

What Care Produces

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I. Introduction

Care provision is a multidimensional concept, reaching beyond motives, morals, and the satisfaction of human needs to include an important component of economic *output*: the production, development, and maintenance of human capabilities with both instrumental and intrinsic value. This distinctive output defines the “care sector” of the economy, which bridges unpaid and paid activities, entails significant transfers of time and money, and makes indispensable contributions to both the market economy and to social well-being. Conventional economic theory treats “human capital” as one of many *inputs* into Gross Domestic Product or GDP—the final value of all goods and services bought and sold within a country. This essay makes a case for reversing these priorities, treating GDP as one of many inputs into individual and social capabilities and explaining why high levels of inequality and economic stress make such a reversal difficult to achieve.

In the following sections of this paper, a critique of conventional ways of imputing a dollar value to unpriced *inputs* such as unpaid care work provides a starting point for the more ambitious argument that we should also consider unpriced *outputs* such as physical and mental health, educational attainment, social connections, and subjective well-being. A

brief description of social accounting reveals the potential to track the distribution of the costs and benefits of care provision and unveil complex forms of collective conflict over social spending. The next section explains implications for alternative economic “scorecards” and improved national income accounts. The conclusion insists that the policy implications are already clear: We should look beyond conventional measures of economic success and invest more resources in all forms of care provision.

II. Market Valuation of Unpaid Work

Improvements in the measurement and valuation of unpaid care work over the last two decades merit recognition for detailing the quantitative significance of productive activities outside the market. However, they generally provide lower-bound estimates of the value of these activities. As the following paragraphs will explain, they typically fail to acknowledge all the temporal constraints of unpaid care provision, presume that market wages are an accurate measure of its hourly value, and make simplistic assumptions regarding substitutability between unpaid and paid services.

The advent of nationally representative time-use surveys has made it possible to measure average time devoted to unpaid care, housework, volunteering and other unpaid but productive activities. For example, the American Time Use Survey, conducted annually since 2003, consistently shows that time spent in unpaid work (defined as activities someone else could, in principle, be paid to perform) closely resembles the time devoted to paid employment. In 2023, the latest year for which data is available, the civilian population of the U.S. ages 15 and older spent an average of 3.56 hours per day in employment and employment-activities, and an average of 3.25 hours in housework and lawn care, purchasing goods and services, and caring for and helping household and non-

household members. If time devoted to volunteering and organizational, civic and religious activities is added in, total unpaid work reaches an average of 3.59 hours.¹ These numbers alone dramatize the need to expand the conceptual boundaries of what we refer to as “production,” even though the American Time Use Survey itself continues to use the word “work” to refer only to paid work.

Unpaid units of labor time can be assigned a monetary value based on their replacement cost (what it would cost to pay someone to perform a comparable service). They can also be assigned an opportunity cost (such as wage a person forgoes in order to provide unpaid work), which is particularly relevant to individual decisions. While many methodological issues remain open to debate, the U.S. Bureau of Economic Analysis now publishes “satellite accounts” that estimate the replacement cost of unpaid work (along with estimates of the value of other inputs) in terms that can be added to conventional measures of Gross Domestic Product. By these estimates, the value of household production represented about 34% of the total output measured in the satellite account in 1965 and 22% in 2019, a decline largely driven by increases in women’s paid employment (Bridgman et al. 2022:10).

Both replacement and opportunity cost valuations are directly affected by the way in which time spent on unpaid work is defined and measured. Time-use surveys remain largely focused on explicit activities, without much attention to the supervisory constraints of care for young children, people experiencing sickness or disability, or frailty of old age. Yet the need to be physically present and “on call” in order to provide direct care, if needed,

¹ Author’s calculations based on the American Time Use Survey tables at <https://www.bls.gov/tus/tables/a1-2023.pdf>

significantly reduces women's availability for employment outside the home (UNWomen 2021; Folbre 2023).

The extent to which responsibility for children under the age of 13 affects time allocation is directly measured in the American Time Use Survey and can also be proxied by in other surveys by questions regarding the co-presence of young children during explicit activities (Mullan and Craig 2009). The quantitative implications are significant. One analysis of taking measures of supervisory responsibility from the American Time Use Survey into account (as well as modifying some valuation parameters) almost doubled the estimated contribution of unpaid work to GDP in 2010 (Suh and Folbre 2016).

Another method of imputing value differs from both replacement and opportunity cost valuation, known as output valuation, asks what it would cost to purchase a comparable service outside the home, rather directly valuing hours of unpaid work. For instance, rather than simply applying the wage of a nanny or a child care worker to parental child care time, this approach would consider the hourly cost of the services of a paid child care facility. This cost looks beyond labor costs alone to consider the costs of space, facilities, utilities, and management, profits, other inputs, and profits (mark-up of prices over costs).

The method of output valuation, pioneered by the Australian economist Duncan Ironmonger, has been applied in some detail by the United Kingdom's Office of National Statistics (Ironmonger 1996; Holloway et al. 2002) and on a smaller scale to some communities in the U.S. (Dalenberg et al. 2004). This method has not been widely applied, partly because it is difficult to define all the separate outputs of unpaid work and to accurately account for non-labor costs. However, one interesting application, relevant to

valuation of the direct care of dependents, could consider what it would cost the state to provide substitutes for family care, such as foster care for children, or nursing home care for adults in need of assistance.

All three methods of imputation are sensitive to market wage rates and typically justified by the assumption that the chosen wage rate accurately reflects the value of the work performed. This assumption has momentous empirical consequences. For instance, in the U.S. satellite accounts, the hourly wages of a “general housekeeper” are typically used to assign a value to all unpaid work. This occupation is one of the most poorly paid in the U.S., influenced by a long history of labor market segmentation based on gender, race, ethnicity, and citizenship. In recent years, an influx of undocumented workers with little bargaining power in the labor market has also exerted downward pressure on wages in this occupation. Many social scientists reject the view that market wages are an accurate measure of “value-added,” and empirical research suggests that even the wages of more highly-educated workers in care occupations and industries (health, education, and social welfare) are a poor reflection of the social value of their contributions (Budig et al. 2019; Folbre et al. 2023).

Individual productivity certainly influences wages, but collective bargaining power and institutional arrangements also come into play, shaping the forces of supply and demand. For instance, a large supply of unpaid care worker reduces the demand for paid care services, lowering their price. If all unpaid care were suddenly withdrawn, the wages of paid care workers would likely increase, making unpaid care seem more valuable. Or imagine what would happen if women were largely excluded from paid employment (as they have been in the past). The supply of unpaid care would increase, reducing demand

for paid care services, lowering the wages of paid care workers and, along with them, the imputed monetary value of unpaid work.

Imputation also implicitly assumes perfect substitutability between unpaid and paid care services, which is far-fetched. While paid services reduce constraints on unpaid caregivers committed to long-term relationships, they do not and cannot replace them entirely. Children relegated to temporary group quarters or unstable foster care often experience irreparable harms. Personal connections and attachments also contribute to the physical and mental health of adults. In more technical economic terms, unpaid care often entails emotional attachments and person-specific skills that can render it more “productive” than paid substitutes.

III. Social Accounting, Public Goods, and Human Capabilities

Sometimes care provision is equated with the unpaid family work described above, but it also includes services and resources provided outside of families. Whether provided at home, purchased in the market, or provided by the public, care services produce, develop and maintain human capabilities that benefit society as a whole. Feminist research often pictures care provision in terms of a “diamond” with four vertices representing distinct sites—families, communities, firms, and the state (Razavi 2007). Important synergies between these sites affect care outcomes. The communities people live in influence their interactions with others and their access to mutual aid. The wages that adults earn from firms affect both the time and the money that they can devote to the care of one another and their dependents. The state is a source of public investment in health, education, and social services, as well as regulation of families, communities, and firms.

This big picture invites comprehensive social accounting, which departs from market-centric approaches in its attention to what economists term “externalities” or “spillovers” (the unanticipated side effects of private transactions) “public goods” that are difficult to price (and therefore susceptible to “free-riding”), “social costs” (which could also be labeled “public bads”) and “merit goods” that embody important moral values. This conceptual vocabulary is widely deployed in environmental accounts that are sometimes treated as satellites to national income accounts. While environmental accounts include some dollar values based on estimates of specific social costs, they also include physical indicators such as changes in global temperatures, loss of wetlands, and species extinctions (Torres et al. 2021). Likewise, social accounting is attentive to stocks and flows that can’t necessarily be reduced to dollar values, such as physical and mental health, subjective well-being, and levels of social trust. Many non-profit organizations and cooperative businesses use social accounting to assess their contributions to community well-being (Mook and Pstross, 2013).

The distinction between private and public goods is better conveyed by a spectrum than a clear dividing line. Many goods and services have characteristics of both. For instance, parents derive substantial private benefits from raising children that also grow up to become employees and taxpayers, generating public benefits. Individuals who successfully attain high levels of education can often earn more money than those who don’t but may also come up with ideas and innovations of great social value. Elderly retirees derive substantial private benefits from publicly-financed pensions and health care but often continue to provide substantial public benefits to their communities. While

individuals prize their own mental and physical health, they also benefit from the mental and physical health of others.

These are all examples of the positive externalities of producing, developing, and maintaining human capabilities, which often render them public goods (Folbre 1994). These social benefits are often emphasized in economic assessments of human capital, which clearly contributes to growth in GDP. However, most economists define human capital in terms of the effect of educational attainment and labor force experience on lifetime earnings, largely ignoring both the private costs and the public benefits of producing the human beings that later attend school and find jobs (Folbre, 2012). Likewise, research on social capital, which emphasizes the positive impact of trusting others on economic efficiency, seldom considers the positive impact of care for others (Putnam 2000).² Trust is based largely on information—confidence that people will not betray promises. Surely it is reinforced by care provision, which relies more heavily on emotional attachments, prosocial preferences and norms of social obligation.

While research on human and social capital reveals important instrumental payoffs, it does not capture all the social benefits and, even more importantly, should not distract attention from “merit goods.” Care provision is valuable in and of itself, a source of meaningful satisfaction for both providers and recipients. Advocates for feminist care ethics emphasize the intrinsic value of enabling people to lead meaningful and productive lives (Tronto, 1993). The development of human capabilities should be a primary goal of

² One exception is the work of James Coleman (1988), which long precedes that of Robert Putnam. Coleman emphasized the contributions that “stay-at-home” mothers made to human capital, though he ignored the costs and risks they incurred as a result.

economic development, because it expands the scope of freedom for people to be who they are and do what they want (Sen, 1999; Nussbaum, 2013). Attainment of individual capabilities represents an important dimension of social justice.

Conceptualizing care provision as the production, development and maintenance of human capabilities combines instrumental and intrinsic benefits and goes beyond a market metric based exclusively on dollar values. Effective social accounting must be attentive to social costs as well as social benefits and much depends on how it is framed. Basic economics textbooks often treat discussions of social welfare from the point of view of an imaginary social planner who has the best interests of society at heart, in much the same way that a benevolent head of household is presumed to have the best interests of his family at heart (Becker 1981). In reality, no such planner exists, and it is probably hard to know how to make everyone as happy as possible.

The distribution of the costs and benefits of care provision is profoundly shaped by many forms of collective conflict and bargaining. However, it is possible for a democratic process to set priorities for achieving agreed-upon social goals. Reaching those goals is far more difficult, as a result of distributional conflict. Individuals are often unwilling to contribute to a public good unless they can be confident that others are contributing as well, but it is often difficult to determine (much less enforce) their level of contribution. Cooperation in the production of public goods can easily break down as a result of this free-rider problem. If even one person defects on their commitment to help pay the costs, this reduces the relative costs to others, which can in turn motivate their defection.

Another form of distributional conflict emanates from the prevalence of

“club goods,” or goods public only to members of a specific group (Cornes and Sandler, 1996) For instance, many country clubs and gated communities charge a basic membership fee that, once paid, provides free access to many facilities, such as swimming pool or tennis courts. Many airlines offer access to comfortable airport lounges, along with free snacks and drinks, for those who pay for membership. A club isn’t necessarily formal and doesn’t necessarily rely on fees to set boundaries. It can describe any group able to exclude others from public goods or effectively avoid paying private costs.

The term “club good” trivializes problems of global import. Affluence typically offers access to valuable public goods—such as high quality neighborhoods, schools, and vacation venues—that poverty does not. Safety itself can be a public good not available to low-income families, who are more likely to live in high-crime neighborhoods, to be exposed to environmental toxins, and to be more vulnerable to the effects of climate change. Affluent nations themselves represent a kind of club that is largely responsible for the carbon emissions driving climate change, yet less likely than poor nations to be adversely affected by it (Boyce, 2021).

Like the free-rider problem, club competition can undermine public good provision. The economic advantages of restricting access to public goods can motivate efforts to exclude others whether they can pay the price of admission or not, as when some groups collectively discriminate against others. For much of the twentieth century, racial segregation in the U.S. restricted Black access to high quality education and health services, reducing the capabilities of the Black population. Immigration barriers in affluent countries exclude most non-citizens from the public benefits of citizenship, which typically include access to valuable publicly-funded health and education services. Feminist research offers

considerable evidence that the current organization of care provision in the U.S. and elsewhere depletes care providers and reproduces inequalities based on gender, race, citizenship and class (Rai 2024; Folbre 2021).

IV. Alternative Scorecards and Revised National Accounts

One of the greatest attractions of GDP as a measure of economic success is that dollar values provide a convenient common denominator for the aggregation of market output. Non-market outcomes are, almost by definition, more difficult to define and measure. Many alternative scorecards of success have been devised, based either on a dashboard of many indicators or a weighted index of indicators distilled to one number. The United Nations challenged the link between GDP and social well-being long ago with its Human Development Index, which ranks countries on a combined measures of life expectancy, educational attainment and per capita market income—three important dimensions of individual capabilities. The resulting rankings diverge significantly from those based per capita market income alone. The more recent United Nation’s Sustainable Development Goals specify a set of dashboard indicators that emphasize both environmental and social sustainability (United Nations, 2024). Some indicators, such as the Gender Empowerment Measure, assess women’s progress in entering traditionally masculine domains (Folbre, 2006).

One of the best known alternatives to GDP, the Genuine Progress Indicator (GPI), includes the imputed market value of unpaid work in the home as well as estimates of the depreciation of unpriced natural assets and loss of ecological services. In recent years, the GPI has trended down even as GDP has trended up (Berik, 2018). Like several other indices, it treats the market value of unpaid work as an input while valuing it at a very low

replacement cost. Another example, the Better Life Index developed by the Organization for Economic Cooperation and Development (OECD), includes eleven different indicators of the quality of the social environment, providing a way to compare outcomes across countries (OECD, 2014). This index does not include attention to specific inputs and does not assign its outcomes a dollar value.

National-level scorecards can offer useful clues to the effects of differences in care policy regimes, as well as trends over time. However, their contributions are limited. It is difficult to choose among them, and the proliferation of measures makes it difficult to coordinate research. Focus on national averages conceals economic and social inequalities within nations. Individual-level indicators tend to get more attention than social costs related to poverty, crime, or the quality of the physical and social environments. Even scorecards that cover many different care outcomes tell us little about how such outcomes are produced.

However, alternative scorecards clearly tells us more than GDP alone, which explains why they are gaining considerable attention. Tasked with updating the System of National Accounts, an international body set up by the UN Statistical Commission, the Intersecretariat Working Group on National Accounts, has proposed systematizing measures of social well-being to complement reliance on GDP.³ Like firm-level balance sheets that compare costs with both revenues and social impacts, such accounts could potentially guide national investment decisions.

³ Drafts accessed February 27, 2025, at

<https://unstats.un.org/unsd/nationalaccount/snaupdate/2025/chapters.asp>

Full disclosure: I served in a small unpaid advisory role on one of the subcommittees of this Working Group.

The Working Group's proposed revisions include many supplements to the core GDP measure: the two satellite accounts mentioned above (covering unpaid household production and the natural environment), plus other accounts covering human capital (education and training), health care, the distribution of income and wealth, and some other thematic issues of less relevance here. Unfortunately, despite this comprehensive approach, the Working Group reasserts the strict boundary between conventional GDP and its social supplements and emphasizes the economic primacy of the former.

In its own words, the Working Group explains that placing unpaid household services outside the "production boundary" that defines inclusion in GDP is "not a denial of the relevance of the services but reflects a view that their inclusion would not necessarily add to the usefulness of the SNA for the primary purposes for which it is designed, that is macro-economic policy and analysis" (Chapter 2, Section 2.42). This holds true only if one accepts the premise that macro-economic policy and analysis need not take unpaid services or the value of public goods into account. As later discussion will explain, many economists reject this premise. The problem is circular: How can macro-economic policy integrate unpaid services when they are segregated in a separate satellite where their contribution to total output and social outcomes is ignored? Even more problematic is the way that unpaid household services are segregated from both the human capital/education and training accounts, and from the health accounts, as though they makes no contribution to either.

V. Social Cost/ Benefit Analysis

More concerted efforts of social cost/benefit analysis could help improve social accounting. It is difficult to determine the difference between what we pay for and what we

get in care provision, because many of these costs and benefits land outside the market and only emerge in the long run. While the time-use surveys described above represent a valuable resource, they seldom include any household-level data on household wealth, consumer expenditures, or utilization of public services, which all affect the productivity of care work. Also, existing national surveys provide relatively little data on non-market transfers such as bequests and intra-family transfers, especially relevant to care provision over the life cycle (Folbre, 2024a).

To imagine what better data and a more coherent theoretical approach could yield, consider some examples of social cost/benefit analysis that explicitly ask how human capabilities are produced, developed and maintained. These can take multiple forms-- measuring both inputs and outputs in dollar terms, asking what is spent in dollar terms to achieve physical outcomes (such as improved life expectancy), providing more complete estimates of the total costs of caring for children and people experiencing illness, disability, or frailty, and asking how these costs are allocated among providers, recipients, and society as a whole

Economists often consider estimates of reductions in social costs especially attractive because they can be reported in terms of dollar values as a rate of return. In general, if public expenditures to compensate for Problem X are taken to be an accurate reflection of social “willingness to pay” for better outcomes, then the value of any reduction in Problem X can be imputed from the resulting reduction in compensatory expenditures, as well as increased future earnings and tax revenues. This reasoning doesn’t apply if the compensatory expenditures were considered unnecessary or undesirable in the first

place—a reminder that social goals can only be determined through democratic deliberation.

One of the best-known examples of a calculation of a social rate of return in the U.S. pertain to investments in high-quality early childhood education in the U.S., which have been shown to decrease the likelihood that individuals will commit crimes or require public assistance—thus reducing compensatory spending—and to increase the earnings of both children and their mothers. One headline finding: high quality birth-to-five programs for disadvantaged children can deliver a 13% per year return on investment—(García et al. 2017). Similar reasoning has been applied to the social benefits of reducing child poverty in the U.S., though here the intrinsic value of improving children’ capabilities is also invoked (Brooks-Gunn et al., 2021). The negative “externality” of poverty on children is driven home by research showing that variation in state and local minimum wage policies in the U.S. is significantly linked to variations in infant mortality (Wolf et al. 2021). Higher minimum wages literally save lives.

This line of research on public policy, however valuable, seems to follow the lead of traditional human capital theory in taking the unpaid contributions of parents in general (and mothers in particular) for granted. Still, it sets the stage. One could interpret research calling attention to the social costs associated with children growing up in single-parent households as a mirror image of the “value added” of a second parent, though obviously many factors other than family structure per se come into play (McLanahan and Jacobsen, 2014). Since foster parents in the U.S. are paid a stipend per child, one could treat these payments as an “output valuation” of unpaid parental services, keeping in mind that

substitutability is limited since children in foster care are generally at high risk of poor emotional health (Leve et al. 2012).

Official estimates of the cost of raising children in the U.S. have recently begun to include at least some consideration of parental time, by assigning typical childcare expenditures to all families with children as an approximation of the value of their time (Lino et al. 2017). Mothers in most countries pay a higher price for childrearing than fathers do, both because they experience greater losses in lifetime earnings and are more likely to become single parents primarily responsible for their children's financial support (Kleven et al., 2024).

Estimates of the replacement cost value of unpaid time devoted to the care of adults with disabilities or frailties of old age in the U.S. summed to about \$600 billion in 2012 (Reinhard et al., 2023). A recent estimate of the value of unpaid care for family members with Alzheimer's Disease applies a far higher replacement cost wage than the more general estimate (and also far higher than the U.S. satellite account (Fox et al. 2024). Also, unlike some previous cost-benefit analysis (Viscusi, 1995) this estimate does not assume that retired persons are economically unproductive and assigns a value to their unpaid work. It would be interesting to compare this relatively generous replacement cost estimate with an output valuation question: What would it cost the U.S. government to provide nursing home care through its Medicaid program if family members withdrew their services?

While many resource flows between families, communities, firms, and the state remain invisible, intergenerational transfers are becoming more visible (Vanhuysse et al. 2023). The U.S., like other affluent countries, taxes the working age population to finance

health and pension benefits for the elderly, as well as education for the young. Improved capabilities that increase productivity help fatten the public purse. Yet public pension benefits in the U.S. are based on an individual history of market earnings, without regard for the time, money or effort devoted to actually producing the next generation of taxpayers. In the U.S., in particular, single mothers remain economically precarious in old age, because time they took out of paid employment to provide family care reduced their future Social Security benefits as well as their ability to save for old age.

Most children today will grow up to become fiscal public goods, paying more in taxes than they will take out in benefits over their lifetimes. The economic benefits of childrearing have been socialized far more thoroughly than the costs. As a result, the net benefits of Social Security are significantly higher for individuals who never devoted considerable time, money and effort to raising children, who might be said to be free-riding on parents in this respect (Folbre 2024).

International migration affects resource flows related to care provision in largely unexamined ways. Adult migrants to the U.S. (whether documented or undocumented) arrive ready-made, often bringing valuable capabilities that U.S. citizens never helped pay to develop. Most undocumented workers contribute to Social Security and Medicare through paycheck deductions, but, if deported, will never reap the benefits. Immigrants of all citizenship categories and educational levels play a crucial role in the U.S. labor force in child care, elder care, and health care services, generally earning less than their U.S. born counterparts (Folbre, 2025).

While health care is usually treated separately from the non-medical care of children and adults in need of assistance, it clearly shapes all care outcomes. Its economic

organization in the U.S. is demonstrably and lamentably inefficient (Friedman 2020). International comparisons with other affluent countries show that the U.S. “has the lowest life expectancy at birth, the highest death rates for avoidable or treatable conditions, the highest maternal and infant mortality, and among the highest suicide rates” (Montez et al. 2020:668). One recent study by experts in public health reports that a single-payer universal healthcare system would have saved 212,000 lives from Covid-19 in 2020 alone. It also calculated that over \$105 billion in hospitalization costs could have been averted (Galvani et al. 2022).

Recent research on differences in life expectancy across states in the U.S. clearly reveals the impact of the social environment. Policies as diverse as those related to tobacco, gun rights, labor, immigration, civil rights, and the environment exert a distinct influence. Indeed, Montez et al. (2020) report a strong positive correlation between policies they categorize as “liberal” and improvements in average life expectancy, both across states and over time. Poverty itself makes it hard for people to take adequate care of themselves and others (Kawachi and Subramanian, 2018).

High levels of income inequality are associated with increased levels of crime, as well as a host of other costly problems (Wilkinson and Pickett 2017; D’Alessio et al. 2025). Many other dimensions of inequality reduce social capabilities for cooperation and political engagement, which require a modicum of public trust (Uslaner and Brown, 2005) and inhibit social connections that improve health (Holt-Lunstad 2022). Due to the free-rider and distributional conflict problems outlined above, inequality can become a serious obstacle to efforts to overcome it, creating a behavioral trap that is difficult to escape (Espuelas 2015).

The factor of production that economists refer to as labor is a collection of capabilities produced, developed and maintained by the care sector as a whole. The circuits of care are just as important as the circuits of capital and stocks and flows within and between all sites of the “care diamond” influence economic outcomes. Improved survey design and data collection could expand the scope of social cost/benefit analysis, which could, in turn, contribute to National Care Accounts that treat GDP as one of many valuable inputs into what we value most.

V. Beyond the Mainstream

These efforts should be informed by recent challenges to mainstream economic assumptions. The National Income Accounts are largely the product of a theoretical paradigm that focuses primarily on individual decisions in competitive markets, treating all else as “external” to the economy. This paradigm encourages reliance on GDP as a measure of collective success by expressing considerable confidence in the efficiency of markets in which individuals pursue their own self-interest. While environmental and ecological economists document the divergence between market prices and social costs, their insights have not been widely incorporated into macroeconomic models.

A very different paradigm being advanced in the fields of feminist economics and ecological economics insists that people need to cooperate in provisioning themselves and protecting our natural and social environments (Power, 2004; Farley and Kish, 2021; Nelson and Power, 2018). This paradigm also calls attention to collective conflict over the distribution of social costs and benefits (Folbre, 2021). Such conflict can lead to top-down efforts to discourage attention to any outcomes “beyond the market,” that might be considered inconvenient truths. Recent examples in the U.S. include presidential directives

to minimize references to climate change and block efforts to increase “diversity, equity, and inclusion” in paid employment.⁴

The good news is that many economists across the board are devoting more attention to cooperation in general, and care provision in particular. paying more attention the economics of cooperation and care provision. For instance, a growing body of research in experimental economics demonstrates many people are motivated by “prosocial” as well as self-interested preferences (Sobel, 2005; Fehr and Charness, 2023). Empirical research on occupational choices and time allocation suggests that people are less motivated by a desire to maximize “happiness”—the way they feel at one particular moment—than by “meaningfulness,” more directly enhanced by tasks that involve caring for and working with others. Meaningfulness appears to be a better predictor of reported life satisfaction than happiness (Larsen et al. 2023). The big question is whether such preferences are robust enough to endure despite the economic penalties imposed on them by the labor market.

A long tradition in macroeconomics treats GDP as the final goal and arbiter of economic success, defining “welfare” largely in terms of the consumption of private goods. However, feminist economists have explored the role of both private and public care services in shaping the supply of labor to the market (Braunstein et al. 2011; Onaran et al. 2022; Setterfield, 2024). Many New Keynesian models treat distributional conflict between

⁴ See ‘Outcry as Trump withdraws support for research that mentions ‘climate’ <https://www.theguardian.com/environment/2025/feb/21/trump-scientific-research-climate>; Katrina Miller and Roni Caryn Rabin, “Ban on DEI Language Sweeps Through the Sciences,” *New York Times*, February 9, 2025, accessed online March 1, 2025, at <https://www.nytimes.com/2025/02/09/science/trump-dei-science.html>

employers and employees—i.e. profits and wages—as a significant determinant of macroeconomic outcomes. Distributional conflict between rich and poor, men and women, educated and less-educated workers, and citizens and non-citizens can also affect GDP growth.

Few, if any mainstream economic models explicitly consider the implications of below-replacement fertility, now a global trend. However, macroeconomic reasoning shows there is little reason to believe that countries automatically achieve optimal population growth—some seem stuck at levels that are unsustainably high, even more at levels that are unsustainably low (Heintz and Folbre, 2022). Paul Samuelson (1958) observed long ago that the intergenerational exchanges needed to provide income and health security in old age can't be accomplished purely through the market. Individuals can, of course, save private funds to hire assistance—but those funds won't go very far if there are few workers available to hire (one possible long-run consequence of below-replacement fertility). The elderly do better to drive a collective bargain with the young, helping finance public education in return for support in old age. So-called “overlapping generations” models explore these issues.

Intersections between demographics and macroeconomics heighten the need to devise expanded models that treat the production, development and maintenance of human capabilities as a crucial aspect of the macroeconomy.

VI. Some Policy Implications

As feminist economist Diane Elson (1995) warned long ago, unpaid care services have long served to buffer the ups and downs of the business cycle, but they do not represent a cost-less---or an infinite—resource. Policies that take the supply of unpaid care

services for granted are unsustainable, as well as unfair. They are also unhealthy.

International comparisons of differing national responses to the Great Recession of 2008 reshew that austerity policies and privatization of public services took a huge toll that included significant reductions in average life expectancy (Stuckler and Basu, 2013).

Historically, many economists have treated growth in GDP as if it were largely a public good, benefiting everyone, because it “increases the size of the pie” or because gains to the rich “trickle down” to the poor, or a “rising tide lifts all boats” and gains to the rich “trickle down” to the poor. These claims are overstated, not only because the benefits of Gross Domestic Product are unequally distributed, but also because growth in output that is officially counted is often accompanied by a decline in output that is not well tallied, including loss of lives and waste of individual and social capabilities. Add in the depletion of natural resources and the disruption of ecological services, and it is easy to see why the Genuine Progress Indicator for the U.S. has declined even as GDP per capita has risen.

Policy-makers insisting that rapid GDP growth should be our primary goal are ignoring serious threats to our social, as well as our natural environment. High levels of economic inequality are amplified by undervaluation of the time, effort, and expenditures necessary to produce, develop, and maintain human capabilities. The rapid expansion of social media has disrupted the information environment, contributing to political polarization and cultural fragmentation. The rapid pace of globalization and outsourcing has weakened the bargaining power of workers and fueled hostility to immigration. The sudden advent of new forms of artificial intelligence is likely to render many previously well-paying middle-class jobs obsolete and to reduce incentives for large employers to

support public investments in human capabilities. If we value what care produces, we need to produce policies more reliable than trickle-downs to publicly support it.

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