ARTICLES IN THIS ISSUE

Unemployment and monetary policy: a revisit and new job strategies
Dante B. Canlas

A SYMPOSIUM ON THE CARE ECONOMY

Introduction to the symposium on the care economy
Maria S. Floro
Elizabeth M. King

Child and elderly care in South Korea: policy analysis with a gendered, care-focused computable general equilibrium model
Martin Cicowiez
Hans Lofgren

Women’s market work and childcare policies in Colombia: policy simulations using a computable general equilibrium model
Martin Cicowiez
Hans Lofgren
Ana Tribin
Tatiana Mojica

The enduring impact of the pandemic on gender patterns of paid and unpaid work: evidence from time-use data in Turkey
Ipek Ilkkaracan
Emel Memiş

Unpaid eldercare and its impact on the US labor supply
Tanimah Ahmed
Maria S. Floro

Care work and the demographic composition of households: two Asian cases
Elizabeth M. King
Hannah L. Randolph
Jooyeoun Suh

Care workers’ sense of responsibility, working conditions, and the quality of care in South Korea
Shirin Arslan
Arnob Alam
Maria S. Floro
Seung-Eun Cha
Eunhye Kang
Aims and Scope: The Philippine Review of Economics (PRE) invites theoretical and empirical articles on economics and economic development. Papers on the Philippines, Asian and other developing economies are especially welcome. Book reviews will also be considered.

The PRE is published jointly by the UP School of Economics and the Philippine Economic Society. Its contents are indexed in the Journal of Economic Literature, EconLit, and RePEc. PRE’s readership includes economists and other social scientists in academe, business, government, and development research institutions.

Publication Information: The PRE (ISSN 1655-1516) is a peer-reviewed journal published every June and December of each year. A searchable database of published articles and their abstracts is available at the PRE website (http://pre.econ.upd.edu.ph).

Subscription Information: Subscription correspondence may be sent to the following addresses:

- css@pssc.org.ph
- PSSC Central Subscription Service,
  PSSCenter, Commonwealth Avenue, 1101, Diliman,
  Quezon City, Philippines.
  P.O. Box 205, UP Post Office, Diliman, Quezon City,
  Philippines 1101
  PHONE: 922-9627, FAX: 924-4178/926-5179

Submissions: Authors may submit their manuscripts to the addresses below:

- pre upd@up.edu.ph
- The Editor, The Philippine Review of Economics, Rm 237,
  School of Economics, University of the Philippines, Diliman,
  Quezon City, 1101.

Manuscripts must be written in English and in MS Word format. All graphs and tables must be in Excel format. Submission of a manuscript shall be understood by the PRE as indicating that the manuscript is not under consideration for publication in other journals. All submissions must include the title of the paper, author information, an abstract of no more than 150 words, and a list of 3–4 keywords. Complete guidelines can be viewed in the PRE’s website.

Copyright: The Philippine Review of Economics is protected by Philippine copyright laws. Articles appearing herein may be reproduced for personal use but not for mass circulation. To reprint an article from PRE, permission from the editor must be sought.

Acknowledgements: The PRE gratefully acknowledges the financial support towards its publication provided by the Philippine Center for Economic Development (PCED). The Review nonetheless follows an independent editorial policy. The articles published reflect solely the editorial judgement of the editors and the views of their respective authors.
The Philippine Economic Society (PES) was established in August 1962 as a nonstock, nonprofit professional organization of economists.

Over the years, the PES has served as one of the strongest networks of economists in the academe, government, and business sector.

Recognized in the international community of professional economic associations and a founding member of the Federation of ASEAN Economic Associations (FAEA), the PES continuously provides a venue for open and free discussions of a wide range of policy issues through its conferences and symposia.

Through its journal, the *Philippine Review of Economics* (PRE), which is jointly published with the UP School of Economics, the Society performs a major role in improving the standard of economic research in the country and in disseminating new research findings.

At present the society enjoys the membership of some 800 economists and professionals from the academe, government, and private sector.

- **Lifetime Membership** – Any regular member who pays the lifetime membership dues shall be granted lifetime membership and shall have the rights, privileges, and responsibilities of a regular member, except for the payment of the annual dues.

- **Regular Membership** – Limited to individuals 21 years of age or older who have obtained at least a bachelor’s degree in economics, or who, in the opinion of the Board of Directors, have shown sufficient familiarity and understanding of the science of economics to warrant admission to the Society. Candidates who have been accepted shall become members of the Society only upon payment of annual dues for the current year.

- **Junior Membership** – This is reserved for full-time college or graduate students majoring in economics. Affiliation for junior membership is coursed through the Junior Philippine Economic Society (JPS).

For more information, visit: www.phileconsociety.org.
1. Unemployment and monetary policy: a revisit and new job strategies  
*Dante B. Canlas*

A Symposium on the Care Economy

10. Introduction to the symposium on the care economy  
*Maria S. Floro*  
*Elizabeth M. King*

19. Child and elderly care in South Korea: policy analysis with a gendered, care-focused computable general equilibrium model  
*Martín Cicowiez*  
*Hans Lofgren*

65. Women’s market work and childcare policies in Colombia: policy simulations using a computable general equilibrium model  
*Martín Cicowiez*  
*Hans Lofgren*  
*Ana Tribin*  
*Tatiana Mojica*

99. The enduring impact of the pandemic on gender patterns of paid and unpaid work: evidence from time-use data in Turkey  
*Ipek Ilkaracan*  
*Emel Memiş*
123  Unpaid eldercare and its impact on the US labor supply
    *Tania Ahmed*
    *Maria S. Floro*

158  Care work and the demographic composition of households:
    two Asian cases
    *Elizabeth M. King*
    *Hannah L. Randolph*
    *Jooyeoun Suh*

191  Care workers’ sense of responsibility, working conditions, and
    the quality of care in South Korea
    *Shirin Arslan*
    *Arnob Alam*
    *Maria S. Floro*
    *Seung-Eun Cha*
    *Eunhye Kang*
Introduction to the symposium on the care economy*

Maria S. Floro
American University

Elizabeth M. King
The Brookings Institution

1. What is the care economy?

The articles in this Symposium on the Care Economy contend that a better understanding of the care work that households provide would deepen our understanding of how economies operate and why public policies may or may not have their desired impact. The care economy comprises a wide range of activities: from those involving direct, nurturing care activities, such as feeding an infant, assisting a child with homework, or helping a disabled family member dress, to those activities considered as indirect care or that do not entail face-to-face personal care, such as cooking meals, washing laundry, or gathering water [ILO 2018:6]. Many of these activities are undertaken by family members or by kin residing in a separate household; many are also performed by paid caregivers who work in households and in care establishments, whether private for-profit, non-profit, or government-run. In some cases, care services, such as daycare for young children, may be provided by one’s employer or a community organization.

Over the past three decades, a growing number of studies have shown the strategic importance of care activities in the larger economy (Elson and Cagatay [1995]; World Bank [2011]; Alonso et al. [2019]; Blecker and Braunstein [2022]). These studies illustrate how these activities are critical for economic growth and sustainable, economic development. Such activities lay the foundation of every country’s human and social capital and maintain every country’s workforce. In contexts where paid or public health and social services are undeveloped or unaffordable, family members, kin, and neighbors are the primary providers of such services. In richer economies, the private sector for care services is more well-developed, but unpaid family caregiving is still significant. These points may seem obvious but the care economy, especially unpaid caregiving, tends to be invisible in policy discourse.

* Editor’s note: The Philippine Review of Economics is grateful to Maria S. Floro and Elizabeth M. King for organizing the symposium and reviewing the papers in the collection.
One reason for the absence of care activities in national development plans and policymaking is that they are largely unpaid and nontraded. While time-use survey data from many countries globally document that a large share of people’s time each day is devoted to these activities, they are not included in the System of National Accounts. Despite efforts by the UN and experts to expand the measures of a country’s level of production and well-being to include the unpaid care sector, progress to do so has been limited. Taking stock of the labor engaged in services that are provided in the care economy is therefore not an easy task. Another important reason for the relative neglect of the care economy is that, as shown by the articles in this Symposium, care work worldwide, whether paid or unpaid, is predominantly performed by women and girls. The totality of women’s economic contribution has been ignored in development models and growth theories.

The articles in this Symposium address the challenges of, first, estimating the magnitude of the care economy and, second, integrating it in policy tools such as macroeconomic models, empirical evidence, and indicators. The authors use a variety of theoretical approaches and empirical methods to illustrate the interconnection between the market economy and the care economy as well as the short term and longer-term consequences of economic growth processes. References are made to both high-income countries like South Korea and the US, as well as middle-income countries such as Colombia, Mongolia, and Turkey.

Collectively, the articles demonstrate that care issues are central to addressing demographic, economic and social challenges in the world including the Asia-Pacific region. Growing populations, ageing societies, changing family structures, ongoing shifts in economic sectors and employment patterns, and global crises such as the COVID-19 pandemic have affected not only the demand for care but also the abilities of existing care arrangements to meet those needs. The articles also highlight possible policy solutions and the important roles of governments, the business sector, communities as well as individuals in addressing these urgent care issues.

2. Care and demographic transitions

Population pyramids for 1950, 2000, and 2025 (using the medium-variant projections of the UN) show significant shifts in the age distribution of the world population, especially during the half-century between 1950 and 2000 (Figure 1). During that period, fertility rates fell and life expectancy at birth increased. As a result, there was a ten percentage point decline in the share of the population below age 15 (from 34.7 percent to 24.5 percent) and a doubling of the share of the population aged 65 and above (from 5.1 percent to 10.5 percent). However, although fertility rates have declined, children aged zero to 14 still make up one-quarter of the world’s population, especially in lower-income countries. Meanwhile, rapid aging has been occurring mostly in higher-income countries.
The age groups at both ends of the population distribution are highly relevant to any discussion of care. The care of children below five and even of school-age children demands a large proportion of the time, energy, and resources of households. In Korea, for example, the average weekly time spent caring for children and older adults in need of care by family members in households with dependents exceeds 50 hours on average [Cha et al. 2023]. In the US, many of those who provide care to elderly persons are themselves employed [Ahmed and Floro in this issue]. While improvements in public health have contributed to older people being healthier, longer lives have also meant an increase in the share of the superannuated—those aged 80 and above—who demand both more family caregiving and greater access to health and paid care services (Table 1).

**TABLE 1. Distribution of the world’s population, by age group**

<table>
<thead>
<tr>
<th>Percent share</th>
<th>1950</th>
<th>2000</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below five years old</td>
<td>13.7</td>
<td>8.7</td>
<td>7.9</td>
</tr>
<tr>
<td>Below 15 years old</td>
<td>34.7</td>
<td>25.7</td>
<td>24.5</td>
</tr>
<tr>
<td>65 years old and above</td>
<td>5.1</td>
<td>9.4</td>
<td>10.5</td>
</tr>
<tr>
<td>80 years old and above</td>
<td>0.6</td>
<td>1.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: UN Population Projections (medium-variant)

These demographic transitions have led to an expanding need for childcare and eldercare, challenging current care arrangements and overwhelming many families. Adults who belong to the “sandwich generation,” that is, those who care for their young children as well as their aging parents, are finding themselves in a real conundrum. A study of these caregivers find that they experience financial
difficulties twice as often as other caregivers, and emotional stress, 50 percent
more often [Lei et al. 2023]. Together with demographic transitions, economic
phenomena, such as rapid urbanization and higher migration rates, are also
changing marital patterns and family structures in many countries. One result of
these changes is that more children are growing up in households with one or no
parent. These single-parent households are among the most financially vulnerable
groups. A significant proportion of these households do not have access to
resources that enable them to get care support or assistance from either extended
family networks or paid care services.

3. Aspects of the care economy

Because women typically bear the heaviest burden for caregiving in the family
now and quite possibly also in the future [King et al. 2021], the tension between
their unpaid care work and their labor market participation has been a topic for a
growing literature (World Bank [2011, 2021]; Ferrant et al. [2014]; Beneria et al.
[2016]; Connelly and Kongar [2017]; Blau and Winkler [2017]; Charmes [2019];
Alonso et al. [2019]). Empirical research shows that domestic and childcare
duties, against a background of culture and social norms, constrain female labor
force participation and influence the type of livelihood in which women engage.
The global labor force participation rate for women is just over 50 percent
compared to about 80 percent for men and has remained fairly flat over the last
three decades [World Bank 2023a]. The relationships regarding the care activities,
domestic work and market participation of women are the focus of several of the
papers in this Symposium.

Many countries, including South Korea and Colombia, have made significant
progress towards gender equality on many dimensions, yet inequalities in the
care workload and the division of unpaid care labor within households have
persisted. Martin Cicowiez, Hans Lofgren, Ana Tribin and Tatiana Mojica
examine economic policies in South Korea and Colombia that can help improve
the welfare of households with care responsibilities by freeing up time for women
to take on jobs that are better paid. They break new ground by developing care-
focused, gender-aware computable general equilibrium (CGE) models of the two
economies. CGE models are tools commonly used by policymakers to analyze
the potential impacts of specific economic policies, but they are seldom used to
examine and predict the macro effects of care activities. These gendered CGE
models for policy analysis or GEM-Care models for Korea and Colombia embed
care services as inputs in the economy that have a direct effect on the size of
the labor force and indirect effects on wage earnings, household income, and
consumption. These models are used to predict the impact of policies that expand
public care, provide subsidies for the care given by households or the private
sector, and reduce gender gaps in labor force participation and wages, economic
growth, and household welfare. The paper on Colombia also estimates the impact of cash transfers to households with children on private consumption, unpaid care work, female labor supply, and economic growth. The two papers conclude that the impact of these policies depends on the flexibility of gender roles and the division of labor both within households and in the broader economy.

The paper by Ipek Ilkkaracan and Emel Memiş in this Symposium illustrate how different flexible work arrangements that emerged during the COVID-19 pandemic in Turkey have reset the allocation of time between market and unpaid care time for women and men in households. Using three surveys conducted before and during the pandemic, they found shifts in the work and unpaid care activities that reflected the work conditions during the lockdowns and, later, also the easing of such restrictions. After some of the work restrictions were lifted, the unpaid work time for women and men remained higher than during the pre-pandemic period, but less than under the lockdown period. Labor market hours, however, returned to pre-pandemic levels and even at slightly higher levels for employed men than before the pandemic, although it may be too early to tell where work hours would level off. Moreover, post-lockdown, there was a return to the workplace as the location of employment, but some teleworking and hybrid work have remained, especially in the case of women. This paper is relatively unique in being able to examine shifts in labor supply behavior by women and men in response to rapid changes in work arrangements.

Understanding time allocation within the household helps to predict the impact of a variety of family and social assistance programs on economic indicators such as labor force participation. Who provides unpaid care within the household is of economic and policy relevance. The paper by Elizabeth King, Hannah Randolph, and Jooyeoun Suh in this Symposium examines how childcare, domestic work, and paid work in the labor market are shared among household members, the extent to which women and men substitute for each other in these activities, and whether or not they realize economies of scale. The authors analyze nationally representative time-use survey data for Mongolia and Korea to examine these questions. The two countries differ in their level of economic development and industrial structure, demographic profile, and household composition, providing a comparative perspective on the allocation of time within households. And while traditional beliefs and social norms, as well as the market for paid care services, are important factors in those allocation decisions, these social factors are themselves evolving in response to broader demographic and economic transformations.

The paper by Tanima Ahmed and Maria Floro in this Symposium brings attention to the pressing issue of eldercare as life expectancies and dependency ratios increase; in particular, it examines this relationship in the US. Similar to low- and middle-income countries and in contrast with high-income countries, the majority of frail older adults in the US rely largely on unpaid caregivers. This is because of the inadequate prioritization of public investment in long-
term care, making the US government spending on eldercare proportionally the lowest among high-income countries. Using American Time Use Survey data, the authors show that frequent eldercare provision, that is, providing eldercare daily or several times a week, reduces the labor force participation of both women and men by nine percentage points. The tradeoff between unpaid eldercare and employment highlights the constraint imposed by the lack of public investment in care services and family leave policies.

Can paid care services substitute for a significant share of unpaid family caregiving and thus alleviate the burden on households and release time for other economic activities? In response to a growing demand for care services, governments in middle- and high-income countries have adopted various policies and programs. One of these is to expand paid care services, including childcare, early childhood education, community-based daycare, and long-term care for older adults in need of care. The paper by Shirin Arslan and her co-authors in this Symposium addresses one of the most important deterrents to a greater use of such services—concerns by families about the quality of paid services. Caregiving is distinct from other types of services in that it requires sustained personal attention. The quality of care and emotional support that a loving family member or kin can offer are difficult to replace, some would argue; on the other hand, others would argue that paid care workers may have specialized training and thus would be better able to provide the type of care needed by, say, an older adult with worsening dementia. By exploring the factors that contribute to the sense of responsibility that care workers feel, such as their working conditions (job security, work schedule predictability, and adequacy of training), the paper elucidates important dimensions of care policies and programs that deserve greater attention.

4. Care in the Philippine economy

How important are issues about the care economy in the Philippines? As with the rest of the world, over the past two decades, there have been significant changes in its demographic profile—a dramatic decline in fertility rates from 7.1 in 1960 to 2.7 births per woman in 2021 and an increase in average life expectancy at birth from 59.2 years in 1960 to 69.3 years in 2021 [World Bank 2023a]. These demographic shifts, along with large rural-to-urban and international migration flows over the past decades, have brought about profound changes in kinship network ties and household structures that have shaped the country’s care economy—more households with no or single parent, parents who are absent for extended periods of time, and fewer kin in the immediate community to provide care support. According to the 2018 Philippine National Migration Survey, 12 percent of households have a member who was or had been an Overseas Filipino Worker (OFW) [National Statistics Authority 2023].
From factory and domestic workers to engineers and nurses, OFWs leave their families to earn income that provide financial assistance to those they leave behind. Their remittances totaled USD 32.8 billion in 2017, an amount equal to ten percent of the country’s GDP [World Bank 2023b].

The massive migration flows frequently separate children from their parents during their early formative years of growth, threatening the healthy development of children. A study of children who are left behind finds that these children experience a vast range of poor physical (general health, hygiene, illness, and nutrition) and mental (behavioral, cognitive, and emotional) health outcomes [Domínguez and Hall 2022]. The pressure of outmigration on families, children and elders left behind needs more attention than has been given by policymakers. In 2018, less than ten percent of children aged zero to four years were enrolled in public early childhood care and development programs. Although there are private sector childcare services in major urban centers, they are generally not affordable for low-income families [Epetia 2019]. Concerns regarding the affordability and quality of care can serve as barriers to families seeking assistance from outside the household to meet their care needs.

Social expectations regarding women’s role as primary caretaker in families remain prevalent, regardless of the increase in women’s labor force participation in the past six decades. Data from the International Social Survey Programme’s World Value and Gender Roles survey show that over 80 percent of Filipinos agree that a man’s job is to earn money while a woman’s job is to look after the home, and about half believe that a preschool child suffers with a working mother [World Bank 2021]. As a result of persistent gender norms and the absence of comprehensive care policies, employed women now work longer hours, on average, compared to employed men when the time for unpaid domestic and care work are combined [Abrigo and Francisco-Abrigo 2019]. The lesson is not to prevent women from participating in income-earning work but to address the barriers they face. Higher female labor force participation is instrumental to economic growth and gender equality [Philippine Institute of Development Studies 2022]. A study shows that if women’s participation increased by 0.5 percentage points per year from a baseline of 45 percent in 2020, GDP and GDP per capita would increase, on average, by 0.3 percentage points per year over the period 2021–2050 [World Bank 2021]. And because the absence of care support policies hits low-income and vulnerable families the hardest, a comprehensive national care policy would be both an economic growth and poverty reduction policy.

5. A call for more research on the care economy

The studies in this Symposium illustrate some of the kinds of research that are needed to understand the care economy across different country settings. Using various sources of data—time-use surveys, household questionnaires that reveal
the nature of care needs and arrangements, labor force surveys, and surveys of paid care workers—they demonstrate the range of information and types of analysis that can expand our knowledge about the care economy. They also reveal the need to improve measures of care activities, many of which take place in the home, whether performed by family members or paid domestic workers, and are inadequately captured by labor force surveys. Because care is, by nature, a personal activity, research on the care economy would be enriched by evidence on people’s beliefs and values about caregiving and on the network of care-related relationships within and across households and communities. The nature of care activities and who engage in them change over time because of demographic, technological and economic shifts, as well as unanticipated phenomena such as the COVID-19 pandemic. Research using data from panel surveys and repeated cross-section surveys can help monitor the magnitude and direction of those changes. Finally, by making the care economy not only more visible and better understood but also an integral component of micro- and macroeconomic models and other policy tools, research can help sharpen the effectiveness of social and economic policies.

References


