is a dark blue shape that tapers slightly towards the bottom. The bottom curve is a thick, dark blue arc. The background is split horizontally: the top half is a solid blue color, and the bottom half is a solid green color.

EMPIRICAL ANALYSIS

Using the 2020–2021 GTUS data, this chapter employs several data analytical techniques to address the following research questions:

- 1 Is there a relationship between labour force participation and the amount of unpaid domestic and care work performed by women and men?
- 2 What determines the amount of labour market work time, unpaid work time and leisure/social time spent by women and men? Of particular interest is the manner in which time allocation is influenced by the care needs of children as well as of persons with functional difficulties.
- 3 Who is likely to be time-poor? Are women more likely than men to be time-poor and to have a poor work-life balance?

This chapter comprises four sections. The first section examines the relationship between caregiving and labour force participation using a probit analysis. In the second section, the analysis examines the determinants of women’s and men’s time use patterns using SUR and tobit analyses. The third section focuses on answering the question of whether women are more time-poor than men using the concepts of time poverty and work-life balance, and the final section examines whether time poverty is associated with a respondent’s experience of ‘feeling rushed’.

5.1 RELATIONSHIP BETWEEN CAREGIVING AND LABOUR FORCE PARTICIPATION

We used a probit regression analysis to examine whether or not the caregiving role of a working-age respondent may be associated with the probability of participating in the labour force.¹ We adopted two definitions of a caregiver: *caregiver1* refers to a respondent who has performed at least two hours (120 minutes) of primary care work per day.² *Caregiver2* refers to a respondent who has performed at least 3.3 hours (200 minutes) of primary and parallel unpaid work (i.e. both primary care work and domestic chores) per day.³ The dependent variable in the probit model identifies whether a respondent is in the labour force based on the response to the following GTUS self-declared labour status question: “Nowadays, which one of the following groups do you mainly consider yourself in?” We used a number of individual and household characteristics that may indicate a person’s likelihood of labour force participation, such as sex, whether the person is a caregiver, an interaction variable (sex*caregiver dummy), life-cycle stage (represented by the age and age-squared of the individual), marital status, education level, ethnicity, location of residence, and health status (proxied by whether or not the

individual has a long-standing illness). In the empirical analysis that follows, we frame our discussion around the first three variables of interest: sex, caregiver status and the interaction variable (sex*caregiver dummy).

The probit regression results are given in Table 5.1. Using the *caregiver1* definition (respondents who provided at least two hours of unpaid caregiving per day), the marginal effects in Model 1 suggest that, all else being equal, respondents are less likely to participate in the labour force if they are female, are in the later stage of the life cycle, live in rural areas or are in poor health; these results are statistically significant at the 1 per cent level. The interpretation of the marginal effects of the interaction term requires the performance of a t-test.⁴ The results suggest that women have a 33.3 per cent lower probability of participating in the labour force than men. However, women who are caregivers have an even lower probability—about 58.4 per cent below that of non-caregivers, which is consistent with our findings in the descriptive statistics in Table 4.1.

TABLE 5.1

Probit marginal effects: Probability of labour force participation and caregiving

	Caregiver1 definition	
	Model 1 (at least 2 hours per day of unpaid caregiving)	Model 2 (at least 3.3 hours per day of unpaid caregiving and domestic work)
Female	-0.3332*** (0.0367)	-0.0069 (0.0514)
Caregiver	-0.1516 (0.1310)	-0.1684* (0.0875)
Female*Caregiver ^a	-0.2518* (0.1373)	-0.4135*** (0.1012)
Age	0.0357*** (0.0133)	0.0502*** (0.0132)
Age squared	-0.0005*** (0.0002)	-0.0006*** (0.0002)
Married	-0.0529 (0.0419)	-0.0280 (0.0416)
Educ=Upper secondary	-0.1179 (0.0876)	-0.1314 (0.0885)
Educ=Vocational/professional	-0.0016 (0.0923)	-0.0102 (0.0932)
Educ=Higher educ	0.1445 (0.0912)	0.1223 (0.0915)
Ethnic=Azerbaijani	0.0949 (0.0677)	0.1373* (0.0715)
Ethnic=Armenian	0.1208 (0.0835)	0.1660** (0.0845)
Ethnic=Other	-0.1246 (0.0978)	-0.1252 (0.0924)
Domain=Other urban	-0.0265 (0.0412)	-0.0282 (0.0412)
Domain=Rural	-0.1240*** (0.0415)	-0.1103*** (0.0411)

Long-standing illness	-0.1692*** (0.0498)	-0.1679*** (0.0498)
N	2,610	2,610

Notes:

^a This is an interaction variable for the sex and caregiving dummy.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Dependent variable: whether or not in the labour force. Omitted dummy variable categories: Educ=lower sec or below; Ethnic=Georgian; Domain=Tbilisi.

See Annex 1 for probit coefficient estimates.

Using the definition of caregiver as one who has performed at least 3.3 hours (200 minutes) of primary and parallel unpaid work (i.e. both primary care work and domestic chores) per day, Model 2 shows similar results. Under this broader definition of care work that also includes indirect care (domestic chores), Table 5.1 shows that regardless of sex, caregivers who provide at least 3.3 hours (200 minutes) of direct care work and domestic chores a day are 16.8 per cent less likely to participate in the labour force, compared to those who

do unpaid work for less than 200 minutes per day, although this is statistically significant at the 10 per cent level. The probability of participating in the labour force declines even more—about 68.2 per cent lower (a decline of an additional 41.3 per cent)—if the individual is a female caregiver.

In both models, we find that the probability of being in the labour force declines when the respondent is in the later stage of the life cycle, lives in a rural area or has a long-standing illness.

5.2 DETERMINANTS OF WOMEN'S AND MEN'S TIME USE PATTERNS

In this section, we address the following question: how does the time use of women and men vary with their demographic and socioeconomic characteristics? Answers to this question can shed light on whether women and men in Georgia have the same degree of flexibility to trade off one type of activity for another. In the study, we examined the effect of care needs as proxied by the following indicators: (a) the presence of children under the age of 10; (b) the presence of older children aged 10–17; and (c) having a household member with functional difficulties. We also analysed the potential effect of access to care support, whether in-house or external, and use the following proxy indicators: (a) the presence of other able-bodied women and girls aged 15–74; (b) access to help from other persons or care services provided to children under 10 years of age by a crèche, kindergarten or other external source;⁵ and (c) care for the sick and elderly.⁶ The analysis makes use of the SUR method, whereby the time allocated to different primary activities is determined by the same set of explanatory variables and are estimated jointly as a system.⁷ This is the appropriate regression method since the time spent by an individual on labour market work, unpaid work and non-work activities in a specified time period, such as a day or a week, are interdependent.

We conducted SUR analyses separately for female and male respondents. As in the probit model in the preceding section, the variables of interest in the SUR model are the care need proxy variables and the proxies for access to in-house and external care support. We included in the analysis other individual and household characteristics that may determine the time allocation of female and male respondents, such as life-cycle stage (age and age-squared), marital status (married dummy variable), education level (dummy variables), ethnicity

(dummy variables), spouse's employment (spouse employed dummy variable), and respondent's health status (long-standing illness dummy variable).







We tested three variations of the SUR model: Sample A uses the entire household subsample; Sample B includes respondents only in households with young children under the age of 5; and Sample C includes respondents only in households with person(s) with functional difficulties. In the Sample B model, we used the same independent variables as in the Sample A model but added a dummy variable to consider whether or not children under the age of 10 are looked after (i.e. the household has access to a crèche and other forms of external childcare services). In the Sample C model, we added a dummy variable indicating whether or not the household has access to external care support or help to care for sick and frail older persons.

Table 5.2 presents the SUR estimates differentiated by sex and type of household. In other words, the regressions estimate the gender differences in time allocation and explore the differences between men and women, holding all else constant. The SUR estimates for Sample A indicate that, all else being equal, working-age women in households with childcare needs (i.e. presence of children under the age of 10) spent 5.6 fewer hours (338.6 minutes) on labour market work each week on average, 11.2 more hours (674.2 minutes) on unpaid work and 3.6 fewer hours (220 minutes) on free-time activities than women in households with no children under the age of 10; these results are statistically significant at the 1 and 5 per cent levels. In addition, other care needs, such as those of older children aged 10–17 and persons with functional difficulties, increase women's weekly

time in unpaid work by 2.2 hours (135.4 minutes) and 2.8 hours (171.1 minutes) on average, respectively. These estimates are in line with the proposition that women's ability to substitute one type of work for another is more limited in the presence of care needs. Figure 5.1 presents the kernel density

distribution of the weekly total unpaid work time (spent on both caregiving and domestic work) of women and men in all households sampled (Sample A).

TABLE 5.2
Marginal effects of selected characteristics on three time use activities in minutes per week (per cent change in parentheses), by sex and household type

	Sample A (all households)		Sample B (households with children under 5 years of age)		Sample C (households with person(s) with functional difficulties)	
	 Women	 Men	 Women	 Men	 Women	 Men
A. Labour market work						
1 Care need proxies						
Presence of children under 10 years old	-339 minutes*** (-28.1%)	NS	NS	NS	NS	NS
Presence of children 5–9 years old	NS	NS	NS	NS	NS	NS
Presence of children 10–17 years old	NS	NS	NS	NS	-338 minutes** (-27.9%)	NS
Presence of person with functional difficulties	NS	NS	NS	-382 minutes* (-15.1%)	NS	NS
2 Access to care support proxies						
Children under 10 years old looked after ^a	NS	NS	NS	NS	NS	NS
Other able women 15–74 years old in household	205 minutes** (17.0%)	NS	NS	NS	264 minutes* (21.7%)	NS
3 Individual and household characteristics						
Married	NS	339 minutes** (13.7%)	-559 minutes** (-65.6%)	NS	405 minutes** (33.4%)	NS

Spouse employed	NS	NS	NS	NS	NS	714 minutes*** (31.6%)
Ethnicity=Azerbaijani	NS	NS	NS	NS	NS	NS
Ethnicity=Armenian	NS	NS	NS	NS	NS	NS
Ethnicity=Other	NS	NS	NS	NS	-904 minutes** (-74.5%)	NS
Domain=Other urban	NS	-387 minutes*** (-15.6%)	NS	NS	NS	NS
Domain=Rural	NS	NS	NS	NS	NS	NS
B. Unpaid work						
1 Care need proxies						
Presence of children under 10 years old	674 minutes*** (30.5%)	170 minutes*** (39.0%)	NS	NS	753 minutes** (33.4%)	203 minutes** (51.5%)
Presence of children 5–9 years old	NS	NS	330 minutes** (12.6%)	NS	NS	NS
Presence of children 10–17 years old	135 minutes** (6.1%)	-38 minutes (-8.7%)	108 minutes (4.1%)	38 minutes (8.2%)	327 minutes** (14.6%)	-87 minutes (-22.1%)
Presence of person with functional difficulties	171 minutes** (7.7%)	58 minutes (13.4%)	-46 minutes (-1.8%)	90 minutes (19.3%)	NS	NS
2 Access to care support proxies						
Children under 10 years old looked after ^b	NS	NS	-237 minutes* (-9.1%)	NS	NS	NS
Other able women 15–74 years old in household	-390 minutes*** (-17.6%)	-449 minutes*** (-103.0%)	NS	-544 minutes** (-116.2%)	-584 minutes*** (-26.0%)	-300 minutes*** (-76.2%)
3 Individual and household characteristics						
Married	283 minutes*** (12.8%)	136 minutes** (31.2%)	595 minutes*** (22.8%)	320 minutes*** (68.2%)	NS	NS
Spouse employed	166 minutes** (7.5%)	NS	266 minutes* (10.2%)	NS	NS	NS
Ethnicity=Azerbaijani	525 minutes*** (23.7%)	-220 minutes*** (-50.3%)	22 minutes (0.9%)	-239 minutes* (-50.9%)	NS	NS

Ethnicity=Armenian	NS	NS	NS	NS	NS	NS
Ethnicity=Other	542 minutes*** (24.5%)	NS	1,076 minutes* (41.2%)	NS	1,203 minutes*** (53.4%)	NS
Domain=Other urban	-186 minutes** (-8.4%)	NS	-277 minutes* (-10.6%)	-194 minutes** (-41.5%)	NS	NS
Domain=Rural	NS	NS	-372 minutes** (-14.2%)	NS	NS	NS

C. Free time

1 Care need proxies

Presence of children under 10 years old	-220 minutes*** (-13.0%)	-317 minutes*** (-14.0%)	NS	NS	-487 minutes*** (-30.2%)	NS
Presence of children 5–9 years old	NS	NS	NS	-308 minutes** (-15.3%)	NS	NS
Presence of children 10–17 years old	NS	NS	NS	NS	NS	NS
Presence of person with functional difficulties	NS	NS	-309 minutes*** (-21.6%)	280 minutes* (13.9%)	NS	NS

2 Access to care support proxies

Children under 10 years old looked after ^a	-141 minutes* (-8.4%)	NS	NS	NS	NS	NS
Other able women 15–74 years old in household	100 minutes* (5.9%)	NS	228 minutes** (15.9%)	NS	NS	NS

3 Individual and household characteristics

Married	-149 minutes** (-8.8%)	-379 minutes*** (-16.7%)	NS	NS	-330 minutes*** (-4.4%)	NS
Spouse employed	-106 minutes* (-6.3%)	NS	-339 minutes*** (-23.7%)	NS	NS	-483 minutes*** (-20.3%)
Ethnicity=Azerbaijani	NS	NS	NS	NS	NS	NS
Ethnicity=Armenian	NS	NS	NS	NS	NS	NS
Ethnicity=Other	NS	NS	NS	NS	NS	NS

Domain=Other urban	NS	203 minutes** (8.9%)	NS	383 minutes** (19.0%)	NS	NS
Domain=Rural	NS	NS	NS	344 minutes* (17.1%)	NS	NS

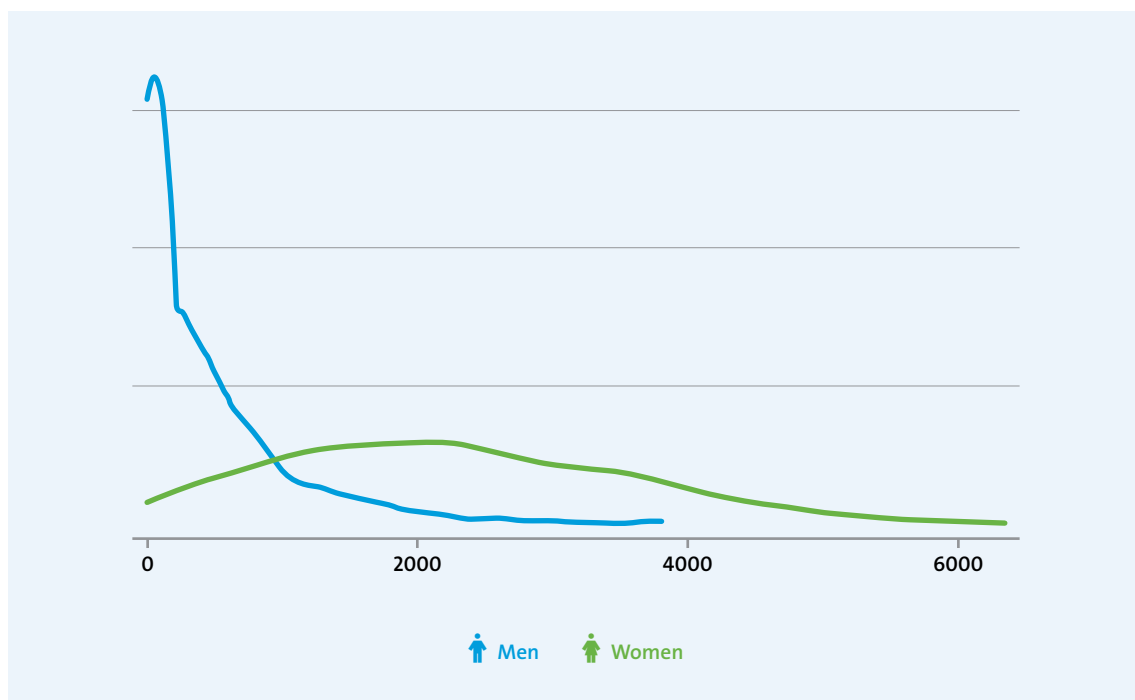
Abbreviation: NS, not statistically significant.

Notes:

- ^a Dummy variable if the response is 'yes' to Question H03 in the GTUS: "Do any of your children under 10 years of age attend a kindergarten or a crèche, or are they being looked after on a long-term basis by other persons (not belonging to your household) or by other institutions?"
- ^b Dummy variable if the response is 'yes' to Question H8.3 in the GTUS: "Did you or any other member of your household receive help in domestic services from a private person who is not a member of your household at any time during the past four weeks?"

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Full estimation results are reported in Annex 2.

FIGURE 5.1
Kernel density of weekly total unpaid work time (caregiving and domestic work) for primary activities in all households sampled (Sample A)



Women also spend 4.72 more hours (283.2 minutes) in unpaid work per week on average if they are married, 2.8 more hours (165.9 minutes) if they have an employed spouse, 8.7 more hours (524.3 minutes) if they are Azerbaijani and 3.1 fewer hours (102 minutes) per week on average if they live in rural areas and in urban areas other than

Tbilisi. Women in households with children under the age of 10 appear to make up for having more hours of unpaid work by spending fewer hours in labour market work and by reducing their free time, compared to women in households with no care needs.

Men's time in labour market work, on the other hand, is not affected by the presence of any care needs; rather, they spend 5.6 more hours (338.9 minutes) if they are married, 6.4 fewer hours if they live in other urban areas and 8.9 fewer hours (531.8 minutes) if they are in poor health. However, men's time in unpaid work increases by 2.8 hours (170.6 minutes) per week on average if they live in households with children under the age of 10, increases by 3.1 hours (181.3 minutes) if they have a higher level of education and substantially declines by 3.6 hours (219.5 minutes) if they are Azerbaijani. Men in households with children under the age of 10 appear to make up for having more hours of unpaid work by reducing their free time. The significant female-male gap in unpaid work time among Azerbaijani women and men suggests the strength of patriarchal norms in certain cultures.

These results indicate that while the care needs of children under the age of 10 increase both women's and men's weekly unpaid work time, the increase for women is nearly four times greater than the increase for men—11.2 hours (674.2 minutes) versus 2.8 hours (170.5 minutes) on average. Moreover, the care needs of older children (aged 10–17) and that of persons with functional difficulties only increase women's weekly unpaid work time, not that of men. These results confirm that women in Georgia shoulder most of the care responsibilities in their households.

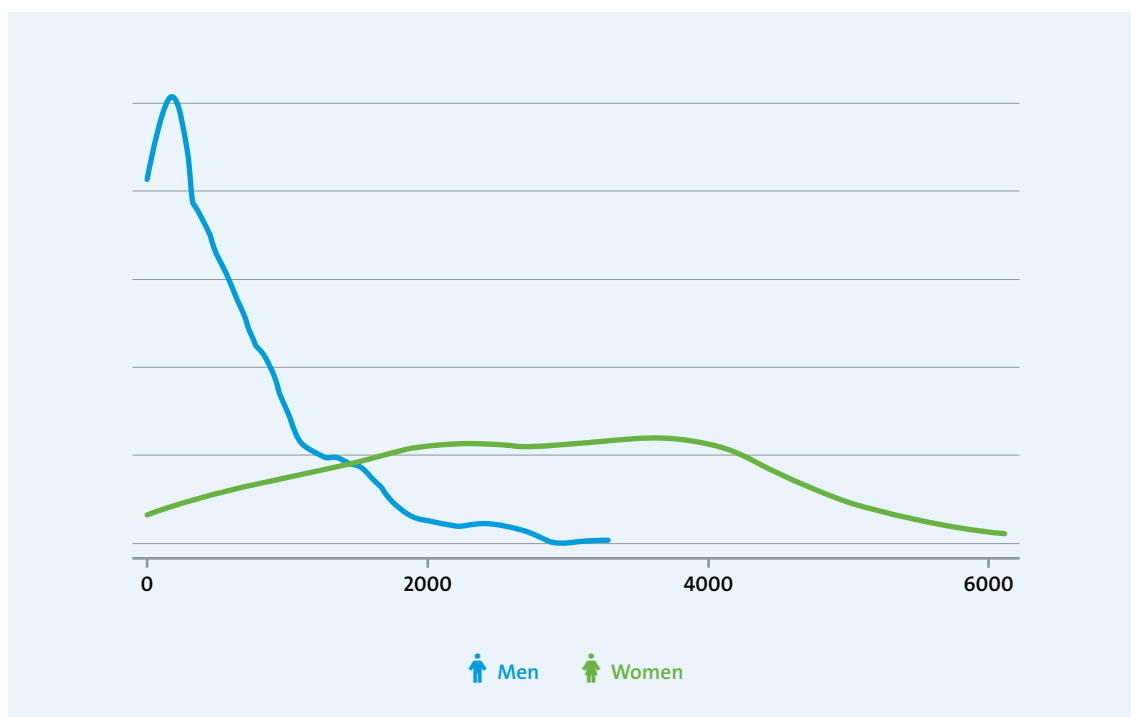
The presence of in-house caregiving support provided by other able-bodied women in the household increases women's weekly labour market work time by 3.4 hours (204.7 minutes) on average. Access to external care support, however, does not have any statistically significant effect. A possible explanation for this is that the time use survey data collection period coincided with the first 15 months of the COVID-19 pandemic. The pandemic led to restrictions and even lockdowns across Georgia, especially in the early months of the pandemic, and closed some childcare services, crèches and kindergarten for a certain period,

making it difficult for households to use outside care services or assistance. It is not surprising, therefore, that in-house care support has a strong impact on women's and men's time allocation. It reduces both men's and women's weekly unpaid work by 7.5 hours (449.5 minutes) and 6.5 hours (389.53 minutes), respectively, and it increases women's weekly time for socializing and leisure by nearly 1.7 hours (100 minutes). Access to external care support, as proxied by the 'children under the age of 10 who are looked after' variable, negatively affects women's free time by 2.4 hours (141.4 minutes). This unexpected result may be due to the temporary (or permanent) closure of some crèches or kindergarten due to the COVID-19 pandemic. This, and the fact that socializing and outside leisure activities may have been curtailed during the pandemic, may explain why women reallocate their time for social and leisure activities towards spending time with children who are unable to attend crèches or kindergarten or who need help in attending online classes.

Columns 4 and 5 in Table 5.2 provide the SUR coefficient estimates for women and men in the subsample of households with young childcare needs (Sample B). The heavy demand for caregiving in these households brought about by the presence of children under the age of 5 appears to dominate all other care needs so that the latter do not seem to affect both women's and men's weekly labour market work time. Being married and having young children, on the other hand, reduces women's weekly labour market work time by 9.3 hours (559.1 minutes) on average. This is in line with the 'motherhood penalty' in terms of the disadvantages and hurdles that mothers typically face in the labour market, such as lower pay as well as hiring and promotion discrimination.⁸ Figure 5.2 presents the kernel density distribution of the weekly total unpaid work time (spent on both caregiving and domestic work) of women and men in Sample B.

FIGURE 5.2

Kernel density of weekly total unpaid work time (caregiving and domestic work) for primary activities in households with children under 5 years of age (Sample B)



Access to care support, whether in-house or provided by external care services or help, also does not have any effect on time spent in labour market work, with one exception. The presence of person(s) with functional difficulties seems to reduce men's weekly time in unpaid work by 6.4 hours (382.8 minutes). Interestingly, the presence of other able-bodied women or in-house care support reduces men's weekly unpaid work time but not that of women in households with young children. In other words, men in these households do fewer domestic chores and less care work when other able-bodied women are present. As expected, marriage increases the unpaid care work time for both women and men in households with young children, but the increase is greater for women than for men by a wide margin.

As with the total household sample, Azerbaijani men in households with young children spend four fewer hours (238.7 minutes) per week in unpaid domestic and care work than Georgian men, while women of other ethnic minorities spend

nearly 17.9 hours (1,076 minutes) more than Georgian women. This is indicative of the influence of cultural norms in the household division of labour.

The variation in the amount of unpaid work performed by women and men also exists across regions. Women and men in households with young children and residing outside Tbilisi, whether in towns and smaller cities or in rural areas, spend less time in unpaid work than their counterparts residing in the capital, Tbilisi. This may be explained by the nuclearization of families brought about by urbanization, particularly in the capital. Extended kinship networks and stronger community ties tend to be more present in towns and rural areas, thereby enabling women to receive childcare assistance from neighbours and relatives.

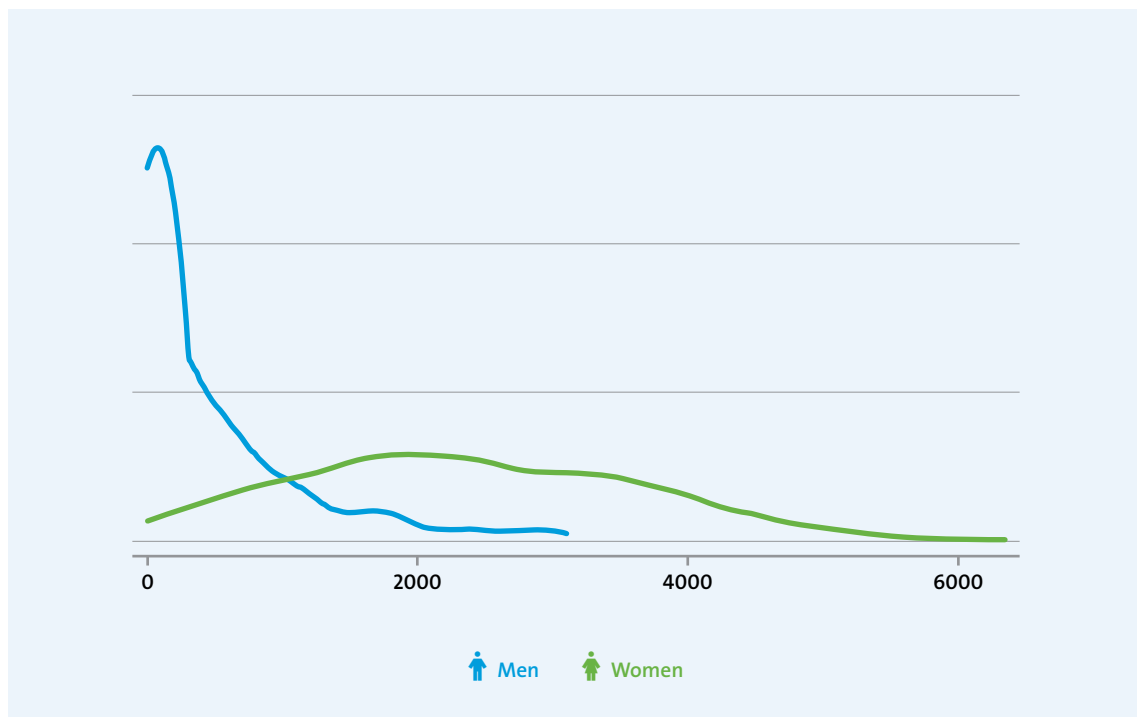
Other care needs, such as those required by persons with functional difficulties, reduce the weekly free time of women but have no effect on men. The presence of other able-bodied women seems

to have a significant effect only on the free time of other women; access to in-house care support increases women’s free time by 3.8 hours (227.6 minutes). Having an employed spouse also reduces women’s weekly free time by 5.1 hours (338.7 minutes).

With respect to the effect of education, the estimates show that more educated women (with at least an upper secondary level) have less free time than those with a lower secondary level of education or below. A possible explanation is that women with more education may have higher expectations of themselves and their use of time when they have young children. They place greater importance on the quality of the output or on the self-fulfilling elements of the tasks. This could manifest as higher standards of cleanliness, better care for the sick or disabled, more nutritious meals or more involvement in their children’s activities.⁹

The last two columns in Table 5.2 provide the SUR coefficient estimates for women and men in households with a person or persons with functional difficulties (Sample C). The estimates indicate that the added care needs of older children aged 10–17 reduce women’s time in labour market work by 338.7 minutes, but access to in-house care support increases it by 263.8 minutes. The opposite effects of additional care needs apply to women’s unpaid work: the added care workload of caring for younger and older children increases women’s time in unpaid work. The presence of other able-bodied women reduces both women’s and men’s weekly unpaid work time by 9.7 hours (584.3 minutes) and 5 hours (300 minutes), respectively. Figure 5.3 presents the kernel density distribution of the weekly total unpaid work time (spent on both caregiving and domestic work) of women and men in Sample C.

FIGURE 5.3
Kernel density of weekly total unpaid work time (caregiving and domestic work) for primary activities in households with person(s) with functional difficulties (Sample C)



Cultural norms may also influence women's unpaid work: those belonging to other ethnic minority groups spend 20 more hours (1,202.9 minutes) per week on unpaid work than ethnically Georgian women. The estimates for the weekly free time for Sample C respondents show that the increase in the unpaid work time of women due to additional care needs results in a reduction of their free time by as many as 487 minutes (8.1 hours) per week on average. Turning to the other characteristics, the SUR estimates show that the amount of women's free time decreases with age, marriage and higher educational attainment. Men's weekly free time, on the other hand, declines by 483 minutes (8 hours) on average if their spouse is employed. This is brought about by the reallocation of men's time towards more hours in labour market work, not an increase in their time in unpaid work activities.

Parallel and supervisory care activities

The preceding SUR analyses of the determinants of time use focus only on primary activities and do not consider two important characteristics of direct care work: it is often done simultaneously or alongside another activity, and it involves not only 'active' types of care (e.g. feeding, dressing, reading, etc.) but also supervisory care.

We conducted tobit regression analyses to examine the extent to which there are gender differences in doing direct care work as parallel activities or in the form of supervisory care. In addition, we examined the extent to which care needs and access to care support affect the time spent by women and men in parallel care and supervisory care activities. As with the SUR analyses, we per-

formed tobit analyses using three different samples: all households (Sample A), households with young children (Sample B) and households with person(s) who have functional difficulties (Sample C).¹⁰ The results are presented in Tables 5.3 and 5.4.

Table 5.3 reports the tobit coefficient estimates on the determinants of time spent in performing parallel activities. The female dummy coefficients in the three tobit models for Samples A, B and C show that the length of parallel care work activities increases significantly if the respondent is female, regardless of household type. In fact, women spend between 8 hours (480 minutes) and 11.2 hours (672.5 minutes) per week on average performing care work while also doing primary, non-caregiving activities. This is consistent with the findings of other studies that show the prevalence of performing overlapping or simultaneous activities as a coping strategy among women since they take on multiple roles that compete for their time. The presence of children under the age of 10 in both Sample A and Sample C also has a strong positive effect on the time spent on parallel care work activities. These results are consistent with the time allocation patterns in Table 4.1 whereby the time spent in unpaid caregiving increases dramatically if parallel activities are taken into account. In households with young children (Sample B), the presence of older children (aged 10–17) also increases parallel care work activity time by 4.2 hours (253.5 minutes) per week on average. These results indicate the intensive nature of care work. It demands such long hours that it is often performed in combination with other activities.¹¹

TABLE 5.3

Average marginal effects of selected characteristics on actual duration of parallel care work activities in minutes per week (per cent change in parentheses), by household type

	Sample A All households	Sample B Households with children under 5 years of age	Sample C Households with person(s) with functional difficulties
Female	13 minutes*** (230.6%)	28 minutes*** (239.5%)	24 minutes** (396.4%)
Presence of children under 10 years old	20 minutes*** (355.5%)	NS	24 minutes*** (389.5%)
Presence of children 5–9 years old	NS	11 minutes* (96.2%)	NS
Presence of children 10–17 years old	NS	13 minutes* (114.6%)	NS
Sick/eldercare help	NS	NS	-92 minutes*** (-1,521.8%)
Other able women 15–74 years old in household	-10 minutes*** (-171.5%)	-17 minutes* (-145.2%)	-16 minutes** (-269.4%)
Lfstat=Employed full- time	NS	NS	NS
Lfstat=Employed part-time	-7 minutes* (-120.8%)	NS	NS
Lfstat=Unemployed	NS	-34 minutes** (-296.3%)	NS
Ethnicity=Azerbaijani	-90 minutes*** (-1,600.6%)	-197 minutes*** (-1,707.3%)	-82 minutes*** (-1,358.1%)
Ethnicity=Armenian	NS	-192 minutes*** (-1,670.5%)	NS
Ethnicity=Other	NS	NS	-120 minutes*** (-1,988.2%)
Domain=Other urban	NS	NS	NS
Domain=Rural	NS	NS	NS

Abbreviation: NS, not statistically significant.

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Omitted the variable 'Not in the labour force' under the labour force status (Lfstat) category. Full estimation results are reported in Annex 2.

The presence of in-house care support, such as having other able-bodied women in the household, reduces the duration of parallel care work activities in all types of households. Unemployed individuals tend to perform fewer parallel care activities than the employed and those not in the labour force. The estimates for the ethnic group dummies serve as proxies for cultural norms that may influence care work-sharing patterns. The estimates indicate that individuals belonging to the Azerbaijani group spend considerably less time doing parallel care work than those who belong to the majority (Georgian) group. Individuals in households with young children and of Armenian ethnicity also spend considerably less time in multitasking that involves caregiving, compared to those who are Georgian. A possible explanation for these differences is that some ethnic groups tend to maintain kinship-oriented aspects of their culture. Extended family networks and care work-sharing practices, especially in rural communities, provide assistance to these households and reduce the amount of overlapped or parallel care work activities.

Table 5.4 provides the estimates for the determinants of supervisory care activity time. Regardless of household type, women overwhelmingly perform more supervisory care than men. They provide anywhere from a weekly average of 13.6 hours (818.4 minutes) for those in households with person(s) with functional difficulties to 17.8 hours (1,065.4 minutes) for women in households with young children. Weekly supervisory care time also increases by 15.2 hours (910.4 minutes) on average when households have children under the age of 10 and by 13.5 hours (810.2 minutes) when households have person(s) with functional difficulties. While access to outside care help does not significantly affect supervisory care time, the presence of other able-bodied women in the household reduces this time in all types of households, specifically by 7.2 hours (430.2 minutes) in households with young children and by 8.9 hours (533.8 minutes) in households with persons with functional difficulties, on average.

TABLE 5.4
Average marginal effects of selected characteristics on actual duration of total supervisory care activities in minutes per week (per cent change in parentheses), by household type

	Sample A All households	Sample B Households with children under 5 years of age	Sample C Households with person(s) with functional difficulties
Female	279 minutes*** (146.2%)	498 minutes*** (181.0%)	430 minutes*** (101.5%)
Presence of children under 10 years old	303 minutes*** (158.8%)	NS	NS
Presence of children 5–9 years old	NS	NS	NS
Presence of children 10–17 years old	NS	NS	NS
Presence of person with functional difficulties	269 minutes*** (141.3%)	NS	NS

Children under 10 years old who are looked after ^a	NS	NS	NS
Other able women 15–74 years old in household	-121 minutes*** (-63.8%)	-201 minutes*** (-73.1%)	-280 minutes*** (-66.2%)
Lfstat=Employed full-time	-121 minutes*** (-63.5%)	-156 minutes*** (-56.8%)	-129 minutes* (-30.5%)
Lfstat=Employed part-time	-122 minutes*** (-63.9%)	-161 minutes** (-58.5%)	NS
Lfstat=Unemployed	-99 minutes*** (-52.0%)	-110 minutes* (-40.0%)	NS
Married	-105 minutes*** (-55.2%)	110 minutes** (39.9%)	NS
Spouse employed	NS	NS	NS
Ethnicity=Azerbaijani	NS	NS	NS
Ethnicity=Other	NS	NS	NS
Domain=Other urban	40 minutes* (21.1%)	99 minutes** (36.0%)	158 minutes** (37.2%)
Domain=Rural	67 minutes** (35.1%)	NS	258 minutes*** (60.9%)

Abbreviation: NS, not statistically significant.

Notes:

^a This is an interaction variable of having a child under the age of 10 and a ‘yes’ response to Question H03 in the GTUS: “Do any of your children under 10 years old attend a kindergarten or a crèche, or are they being looked after on a long-term basis by other persons (not belonging to your household) or by other institutions?”

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Full estimation results are reported in Annex 2.

The labour force status of the individual has a statistically significant effect on the amount of time spent in supervisory care. As expected, those employed, whether on a full-time or part-time basis, and unemployed in Sample A (all households) and Sample B (households with young children) perform less supervisory care than those not in the labour force. In Sample C (households with person(s) with functional difficulties), only employed individuals perform less supervisory care than individuals not in the labour force. Being married decreases the time spent in supervisory care

in Sample A (all households) but increases it for working-age women and men in Sample B (households with young children). Individuals in all types of households who reside in other cities and rural areas (except for rural respondents in Sample B) perform more supervisory care than those living in Tbilisi, the capital. The fact that women spend a significant amount of their care work as parallel and supervisory care activities indicates the importance of these activities in the accurate measurement of the unpaid economic contributions of women and their care workload.

5.3 TIME POVERTY AMONG WOMEN AND MEN

This section of the empirical analysis examines the incidence of time poverty among women and men in Georgia. Being time-poor in this study refers to individuals who lack time for adequate rest and leisure due to long working hours. Attempts to balance the need to earn income, on the one hand, and the demand on one's time for household maintenance and caregiving, on the other, have led to chronic long hours of work. This less recognized form of deprivation, which includes the lack of time for socializing and leisure, has serious implications on a person's health and functionings.

Although there are several definitions of time poverty in the literature, this report uses a simple version adopted by Bardasi and Wodon (2006). A person is time-poor if that individual's primary activity time in performing labour market work, unpaid domestic work and unpaid caregiving in a given week exceeds a certain work time threshold.¹² We estimated three measures using different definitions in order to examine the sensitivity of the results to the choice of time poverty line, as detailed below.



In the absence of a well-established time poverty threshold, we used three alternative time poverty lines: a low time poverty threshold equal to 60 hours (3,600 minutes) of total work time per week; a moderate threshold equal to 71 hours (4,260 minutes), which is the benchmark for belonging to the top quartile of individuals' total work time distribution; and a severe threshold equal to 82.5 hours (4,950 minutes), the bench-

mark for belonging to the top decile of individuals' total work time distribution.¹³ In the case of a low threshold measure, referred to as *timepoor1*, a person is considered to be 'time-poor' if the individual spends more than 60 hours (3,600 minutes) per week on their total primary (paid and unpaid) work activities. The other alternative measures are (a) moderately time-poor, or *timepoor2*, if the individual's total work time is in the top quartile of the total work distribution; and (b) severely time-poor, or *timepoor3*, if the individual's total work time is in the top decile of the total work distribution.

Table 5.5 presents the proportion of women and men in the total household sample (Sample A) who are time-poor using the three alternative measures. All estimates are multiplied by 100 to be presented in percentage terms. The time poverty rates are also disaggregated by labour force status in order to examine any gender differences between these subgroups. Using the time poverty threshold of 60 hours per week, 52 per cent of women and 40.9 per cent of men in Georgia are time-poor. At the higher time poverty threshold of 71 hours per week, the rates drop to 29.6 per cent for women and 20.9 per cent for men. Raising the threshold to 82.5 hours per week lowers the time poverty rates to 11.3 per cent for women and 8.9 per cent for men. Regardless of which definition is used, the rates are much higher for women than for men. Figure 5.4 presents the kernel density distribution of the weekly total work time (spent on labour market and unpaid work) of women and men in all households sampled (Sample A).

TABLE 5.5

Proportion of all household respondents who are time-poor, by degree, sex and labour force status (percentage)

	 Women	 Men
1 Time-poor: Total work time exceeds 3,600 minutes (60 hours) per week		
All	52.4	40.9***
Employed full-time	72.1	58.0***
Employed part-time	56.3	46.7**
Unemployed	32.1	9.6***
Not in the labour force	40.8	14.1***
2 Moderately time-poor: Total work time in top quartile, at least 4,260 minutes (71 hours) per week		
All	29.6	20.9***
Employed full-time	45.0	32.4***
Employed part-time	33.0	21.9***
Unemployed	19.6	4.2***
Not in the labour force	18.7	3.7***
3 Severely time-poor: Total work time in top decile, at least 4,950 minutes (82.5 hours) per week		
All	11.3	8.9**
Employed full-time	19.8	13.8**
Employed part-time	15.0	9.2**
Unemployed	5.4	2.4
Not in the labour force	4.9	1.6**

Note: Female-male difference different from 0 at: *** 1 per cent level, ** 5 per cent level and * 10 per cent level.

FIGURE 5.4

Kernel density of weekly total work time (labour market and unpaid work) in all households sampled (Sample A)

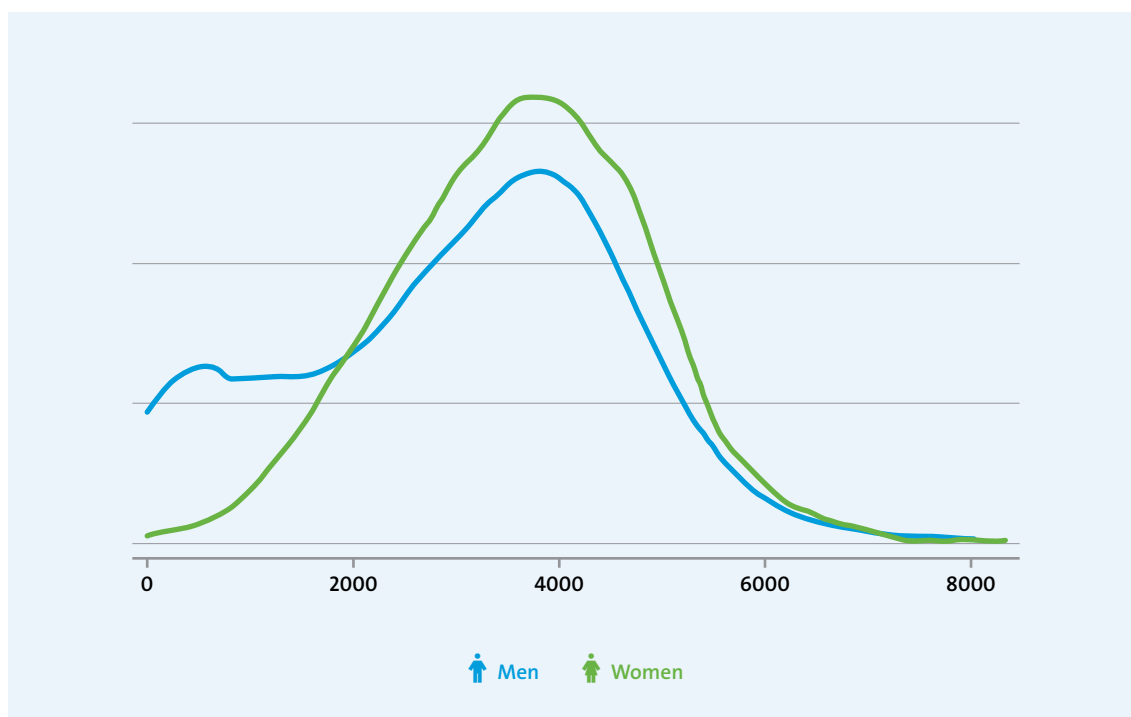


Table 5.5 also shows the time poverty rates across different labour force statuses of female and male respondents. The headcount ratios are much higher for women than men across labour force status subgroups, and they are found to be statistically significant except for the unemployed group, which is severely time-poor. Interestingly, the gender time poverty gap is highest among those unemployed and not in the labour force, when *timepoor1* and *timepoor2* measures are used. This suggests that although women are unable to find work or are not participating in the labour market, they still have long working hours. This implies that women's ability to participate in the labour force or find labour market work is closely linked to their burden of unpaid domestic and care work. The differences between women and men in different labour force status subgroups are smaller when moving from the lower to the highest threshold. Among the severely time-poor, the gender time poverty gap is highest among those who are full-time employed.

We ran probit regressions to examine the extent to which proxies for care needs and access to care

support as well as individual and household characteristics may explain the probability of being time-poor.¹⁴

Table 5.6 provides the probit marginal effects of the determinants of time poverty incidence using three alternative measures. Using *timepoor1* and *timepoor2* measures, the marginal effects indicate that women have a 22–24.6 per cent higher probability of being time-poor than men, holding all else constant. This confirms the findings of the preceding analyses in this report as well as other studies regarding the long working hours of women. Access to in-house care support, on the other hand, reduces the probability of being time-poor by 18 per cent (using the low threshold) and 12.7 per cent (using the moderate threshold). Being married or having an education level of at least a vocational or professional degree increases the likelihood of time poverty, compared to those who are not married or have a lower level of education. The education effect is not surprising given the relatively high education levels of the women and men in Georgia, compared to other middle-income countries.

TABLE 5.6

Probit marginal effects: Probability of being time-poor (all households), by degree

	Time-poor (timepoor1)	Moderately time-poor (timepoor2)	Severely time-poor (timepoor3)
Female	0.2197*** (0.0646)	0.2465*** (0.0686)	0.0679 (0.0862)
Presence of children under 10 years old	0.0483 (0.0621)	0.0611 (0.0649)	-0.0216 (0.0797)
Presence of children 10–17 years old	0.0483 (0.0621)	0.0611 (0.0649)	-0.0216 (0.0797)
Presence of person with functional difficulties	-0.0181 (0.0667)	-0.0012 (0.0725)	0.0367 (0.0878)
Children under 10 years old looked after	0.0952 (0.0876)	0.0909 (0.0907)	-0.0376 (0.1137)
Other able women 15–74 years old in household	-0.1805** (0.0733)	-0.1272* (0.0765)	-0.0488 (0.0947)
Age	0.0293 (0.0250)	0.0106 (0.0267)	0.0393 (0.0334)
Age squared	-0.0004 (0.0003)	-0.0001 (0.0003)	-0.0004 (0.0004)
Married	0.2392*** (0.0823)	0.2633*** (0.0917)	0.1782 (0.1169)
Spouse employed	0.1296** (0.0640)	0.0159 (0.0671)	0.1371* (0.0820)
Educ=Upper secondary	0.2591 (0.1726)	0.4650** (0.2005)	0.0923 (0.2232)
Educ=Vocational/professional	0.4322** (0.1800)	0.5831*** (0.2067)	0.3683 (0.2308)
Educ=Higher education	0.4176** (0.1775)	0.5477*** (0.2043)	0.1435 (0.2276)
Ethnicity=Azerbaijani	-0.0183 (0.1279)	0.1030 (0.1406)	0.2141 (0.1754)
Ethnicity=Armenian	-0.1549 (0.1756)	-0.2864 (0.1813)	-0.3119 (0.2575)
Ethnicity=Other	0.1345 (0.1621)	0.1381 (0.1726)	0.1925 (0.2168)
Domain=Other urban	-0.2930*** (0.0726)	-0.2646*** (0.0765)	-0.2678*** (0.0905)

Domain=Rural	-0.1012 (0.0748)	-0.1788** (0.0782)	-0.3666*** (0.0997)
Long-standing illness	-0.1085 (0.0918)	0.0481 (0.0980)	0.0250 (0.1226)
Constant	-1.2624** (0.5766)	-1.6559*** (0.6193)	-2.4813*** (0.7479)
N	2,610	2,610	2,610

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Omitted categories: Educ=lower sec or below; Ethnic=Georgian; Domain=Tbilisi.

Table 5.6 also includes the results when the definition of time poverty uses the high threshold in terms of the individual's total work time per week. The marginal effect of being female in Model 3 is no longer statistically significant as it is with the marginal effects of the presence of in-house care support, education and marriage. This is not surprising as the increase in total work time at the margin is likely due to the strong preference for or necessity of working long hours among men and women in certain jobs and occupations.

Regardless of which measure is used, the presence of children under the age of 10 increases the probability of being time-poor, while those living in other urban areas have a lower incidence of time poverty than those residing in Tbilisi. Individuals in rural households are also less likely to be moderately or severely time-poor.

5.4 RELATIONSHIP BETWEEN TIME POVERTY AND ‘FEELING RUSHED’

The time poverty measures as noted in the preceding section are based on the working time of women and men spent in total primary work activities.¹⁵ They do not provide the experiential dimension of the way that individuals allocate their time. The notion of experiential well-being focuses on the emotions that people experience from moment to moment in their lives.¹⁶ It conveys a particular aspect of well-being that comprises not only a person’s current ‘doings and beings’ (functionings)—which are observable achievements (such as a healthy body or meaningful employment) that are deemed important to the person—but also his or her freedom (capabilities)—the full range of real opportunities or alternative functionings that he or she perceives as valuable.¹⁷ However, the person’s efforts to take advantage of such opportunities or just ‘to be’ (e.g. enjoying sports, meeting friends, dancing, etc.) can be ‘frustrated’ by the lack of resources or the lack of time. For instance, a woman may want to spend more time with her parents or enjoy a social gathering but feels rushed or lacks the time due to household responsibilities, such as caring for her children and preparing family meals.

We provided a robustness check by examining the extent to which these time-based indicators

are related to the tensions and stresses that individuals experience with long working hours and multiple demands on their time. We conducted a multinomial logit analysis to determine whether or not the time poverty measures are associated with ‘feeling rushed’. We used the response to the GTUS module question (I28) “How often do you feel rushed? Would you say that...” in conducting a multinomial logit analysis. A statistically significant and positive coefficient to the response “Always feel rushed” or, alternatively, a significant and negative coefficient to the other two responses, “Only sometimes feel rushed” and “Almost never feel rushed”, would imply that our work time-based indicators are useful in determining the well-being of an individual.

Multinomial logit estimation is employed to estimate the relationship between ‘feeling rushed’ and the low-threshold time poverty measure, *timepoor1*. The analysis also takes into account the sex, life-cycle stage, marital status, education level, ethnicity, location of residence and health status of the individual.¹⁸ The estimation results, in terms of the marginal effects calculated at the means of the variables, are given in Table 5.7 using the low time poverty threshold of 60 work hours a week.

TABLE 5.7
Multinomial logit marginal effects: Association between time poverty and feeling rushed^a

	Always feel rushed (k = 1)	Sometimes feel rushed (k = 2)	Never feel rushed (k = 3)
Timepov1	0.1225*** (0.0217)	-0.0616*** (0.0225)	-0.0610*** (0.0168)
Female	0.0807*** (0.0219)	-0.0287 (0.0229)	-0.0521*** (0.0174)
Age	0.0090 (0.0093)	-0.0054 (0.0095)	-0.0036 (0.0071)
Age squared	-0.0001 (0.0001)	0.0000 (0.0001)	0.0001 (0.0001)
Married	-0.0017 (0.0301)	0.0034 (0.0316)	-0.0017 (0.0233)
Spouse employed	0.0236 (0.0248)	-0.0213 (0.0253)	-0.0023 (0.0189)
Educ=Upper secondary	-0.1848*** (0.0605)	0.0284 (0.0699)	0.1564** (0.0690)
Educ=Vocational/ professional	-0.1287** (0.0599)	-0.0176 (0.0770)	0.1464* (0.0871)
Educ=Higher education	-0.0967 (0.0638)	-0.0440 (0.0717)	0.1406* (0.0751)
Ethnicity= Azerbaijani	-0.2608*** (0.0288)	-0.1096** (0.0500)	0.3703*** (0.0523)
Ethnicity= Armenian	0.1263* (0.0706)	-0.1923*** (0.0570)	0.0661 (0.0629)
Ethnicity=Other	0.0584 (0.0662)	0.0338 (0.0670)	-0.0922*** (0.0353)
Domain=Other urban	-0.0229 (0.0273)	0.0336 (0.0288)	-0.0106 (0.0213)
Domain=Rural	0.0109 (0.0281)	-0.0233 (0.0293)	0.0124 (0.0221)
Long-standing illness	0.0515 (0.0357)	-0.0670* (0.0357)	0.0155 (0.0283)
N	2,610	2,610	2,610

Notes:

^a The low threshold for time poverty is used.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Standard errors are in parentheses. Omitted dummy variable categories: Educ=lower sec or below; Ethnic=Georgian; Domain=Tbilisi.

Our analysis focuses on 'feeling always rushed'. The marginal effect estimates in Table 5.7 indicate that the person is likely to 'always feel rushed' if the individual is time-poor or is female. In fact, the marginal effect estimates show that being time-poor raises the probability by 12 percentage points, while being female increases it by 8 percentage points. Individuals with professional and upper secondary education and those belonging to either the Azerbaijani or Armenian group, on the other hand, have a lower probability of always being rushed. Working-age women are 5 percentage points more likely than men to always feel rushed, while those with professional and upper secondary education as well as Azerbaijanis are less likely to experience this state.

The above results indicate that time poverty estimates from time use data convey information about individual well-being that other conventional economic indicators do not. They also suggest that there are important gender inequalities that have an adverse impact on the well-being of women and that this impact includes an off-kilter work-life balance, as indicated by their long working hours.

The image features a background split horizontally into a blue upper half and a green lower half. A large, thick blue circular shape is positioned in the center, overlapping both the blue and green areas. The text is white and underlined, arranged in three lines.

CONCLUDING
REMARKS AND POLICY
IMPLICATIONS

Policy discourses around women's economic empowerment, labour supply and economic growth often emphasize the importance of encouraging women to participate and stay in the labour force and maintain their work hours. These discourses often take for granted women's unpaid care labour because its supply, which is largely determined by social expectations around gender roles, is assumed to be abundant and relatively inelastic. Women's participation in the labour force and their ability to access decent work are particularly affected by the burden of combining labour market work and unpaid household and care work. A potential serious consequence of women staying in the labour force without any redistribution of the unpaid work burden within the household and without the provision of universal care services is time poverty, which many women already face. By encouraging women to participate in the labour force, with few or no accompanying policies to reduce and redistribute unpaid work, policymakers may unintentionally exacerbate women's time poverty, thereby leading to chronic stress and adversely affecting their well-being.¹

Using the 2020–2021 GTUS data, this report demonstrates how time use data can be useful in promoting gender-sensitive policies to alleviate the heavy burden of care work on women and to redistribute the responsibilities for care not only inside the household but also across sectors of society. The analyses performed on the GTUS data demonstrate the link between caregiving and labour force participation decisions, as well as the effects of care needs and access to care support regarding the allocation of time by women and men. They also show that an accurate measurement of unpaid work can help inform policymakers about the time constraints that individuals face when participating in the labour force, as well as in community and civic activities. The analyses examine not only the primary unpaid work activities of women and men but also the incidence of parallel and supervisory care activities. The report findings give evidence to the fact that a significant amount of caregiving activities is performed as parallel activities and in the form of supervisory care. Their omission creates a serious bias in the measurement of the amount of time spent in caregiving—so much so that time spent in childcare, for example, tends to be underestimated.

The report also examines the relationship between time poverty and well-being. It argues that the length of the working day is also an important determinant of well-being; thus, the question of well-being is not predicated solely on a person's access to goods and services. As shown in this report, time use data can bring attention to less recognized forms of deprivation, such as the intensification of working time and the lack of time to engage in activities that a person enjoys—for example, playing sports, visiting friends and participating in civic initiatives. Persistent long working hours are shown to lead to a limited amount of time for leisure and personal care, which can bring about chronic stress and serious health problems. The added responsibilities of domestic and care work also cause many women to perform multiple tasks simultaneously, such as cooking and supervisory care. This intensification of working time can also lead to chronic fatigue and stress. In the longer term, the persistence of long work hours among women can eventually lead to a decline in fertility rates below replacement levels as well as lower labour supply and economic growth, and it can undermine the ability of societies to thrive, as shown in the experiences of Japan and the Republic of Korea.²

The promotion of women's economic empowerment and gender equality and the attainment of sustainable development cannot be comprehensively addressed without bringing the issue of unpaid care to the forefront of policy discourses. It is central to providing women with opportunities to access decent work and a healthy work-life balance. Achieving these goals requires a coherent and strategic approach that includes a wide-ranging policy agenda, from gender-aware macroeconomic policies to social, labour and care policies that promote a more equal division of labour in households, provide public investment in care services and ensure decent working conditions for care workers.

Governments play a central role in addressing women's unpaid care work burden, a major barrier preventing women from moving into paid employment and better-quality jobs.³ Given the enormous benefits of caregiving to individuals, communities and societies, governments have a responsibility to invest adequately in the provision of quality care and must therefore integrate the care sector into their policy tools. Macroeconomic policies that widen the fiscal space for making quality care services more available and accessible are important, along with the ratification of the ILO Workers with Family Responsibilities Convention, 1981 (No. 156), which applies to women and men workers whose care responsibilities for family members restrict their abilities to enter, participate in or advance in the labour market.

The transformative potential of accessible, quality care services in the economy cannot be understated: they can reduce female caregivers' disadvantage in access to labour markets, help in the redistribution of care work and promote the creation of productive employment and enterprises. In fact, a growing number of countries—such as Argentina, Australia, Canada, Chile, Costa Rica, Germany, Japan, Norway, the Republic of Korea, Singapore, Sweden and Uruguay, to name a few—recognize the importance of public investment in the provision of care.⁴ These countries are also realizing the need for government support in providing adequate training and decent working conditions to care workers.⁵ They range from government support of care services through the expansion of

public childcare and long-term care (LTC) systems in Japan and the Republic of Korea; to supporting familial care responsibilities in Singapore by enabling families to purchase private care services through government-employer sponsored individual savings plans, tax support for adult child-elderly parent co-residence, and tax and immigration policy support for foreign domestic care workers.⁶

There is also a need for gender-aware labour and social policies that systematically encourage gender-equal social norms that lead to more equitable sharing of household care work. Egalitarian norms can be encouraged through the provision of paid parental leave and family leave policies as well as flexible work arrangements that enable women and men to balance their paid and care work responsibilities.⁷ It is also important to develop and implement policies that address gender biases and discrimination in the labour market and those that enable the growth of a well-paid, quality care workforce. Such plans include not only the adoption of pay equity laws and the effective enforcement of affirmative action but also the ratification and enforcement of several ILO Conventions, namely the Occupational Safety and Health Convention, 1981 (No. 155), the Workers' Representatives Convention, 1971 (No. 135), and the Domestic Workers Convention, 2011 (No. 189). Plans also include prioritizing the implementation of gender-aware assessments of labour and social policies.

ANNEX 1. REGRESSION MODELS USED IN THE EMPIRICAL ANALYSIS

1. Probit regression analysis for examining the relationship between caregiving and labour force participation

The probit model for estimating the likelihood that an individual i is likely to perform labour market work is

$$Y_{ij}^* = \beta_1 \text{Caregiver}_{ij} + \beta_2 \text{Caregiver} \times \text{Female}_{ij} + \beta_3 \text{Female}_{ij} + X_{ij}\vartheta + Z_j\gamma + \varepsilon_{ij}$$

where $Y_{ij}^*=1$ if $Y_{ij}>0$ (i.e. the hours an individual spends in the market, or contracted time) and $Y_{ij}^*=0$ otherwise. Caregiver_{ij} is equal to 1 if individual i in household j is a caregiver. Model 1 is run using the *caregiver1* definition, while Model 2 is run using the *caregiver2* definition. Female_{ij} is equal to 1 if the individual is female. The variable of interest is the interaction term, $\text{Caregiver} \times \text{Female}_{ij}$, which is equal to 1 if the individual is a caregiver and female. The interaction term infers how the effect of being female on labour force participation depends on the respondent being a caregiver. Hence, it is not so much the effect of gender, per se, as it is the effect of being a caregiver of a certain gender that influences an individual's likelihood of participating in the labour force. We argue that the social expectations to perform caregiving is more likely to occur among women than among other working-age individuals. X_{ij} and Z_j are vectors of observable characteristics at the individual and household levels, respectively.

2. Determinants of women's and men's time use patterns

2a. SUR analysis

Two restrictions are imposed on the SUR model in order to capture the interdependence of these activities. The first restriction is that the sum of the intercepts of the system of equations is equal to the total number of hours (minutes) in a day (24 hours or 1,440 minutes) or a week (168 hours or 10,080 minutes). The second restriction is that the sum of the coefficients of each explanatory variable for all activities should be equal to zero. Assuming that the unit of analysis is the weekly number of minutes or hours, the SUR equations take on the following form:

$$Y_{ji} = \beta_{j0} + X_i\beta_{jv} + u_{ji}$$

where $i = 1 \dots n$ individuals in the sample

$$\sum_{j=1}^4 Y_j = 168 \text{ hours and } \sum_{j=1}^4 \beta_{j\gamma} = 0 \text{ for all } \gamma = 1, 2, \dots, m$$

where:

- Y represents minutes (hours) per week
- X refers to the vector of explanatory and control variables
- γ is the index for explanatory and control variables
- i refers to individuals in the sample
- j represents the activities that women and men engage in, such as (1) labour market work (employment-related work and production for own use); (2) unpaid work (unpaid domestic work and unpaid caregiving); (3) free time; and (4) personal care.

Note that the second constraint implies that the coefficients for each independent variable across the equations must sum to zero. In other words,

$$\sum \beta_{\alpha 1} = 0 \text{ or } \beta_{41} = 0 - \beta_{11} - \beta_{21} - \beta_{31}$$

where α refers to the following activity groups:

- 1 = Labour market work (employment-related work; production for own use)
- 2 = Unpaid work (indirect care work or unpaid domestic work; direct care work or unpaid caregiving; unpaid volunteer work)
- 3 = Free time (socializing and communication; community participation and religious practice; leisure; learning)
- 4 = Personal care (self-care and maintenance)¹

2b. Tobit analysis

In addition, a tobit analysis was performed using a reduced form equation for the time spent by individual i in household j on a particular form of care, i.e., parallel care work activities or supervisory care activities:

$$OL_{ij}^* = X_{ij}\beta + Z_j\gamma + \varepsilon_{ij}$$

where

$$OL_{ij} = \begin{cases} OL_{ij}^* & \text{if } OL_{ij}^* > 0 \\ 0 & \text{otherwise.} \end{cases}$$

The observed dependent variable, OL_{ij} , is the time spent by individual i on a given form of care work, i.e. parallel care work or supervisory care. X_{ij} and Z_j are vectors of observable characteristics at the individual and household levels, respectively, that influence the decisions involving the overlap of activities. Both β and γ are vectors of unknown parameters to be estimated. We control for clustering (i.e. two individuals can be from the same household) by estimating robust standard errors.

3. Time poverty among women and men

The probit model for estimating the likelihood that an individual i in household j is likely to be time-poor is

$$Y_{ij}^* = X_{ij}\beta + Z_j\gamma + \varepsilon_{ij}$$

where $Y_{ij}=1$ if $Y_{ij}^*>0$ (i.e. the individual is time-poor) and $Y_{ij}=0$ otherwise. Model 1 is estimated using the *timepoor1* definition based on a low threshold. Model 2 is estimated using the *timepoor2* definition, while the *timepoor3* definition is used for Model 3 estimation. X_{ij} and Z_j are vectors of observable characteristics at the individual and household levels, respectively, that influence the dependent variable. Both β and γ are unknown parameters to be estimated.

4. Relationship between time poverty and feeling rushed

The multinomial logit model takes the form of

$$\Pr(y_i = k) = \frac{\exp(\beta_k' X_i)}{\sum_{j=1}^5 \exp(\beta_j' X_i)}$$

where k is the state of 'feeling rushed', where:

- $k = 1$ if the person 'always feels rushed'
- $k = 2$ if the person 'sometimes feels rushed'
- $k = 3$ if the person 'almost never feels rushed'

X is a vector of independent variables, and β is the vector of parameters to be estimated. Since the regressors in the multinomial logit model do not vary across the three alternatives, a normalization is required to identify the parameters. As a result of the normalization, the signs and magnitudes of the coefficient estimates may not bear any relation to the marginal effect of a variable change on the probability of being in a particular category.² Consequently, marginal effects (i.e. the partial derivatives of the probabilities with respect to the independent variables evaluated at the means), along with the associated standard errors, are calculated.

ANNEX 2. COMPLETE TABLES

COMPLETE TABLE 5.2

SUR estimates of weekly time use, by sex, household type and activity category

	Sample A (all households)		Sample B (households with children under 5 years of age)		Sample C (households with person(s) with functional difficulties)	
	👩 Women	👨 Men	👩 Women	👨 Men	👩 Women	👨 Men
1. Labour market work						
Presence of children under 10 years old	-338.5811*** (98.3823)	159.1388 (121.7284)	—	—	-119.9335 (167.0350)	94.2306 (232.9257)
Presence of children 5–9 years old	—	—	-141.2532 (146.4852)	245.7646 (185.6477)	—	—
Presence of children 10–17 years old	-113.2435 (86.9143)	107.4635 (109.2901)	-84.2960 (162.0941)	34.7804 (212.9466)	-338.6740** (168.1275)	205.2466 (236.6157)
Presence of person with functional difficulties	-134.0706 (92.5096)	-147.6972 (121.6730)	200.1566 (179.7757)	-382.8446* (224.0819)	—	—
Children under 10 years old looked after (H8.3)	-15.2825 (121.6634)	104.5966 (152.1420)	162.4864 (147.0982)	164.4371 (192.1615)	—	—
Sick/eldercare help (H8.2)	—	—	—	—	-544.5592 (573.9495)	-516.1611 (875.2831)
Other able women 15–74 years old in household	204.6822** (84.0405)	81.1239 (227.3728)	-111.9708 (169.5199)	746.0404 (688.1552)	263.8472* (154.3343)	-4.6030 (266.2013)
Age	99.9740*** (35.3127)	31.0006 (44.4004)	4.9048 (62.6880)	-15.3368 (80.5190)	-7.0646 (62.0588)	7.1626 (81.6782)
Age squared	-1.0001** (0.3972)	-0.2625 (0.5037)	0.2146 (0.7252)	0.3478 (0.9455)	0.2375 (0.7076)	-0.0887 (0.9361)
Married	-77.6635 (117.0435)	338.8656** (156.7523)	-559.1155** (221.3178)	-28.7206 (299.1498)	405.1531** (193.8674)	85.6558 (262.7256)
Spouse employed	1.1455 (91.7342)	38.8598 (113.5282)	-37.4412 (167.6229)	154.7652 (213.8869)	-193.2082 (182.1764)	713.6076*** (256.7995)
Educ=Upper secondary	70.1319 (253.8758)	118.8611 (272.4708)	461.5611 (453.5899)	626.7963 (422.2550)	173.4849 (426.2014)	236.4081 (427.6322)
Educ=Vocational/professional	262.8047 (261.7383)	338.1864 (294.1249)	446.6962 (467.4185)	345.1402 (490.3320)	132.5050 (433.3560)	504.7004 (471.9886)

Educ=Higher education	333.2836 (257.2370)	270.6902 (282.9783)	517.8071 (454.6285)	480.7532 (457.1592)	685.9337 (431.4324)	248.1134 (464.1977)
Ethnicity=Azerbaijani	-238.3733 (188.3104)	-114.3052 (209.3110)	401.3444 (325.3682)	209.3217 (373.4154)	-479.8076 (933.6788)	623.3550 (796.3419)
Ethnicity=Armenian	-68.7160 (257.0326)	-414.6077 (291.7016)	-368.1890 (413.4092)	-742.0515 (503.1048)	-467.3048 (419.5229)	305.5622 (551.3414)
Ethnicity=Other	-241.2231 (244.0478)	-204.8728 (344.1397)	-168.7681 (622.3943)	354.1670 (686.1490)	-904.5099** (393.4972)	90.2900 (1,091.9442)
Domain=Other urban	-58.8909 (102.7147)	-387.2315*** (133.2524)	136.3755 (184.5103)	-393.2741 (257.8472)	-79.9853 (190.6770)	-62.8833 (267.7752)
Domain=Rural	60.8822 (104.7033)	-87.3603 (130.8037)	246.6985 (194.9481)	-394.3186 (262.0395)	41.4525 (195.8790)	387.5791 (270.7800)
Long-standing illness	3.3727 (132.5396)	-531.7894*** (180.9735)	267.0908 (262.7036)	-206.4878 (364.9418)	-224.7949 (235.8065)	-215.1177 (347.2488)
Constant	-1,034.2613 (797.2301)	1,264.8682 (1,012.4547)	374.5513 (1,383.7289)	1,620.0902 (1,819.2258)	633.2589 (1,378.3993)	1,442.5012 (1,779.7793)
2. Unpaid work						
Presence of children under 10 years old	674.1873*** (76.0497)	170.4837*** (43.7767)	—	—	752.6035*** (133.6059)	202.8018** (95.6640)
Presence of children 5–9 years old	—	—	329.6488** (131.1097)	41.1629 (69.9473)	—	—
Presence of children 10–17 years old	135.3752** (67.1849)	-38.1083 (39.3036)	107.7490 (145.0803)	38.3157 (80.2329)	327.4378** (134.4798)	-87.0537 (97.1795)
Presence of person with functional difficulties	171.1293** (71.5101)	58.3756 (43.7568)	-46.2284 (160.9059)	90.3330 (84.4284)	—	—
Children under 10 years old looked after (H8.3)	84.7266 (94.0461)	-10.2856 (54.7143)	-237.1162* (131.6583)	-82.7866 (72.4016)	—	—
Sick/eldercare help	—	—	—	—	27.8231 (459.0837)	-52.7497 (359.4842)
Other able women 15–74 years old in household	-389.5340*** (64.9635)	-449.5099*** (81.7693)	-156.3296 (151.7266)	-544.4560** (259.2794)	-584.2811*** (123.4471)	-300.1517*** (109.3305)
Age	-36.9769 (27.2968)	-20.2037 (15.9676)	15.9700 (56.1081)	13.5953 (30.3375)	122.5692** (49.6389)	-21.8932 (33.5458)
Age squared	0.2716 (0.3070)	0.1926 (0.1812)	-0.5899 (0.6491)	-0.2459 (0.3563)	-1.4144** (0.5660)	0.3135 (0.3845)
Married	283.1840*** (90.4748)	135.9929** (56.3723)	595.3586*** (198.0877)	319.5913*** (112.7120)	71.8250 (155.0683)	128.7983 (107.9030)
Spouse employed	165.8777** (70.9108)	61.7808 (40.8278)	266.5233* (150.0288)	-65.8304 (80.5872)	138.2647 (145.7171)	-72.0471 (105.4691)

Educ=Upper secondary	80.0686 (196.2466)	123.8522 (97.9877)	132.6000 (405.9798)	67.1368 (159.0949)	191.8887 (340.9048)	238.0078 (175.6312)
Educ=Vocational/ professional	144.9660 (202.3243)	108.8098 (105.7751)	278.4331 (418.3569)	75.1622 (184.7446)	439.4414 (346.6275)	145.5236 (193.8487)
Educ=Higher educ	92.3634 (198.8448)	181.2860* (101.7665)	254.6174 (406.9094)	205.7798 (172.2459)	157.0910 (345.0889)	381.7832** (190.6489)
Ethnicity=Azerbaijani	524.6181*** (145.5644)	-219.5188*** (75.2738)	22.4303 (291.2167)	-238.7394* (140.6934)	-43.6735 (746.8197)	-11.6456 (327.0626)
Ethnicity=Armenian	132.9098 (198.6867)	-48.8022 (104.9036)	303.9254 (370.0166)	-8.8913 (189.5571)	294.4623 (335.5628)	-27.1177 (226.4393)
Ethnicity=Other	542.3237*** (188.6495)	186.3220 (123.7618)	1,076.0361* (557.0661)	39.0940 (258.5235)	1,202.8939*** (314.7457)	-70.5447 (448.4683)
Domain=Other urban	-185.7066** (79.3987)	-59.0561 (47.9211)	-276.8736* (165.1436)	-194.3891** (97.1503)	-81.4833 (152.5164)	171.7696 (109.9769)
Domain=Rural	-102.8853 (80.9359)	-62.8898 (47.0405)	-371.6930** (174.4858)	-155.6963 (98.7298)	93.3651 (156.6773)	9.6478 (111.2110)
Long-standing illness	138.0834 (102.4534)	-5.3457 (65.0829)	19.2521 (235.1295)	-169.2212 (137.5008)	169.0904 (188.6140)	-214.6689 (142.6172)
Constant	2,774.7673*** (616.2606)	1,093.6762*** (364.1055)	2,582.5764** (1,238.4889)	765.4298 (685.4380)	-714.4809 (1,102.5373)	708.3387 (730.9665)
3. Free time						
Presence of children under 10 years old	-220.2860*** (62.4948)	-317.4287*** (89.4645)	—	—	-487.5557*** (110.0701)	-235.9951 (168.4176)
Presence of children 5–9 years old	—	—	-134.9275 (93.8119)	-307.8049** (135.1930)	—	—
Presence of children 10–17 years old	-39.0802 (55.2101)	-54.7657 (80.3229)	-34.1267 (103.8082)	-115.8327 (155.0728)	0.1893 (110.7900)	-115.2903 (171.0856)
Presence of person with functional difficulties	-78.2009 (58.7644)	86.4694 (89.4238)	-308.6265*** (115.1318)	279.5406* (163.1818)	—	—
Children under 10 years old looked after (H03)	-141.3950* (77.2836)	-143.4045 (111.8170)	-0.0796 (94.2045)	-111.4301 (139.9366)	—	—
Sick/eldercare help	—	—	—	—	547.7303 (378.2122)	734.9293 (632.8759)
Other able women 15–74 years old in household	99.6865* (53.3846)	220.8561 (167.1080)	227.6541** (108.5638)	-577.2738 (501.1308)	71.3923 (101.7008)	131.1160 (192.4776)
Age	-14.3627 (22.4315)	-25.0747 (32.6321)	-8.3308 (40.1466)	19.2793 (58.6358)	-70.2005* (40.8945)	-26.9597 (59.0577)
Age squared	0.2466 (0.2523)	0.2444 (0.3702)	0.1990 (0.4644)	-0.3315 (0.6886)	0.7656 (0.4663)	0.2418 (0.6769)

Married	-149.4848** (74.3489)	-379.0423*** (115.2053)	9.1090 (141.7362)	-205.2270 (217.8479)	-330.1579*** (127.7517)	-197.7855 (189.9645)
Spouse employed	-106.1396* (58.2718)	-58.1748 (83.4378)	-338.7192*** (107.3490)	-125.1514 (155.7575)	-1.7906 (120.0478)	-482.7358*** (185.6796)
Educ=Upper secondary	-181.5178 (161.2682)	-73.2721 (200.2528)	-629.7988** (290.4877)	-274.3184 (307.4960)	-363.8323 (280.8515)	-152.2298 (309.2006)
Educ=Vocational/ professional	-354.1770** (166.2627)	-139.3753 (216.1675)	-665.5345** (299.3438)	-106.3825 (357.0713)	-553.5289* (285.5661)	-150.6358 (341.2727)
Educ=Higher education	-300.1917* (163.4033)	-168.9593 (207.9753)	-655.8963** (291.1529)	-359.6423 (332.9141)	-568.4839** (284.2985)	-207.9030 (335.6395)
Ethnicity=Azerbaijani	-116.0241 (119.6194)	245.9734 (153.8334)	-204.8369 (208.3721)	126.4203 (271.9299)	448.3471 (615.2609)	-250.0200 (575.7973)
Ethnicity=Armenian	-85.4343 (163.2734)	-7.2707 (214.3866)	-73.6796 (264.7553)	140.8157 (366.3728)	173.4222 (276.4506)	-616.3067 (398.6489)
Ethnicity=Other	-63.8993 (155.0252)	-2.0911 (252.9260)	88.9232 (398.5933)	-282.7468 (499.6699)	255.7456 (259.3006)	-1,019.5433 (789.5333)
Domain=Other urban	85.0745 (65.2469)	202.7902** (97.9341)	-10.4318 (118.1639)	382.5559** (187.7704)	159.5821 (125.6493)	-176.7732 (193.6156)
Domain=Rural	-42.6268 (66.5101)	75.9316 (96.1344)	106.1345 (124.8486)	343.9339* (190.8234)	-109.4047 (129.0772)	-245.9359 (195.7882)
Long-standing illness	-77.1290 (84.1924)	476.8694*** (133.0068)	1.8271 (168.2405)	475.2775* (265.7592)	127.4450 (155.3880)	286.9220 (251.0792)
Constant	2,404.3499*** (506.4203)	3,173.9098*** (744.1051)	2,245.0123** (886.1667)	2,730.0492** (1,324.8031)	4,055.2781*** (908.3158)	3,703.3613*** (1,286.8745)
N	1,447	1,163	392	331	372	302

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Omitted categories: Educ=lower sec or below; Ethnic=Georgian; Domain=Tbilisi.

COMPLETE TABLE 5.3

Tobit estimates: Duration of parallel care work activities, by household type

	Sample A All households	Sample B Households with children under 5 years of age	Sample C Households with person(s) with functional difficulties
Female	479.9794*** (151.9952)	529.8514*** (181.1389)	672.4951*** (224.7160)
Presence of children under 10 years old	740.0012*** (159.0745)	—	660.7398*** (186.2242)
Presence of children 5–9 years old	—	212.7802* (120.2707)	—
Presence of children 10–17 years old	132.1635 (96.0204)	253.5255* (135.6911)	157.1521 (149.6948)
Presence of person with functional difficulties	95.9373 (93.1824)	93.2668 (124.3073)	—
Children under 10 years old looked after	1.7031 (111.7338)	-25.1246 (134.9215)	—
Sick/eldercare help	—	—	-2,581.7892*** (547.7329)
Other able women 15–74 years old in household	-357.0804*** (113.5193)	-321.1183** (159.3689)	-456.9530** (184.8748)
Lfstat=Employed full- time	-162.8571 (106.4037)	-237.6140 (146.3300)	0.1056 (160.0070)
Lfstat=Employed part-time	-251.3950* (139.1361)	-241.9676 (215.7035)	1.4716 (192.7527)
Lfstat=Unemployed	-158.0197 (150.8723)	-655.4221*** (252.3813)	-142.8658 (220.2887)
Age	-26.6810 (37.5881)	-75.2279 (52.8988)	66.1082 (54.1598)
Age squared	0.3009 (0.4306)	0.7909 (0.6089)	-0.7775 (0.6123)
Married	-79.6577 (125.3224)	-117.0653 (154.7606)	403.7342* (207.2376)
Spouse employed	-0.7164 (98.4477)	19.1510 (130.8326)	-261.4905** (127.5408)
Educ=Upper secondary	269.0286 (252.2099)	127.1611 (374.6977)	231.5570 (319.3536)
Educ=Vocational/ professional	198.4535 (256.8894)	44.0619 (391.2101)	176.6858 (315.2575)

Educ=Higher education	361.8719 (255.8315)	109.0333 (392.2507)	232.2460 (324.7710)
Ethnicity=Azerbaijani	-3,331.6435*** (399.7307)	-3,776.7481*** (594.2827)	-2,304.0082*** (449.1303)
Ethnicity=Armenian	-78.3987 (298.4116)	-3,695.2512*** (646.6381)	274.7888 (286.4617)
Ethnicity=Other	-347.8130 (284.9595)	-71.0891 (334.2278)	-3,372.9188*** (635.2908)
Domain=Other urban	-11.8453 (102.8076)	-43.7794 (142.4998)	-173.1954 (154.5947)
Domain=Rural	50.8022 (107.8145)	-36.4883 (154.2253)	34.9567 (161.0538)
Long-standing illness	114.1925 (143.2457)	267.8448 (248.3330)	21.7355 (166.0840)
Constant	-1,628.6902* (849.6439)	361.5799 (1,036.3112)	-3,574.0967** (1,557.3096)
N	2,610	723	674

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Omitted categories: Educ=lower sec or below; Ethnic=Georgian; Domain=Tbilisi.

COMPLETE TABLE 5.4

Tobit estimates: Duration of total supervisory care activities, by household type

	Sample A All households	Sample B Households with children under 5 years of age	Sample C Households with person(s) with functional difficulties
Female	838.5159*** (72.2854)	1,065.4070*** (109.9891)	818.3952*** (111.9380)
Presence of children under 10 years old	910.4533*** (87.3619)	—	160.6508 (134.1164)
Presence of children 5–9 years old	—	25.6874 (80.2040)	—
Presence of children 10–17 years old	0.2559 (65.5024)	2.5715 (89.3296)	-56.1195 (126.1705)
Presence of person with functional difficulties	810.2290*** (84.2969)	133.3339 (139.5564)	—
Children under 10 years old looked after	57.5973 (82.2749)	69.6939 (85.0352)	—
Sick/eldercare help	—	—	93.8725 (249.9270)

Other able women 15–74 years old in household	-365.6160*** (69.1387)	-430.2424*** (119.4651)	-533.7798*** (112.3866)
Lfstat=Employed full- time	-364.3199*** (74.8205)	-334.4757*** (104.1757)	-245.6829* (141.3223)
Lfstat=Employed part-time	-366.6900*** (88.2389)	-344.4282** (137.2298)	-134.3005 (184.4753)
Lfstat=Unemployed	-298.4011*** (93.8712)	-235.6059* (130.1729)	-256.1946 (173.5240)
Age	-17.7267 (24.8442)	-3.6444 (33.4152)	56.2546 (37.4379)
Age squared	0.1793 (0.2775)	0.0917 (0.4000)	-0.4920 (0.4315)
Married	-316.3492*** (82.4629)	234.8372** (109.5132)	47.9453 (120.4610)
Spouse employed	29.6664 (69.4823)	69.8606 (97.2150)	48.7485 (151.3798)
Educ=Upper secondary	-90.2438 (168.6615)	-91.5840 (238.6112)	8.3574 (266.9744)
Educ=Vocational/ professional	-19.0536 (180.1977)	-31.1199 (240.5118)	-146.0293 (271.5174)
Educ=Higher education	88.9691 (176.7802)	114.9830 (245.9591)	119.8597 (290.9800)
Ethnicity=Azerbaijani	-186.5211 (137.0004)	-173.9021 (203.3980)	282.5425 (350.3875)
Ethnicity=Armenian	-9.8290 (193.9050)	-240.9434 (179.9320)	86.0684 (231.9365)
Ethnicity=Other	22.6430 (192.5498)	240.2193 (274.9203)	93.3525 (334.2113)
Domain=Other urban	121.0814* (71.5355)	212.2377** (107.0529)	299.8402** (122.4951)
Domain=Rural	201.4253** (83.9632)	128.8588 (117.0423)	491.0899*** (152.9542)
Long-standing illness	110.2933 (105.2445)	57.6302 (239.9788)	213.3117 (210.9282)
Constant	-614.0817 (599.7431)	-460.5996 (700.8771)	-1,777.5218** (866.6771)
N	2,610	723	674

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

ENDNOTES

Chapter 1

- 1 King et al. 2021.
- 2 Folbre 2018.
- 3 UN Women, n.d., p. 2.
- 4 UN Women 2020.
- 5 World Bank 2022. The poverty rate is measured by the international upper-middle-income line (US\$5.50 per capita per day, 2011 purchasing power parity).
- 6 Rakshit and LevtoV 2020; UN Women, n.d.
- 7 Rakshit and LevtoV 2020.
- 8 Ibid., p. 5.
- 9 National Statistics Office 2021, p. 67.
- 10 UN Women 2021; National Statistics Office 2021, p. 67.
- 11 ILO and UN Women 2020.
- 12 UN Women 2021.
- 13 King et al. 2021.
- 14 Addati et al. 2018.
- 15 Its performance heavily influences time allocation in the sense that the caregiver chooses an activity that enables him or her to be with the care recipient.
- 16 Floro 2021.
- 17 The person does not have functional difficulties.
- 18 Guerrero 2021.

Chapter 2

- 1 Lilly, Laporte and Coyte 2010; Antonopoulos and Hirway 2010; Liu, Dong and Zheng 2010; Beneria, Berik and Floro 2016; Moussa 2019; Meurs and Giddings 2021; Taş and Ahmed 2021.
- 2 The Blau and Kahn (2016) reference in the quote can be found at <https://www.nber.org/papers/w21913>.
- 3 Labour market work includes both employment-related work, whether formal or informal, and subsistence production. It refers to activities included in the System of National Account (SNA). In this report, they are referred to as labour market work.
- 4 In this report, the term 'unpaid work' includes both direct caregiving (or care work) and indirect care (or domestic work).
- 5 Koggel 2003; MacPhail and Dong 2007.
- 6 Burda, Hamermesh and Weil 2007.
- 7 Bolin, Lindgren and Lundborg 2008; Carmichael and Charles 1998, 2003; Crespo 2008; Heitmueller 2007.
- 8 A valid instrumental variable must satisfy the following two conditions: (1) it is exogenous and not affected by other variables; and (2) it is correlated with the explanatory variable of interest, namely caregiving, which is the endogenous explanatory variable. In other words, a valid IV induces changes in the explanatory variable but has no independent effect on the dependent variable, hence allowing one to uncover the causal effect of the explanatory variable on the dependent variable (Heckman 1997).

- 9 Bolin, Lindgren and Lundborg 2008.
- 10 Ibid., p. 723.
- 11 Meurs and Giddings 2021, p. 232.
- 12 Cortés and Pan 2020, p. 1.
- 13 Solberg and Wong 1992; Neuwirth 2007; Kimmel and Connelly 2007; Dong and An 2012.
- 14 Bittman 1991; Ironmonger 1996; Craig and Bittman 2008; Floro and Miles 2003; Floro and Pichetpongsa 2010; Mullan 2010.
- 15 For example, Mullan's (2010) estimates of supervisory time in UK households is based on how much time children spent with parents, including measures of childcare intensity. His study yields significantly higher estimates than would be expected based on simple measures of active childcare alone (Mullan 2010).
- 16 Budig and Folbre 2004; Suh and Folbre 2016; Ahmed and Floro 2022.
- 17 Goodin et al. 2008; Gammage 2010; Bardasi and Wodon 2006; Arora 2015; Abdourahman 2017; Srivastava and Floro 2017.
- 18 This definition is adopted by Gammage (2010) in her analysis of the 2000 Guatemala time use data; by Abdourahman (2017) in his analysis of time use survey data from five African countries (namely Ghana, Madagascar, South Africa, Tunisia and the United Republic of Tanzania); and by Srivastava and Floro (2017) in their study of the dual problem of unemployment and time squeeze in South Africa.
- 19 Abdourahman 2017.
- 20 Roldan 1985; Baruch, Biener and Barnett 1987; Benton 1989; Floro and Pichetpongsa 2010.
- 21 In the study, work intensity refers to the length of an average (paid and unpaid) working day and the incidence of 'likely to be stressful' overlapping work activities. The latter involves the simultaneous performance of two or more work activities that either require attention and/or energy or that are monotonous and repetitive.
- 22 Sangaroon et al. 2015, p. 3.
- 23 Sangaroon et al. 2015.

Chapter 3

- 1 Guerrero 2021; Tsakadze 2021. The Autonomous Republic of Abkhazia and the Tskhinvali region/South Ossetia are excluded from the survey.
- 2 During the field work, the sample size was increased due to the high level of non-response brought about by the COVID-19 pandemic.
- 3 Tsakadze 2021.
- 4 See Reid's (1934) third party principle for information on distinguishing productive activities from non-productive (personal) activities.
- 5 The unweighted sample is used because t-tests cannot be performed with weights.

Chapter 4

- 1 Suh and Folbre 2016.
- 2 Budig and Folbre 2004.
- 3 Suh and Folbre 2016.

Chapter 5

- 1 See Annex 1 for the probit model specification.
- 2 This definition is based on the mean of primary and parallel direct care work performed by all sampled respondents per day. This is then multiplied by 2. Hence, the direct care work threshold is estimated as 55.85 minutes $\times 2 = 111.70$ minutes, which is rounded to 120 minutes per day.
- 3 *Caregiver2* is based on the mean of the total daily primary and parallel unpaid work (direct care work time + indirect care (domestic) work time) performed by all sampled respondents. The total unpaid work threshold is therefore 199.44 minutes per day, which is rounded to 200 minutes.
- 4 Standard errors were computed for a linear combination of point estimates, and t-statistics were calculated.
- 5 This uses the response to the following GTUS question (H3): “Do any of your children under 10 years of age attend a kindergarten or a crèche, or are they being looked after on a long-term basis by other persons (not belonging to your household) or by other institutions?”
- 6 This uses the response to the following GTUS question (H8.2): “Did you or any other member of your household receive help or services to care for the sick and elderly from a private person who is not a member of your household at any time during the past four weeks?”
- 7 See Annex 1 for the SUR model.
- 8 Budig and England 2001.
- 9 Floro and Miles 2003.

- 10 See Annex 1 for the tobit model.
- 11 Floro and Miles 2003; Mullan 2010.
- 12 To avoid double counting, the time spent in parallel work activities is not included. Supervisory care activity time is also excluded.
- 13 The low threshold is based on studies acknowledging that 60 hours of work per week have adverse effects on one’s well-being. See Loomis (2005), Landsbergis (2004), Caruso (2006) and Srivastava and Floro (2017), to name a few.
- 14 See Annex 1 for the probit model.
- 15 Parallel work activities are not included in the regression analysis. Hence, the results are based on a low threshold for the total work performed on a weekly basis.
- 16 Frey and Stutzer 2002; Kahneman and Krueger 2006.
- 17 Sen 1985; Alkire 2008; Crocker and Robeyns, 2009.
- 18 See Annex 1 for the multinomial logit model.

Chapter 6

- 1 Elson 2017.
- 2 King et al. 2021.
- 3 UN Women 2022.
- 4 Esquivel and Kaufman 2017; Peng and Yeandle 2017; UN Women 2022. For a comprehensive list of relevant reports and studies, see UN Women 2022.
- 5 OECD 2017, 2020.
- 6 Peng and Yeandle 2017.
- 7 UN Women 2022.

Annex 1

- 1 Activity group 4 (personal care) was omitted in the reporting of results.
- 2 Greene 1998.

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