

# Counting Women's Work in South Africa



## The market and the household in South Africa

South Africa is an upper middle-income economy—GDP per capita in constant 2010 US\$ of \$7 575—yet it is characterised by deep social and economic inequalities. A legacy of the discriminatory apartheid system, many of these inequalities manifest along racial, but also gender, lines. This brief examines one set of differences: how people differ in their engagement in economic activity by age and gender and how that activity is divided between market work, including wage work in the formal or informal sectors, and work for household-owned businesses and farms, versus household production, including unpaid care, housework and household management.

Extremely high levels of unemployment—26.6 percent in mid-2016—and temporary (“circular”) labour migration from economically depressed rural areas to urban areas are key features of the South African labour market. This, and the resulting low levels of co-residence between children and adult males (children under 15 are co-resident with an average of 1.0 men and 1.7 women over the age of 20) mean that children and the elderly are most likely to be in the care of women. Women’s need for flexibility and, at least for older generations, their lower educational attainment contribute to lower earnings for women. These patterns coincide with gender norms about appropriate work, but traditional ideas are under pressure as families face the need for women’s income and as men show they are as capable of providing care as women.

The measurement of economic activity, however, has long focused on market work only. Leaving household production out of economic measurement obscures women’s contributions and hampers efforts to formulate policies that can deal effectively with the challenges South Africa faces. These challenges include both ending gender discrimination for women and girls because it supports human rights, but also allowing all people to use their human capital in the most efficient way to increase economic growth and raise living standards. This brief describes the results from the South African team of the Counting Women’s Work (CWW) project, a research effort within the National Transfer Accounts project designed to integrate measurement of market and household economic activity by age and gender in a new way.

### In Brief

-  The average South African adult (aged 20+) spends 25.0 hours per week in market work, but 25.5 hours per week in unpaid care and housework, traditionally referred to as “women’s work”. For women, these figures are 18.4 hours and 30.5 hours, and for men 32.4 hours and 12.2 hours.
-  Unpaid care and housework represent 47% of all work time in South Africa, and women are responsible for 72% of it. Women also do 39% of all market work.
-  Valuing time spent in unpaid care and housework at a market wage for these activities, this sector’s production is equal to 25% of GDP, compared with 51% of GDP for market labour.
-  Women spend more time in total work than men at all ages, creating a gender gap in access to time for leisure and self-care.
-  Younger girls spend slightly more time in education compared with boys, but that gap reverses and widens at older ages. At age 18, girls and boys spend 14 hours and 20 hours per week respectively on school and study.
-  The value of unpaid care a child receives in the first year of life is estimated at twice the value of market goods and services consumed.

## Age and gender in the economy

With over 50 countries around the world involved in the project, the National Transfer Accounts (NTA) methodology disaggregates national-level economic flows by age, revealing the generational economy: how we produce, consume, share, and save resources by age. The tools developed by NTA have helped us understand how population age structure impacts economic growth, welfare, and the sustainability of government and family transfer systems (Lee and Mason 2011). This is vitally important given that lower fertility and subsequent population ageing is a virtual certainty in almost every country in the world, albeit with great variation across countries.

Another global long term trend related to the phenomenon of decreasing fertility is that of women's changing economic roles. When fertility is very high, women spend many years bearing and caring for young children, which ties them to the household and presents barriers to their participation in market work. They specialise in the unpaid work of raising children, maintaining households, and caring for others, while men specialise in market work (Watkins, Menken, and Bongaarts 1987). Traditional "women's work" however, is not included in our major economic monitoring systems, and thus remains invisible and stubbornly outside of the realm of economic analysis and policy development (Waring 1999).

The aim of Counting Women's Work is to reveal the gendered economy in the same way that NTA has revealed the generational economy. This involves two efforts: (1) separating NTA economic age profiles by gender, and (2) creating National Time Transfer Accounts (NTTA). NTA uses household income and expenditure surveys and administrative data to estimate flows of income, consumption, taxes paid, and public benefits received by age, adding gender as another characteristic, and adjusting the age/gender schedules so that they are consistent with national accounts aggregates. NTTA uses time use data to measure the production, consumption, and transfers of unpaid time in the same framework as NTA estimates. Time production is estimated from time use respondents' activities and consumption of that time is imputed based on the type of activity. For example, consumption of cleaning time is imputed equally to all household members and care of household children is imputed to children in the household by age using numerical methods (Donehower 2014). Taken together, NTA and NTTA reveal how men and women, and girls and boys, produce, consume, and share their time in addition to their money. Understanding the nature of gender differences in the economy and how and why they may change is part of ensuring gender equality and is also vital for nations to thrive in a changing world.

### Counting Women's Work

Counting Women's Work (CWW) is a project within the National Transfer Accounts (NTA) research network, and is coordinated by the University of California, Berkeley; the Development Policy Research Unit at the University of Cape Town; and the East-West Center, Honolulu. The research is funded by the William and Flora Hewlett Foundation and the International Development Research Centre (IDRC).

CWW has developed methodology to measure age and gender in the gendered market and household economies. The project currently supports research in nine low- and middle-income countries around the world—Colombia, Costa Rica, Mexico, Ghana, Kenya, Senegal, South Africa, India, and Vietnam—who join a growing number of countries globally with comparable estimates.

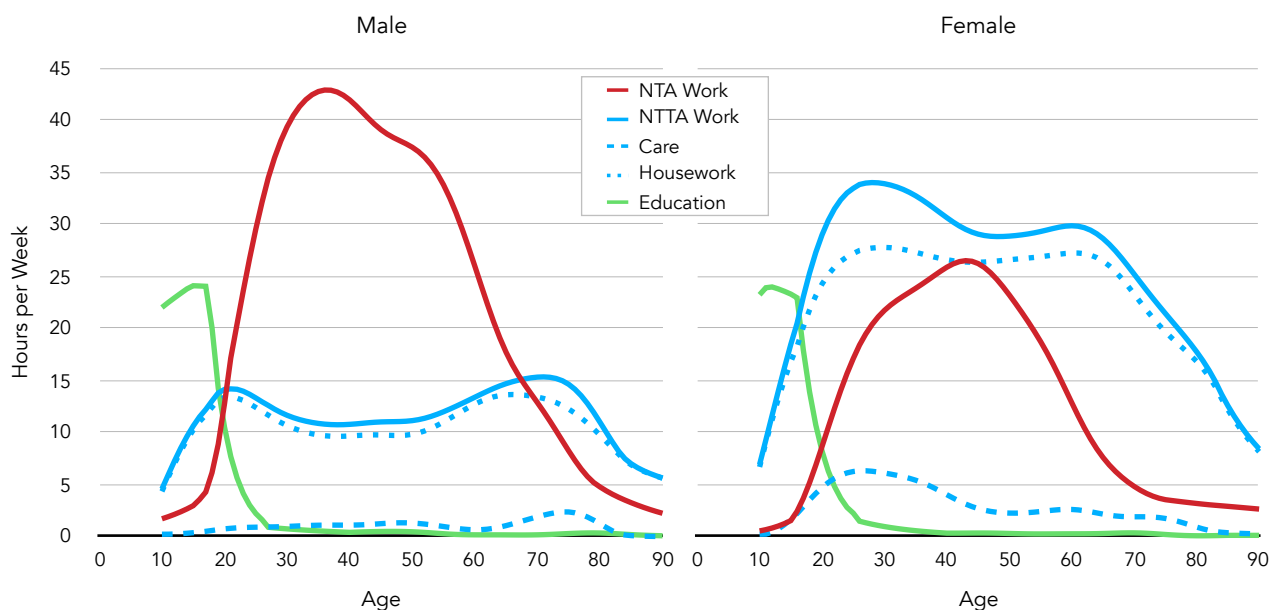
For the purposes of this brief, we refer to household production as "NTTA work" and market production as "NTA work". NTTA work includes the time spent or value produced in unpaid care for children, elders, or other family or community members, and housework, including cooking, cleaning, household management and maintenance and related activities. NTA work is the time spent in market labour or the value of that labour income, which includes wage and salary income earned from an employer as well as a portion of the earnings of household-owned farms and enterprises attributed to labour.

## Time use and gender specialisation

Patterns of gender specialisation in time use in South Africa are estimated using the South African Time-Use Survey of 2010. Time use is impacted by a variety of factors including employment status, household structure and socioeconomic status. Because some of these factors are related to life course events like childbearing and ageing, average patterns of time use can be seen to vary by age and gender.

Time spent in education is a good example. Children and young people are typically enrolled in the education system and, as a result, spend large amounts of time in education. In South Africa, boys and girls between the ages of 10 and 16 years spend an average of 23.4 hours per week in education (Figure 1). As they grow older, young people begin exiting the education system and enter the labour market in larger numbers; as a result, time spent in education declines, while time spent in paid work begins to increase. By age 20, mean time spent in education in South Africa falls below time spent in paid work for both men and women.

**FIGURE 1: TIME USE, BY AGE AND GENDER (2010)**



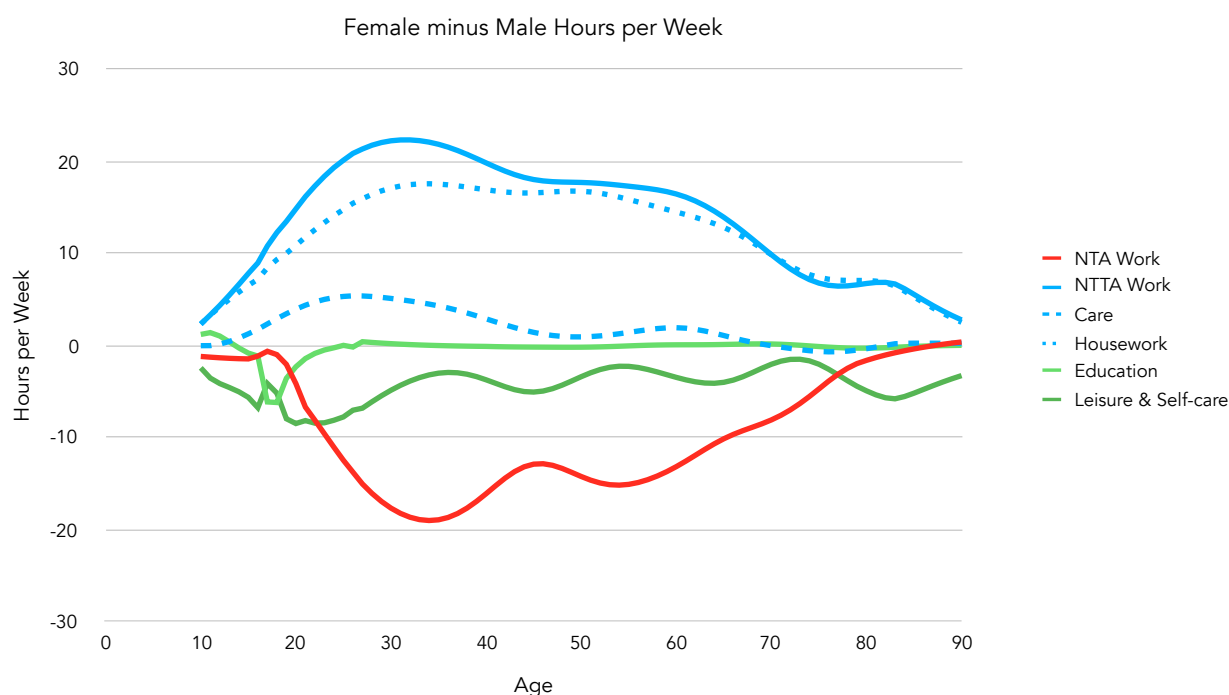
Time spent in productive activities increases rapidly for young people. Figure 1 distinguishes between time spent in NTA work and in NTTA work. For boys, mean time spent in NTTA work rises as they get older, but is soon overtaken by NTA work and related activities (by age 21). By age 26, men are spending an average of 29.6 hours in NTA work, and between the ages of 31 and 43 years they spend more than 40 hours per week in NTA work and related activities. At the same time, men's time spent in NTTA work falls slightly to just over 10 hours per week and remains around that level until the early 50s. By that age, time spent in NTA work is starting to fall rapidly but there is only a small increase in the amount of time spent in NTTA work, which rises to just over 14 hours per week in the late 60s. The vast majority of men's time in NTTA work is in the form of housework: time spent in care peaks at between 2.0 and 2.5 hours per week in their early 70s. While these estimates are from a cross-section of different age groups at one point in time, if we imagine that they do represent a person's life accurately, we could see that only 8.7 percent of men's time over the life course in NTTA work is in the form of care.

For women, time spent in productive activities at young ages rises even more rapidly than for men. By 15 years, girls are already spending 18.5 hours per week in NTTA work and this reaches 29.0 hours per week at age 20 with a growing share of direct care as well. Between the ages of 24 and 34 years, women are

spending 33 to 34 hours per week in NTTA work. Time spent in NTA work and related activities also rises relatively quickly during the late teens and early 20s, but it peaks later than for men during the early 40s facilitated, it would seem, by a fall in time spent in NTTA work to under 30 hours per week. While time in NTA work falls rapidly again for women during their 50s, time spent in NTTA work only really begins to fall by their mid-60s. For women too, the majority of NTTA work is housework; nevertheless, over a lifetime, 11.1 percent of women's NTTA work is care.

Figure 2 reveals the extent of gender specialisation in time use in South Africa; positive numbers represent tasks that women spend relatively more time in, while negative numbers reveal tasks that men specialise in.

**FIGURE 2: GENDER SPECIALISATION IN TIME USE, BY AGE (2010)**



Women are clearly specialising in NTTA work, and in both care and housework. During their 20s and 30s, women are spending an average of 20.5 hours per week more than men in NTTA work, of which an average of 4.7 hours is care. At its peak between 23 and 31 years, women are spending between 5.0 and 5.5 hours more than men in care.

Men on the other hand specialise in NTA work, and leisure and self-care. During their 30s and 40s, men spend an average of 16.0 hours per week more than women in NTA work. At all ages, men on average spend more time in leisure and self-care activities than women, with the difference particularly large during their early 20s. The gap, though, remains throughout the lifecourse, with men spending an average of 3.6 hours more in leisure and self-care activities per week than women from age 30 upwards.

Overall, we estimate that women are responsible for 81.4 percent of all time spent in care work in South Africa, and 70.3 percent of time spent in housework.

## Combining market and household production

Now that we know how much time is spent by men and women in market work and household production, the next question to ask is what is the value of total production. By its nature, work in the home is unpaid and the output produced is not priced, and so, in order to be able to value it, a suitable wage needs to be

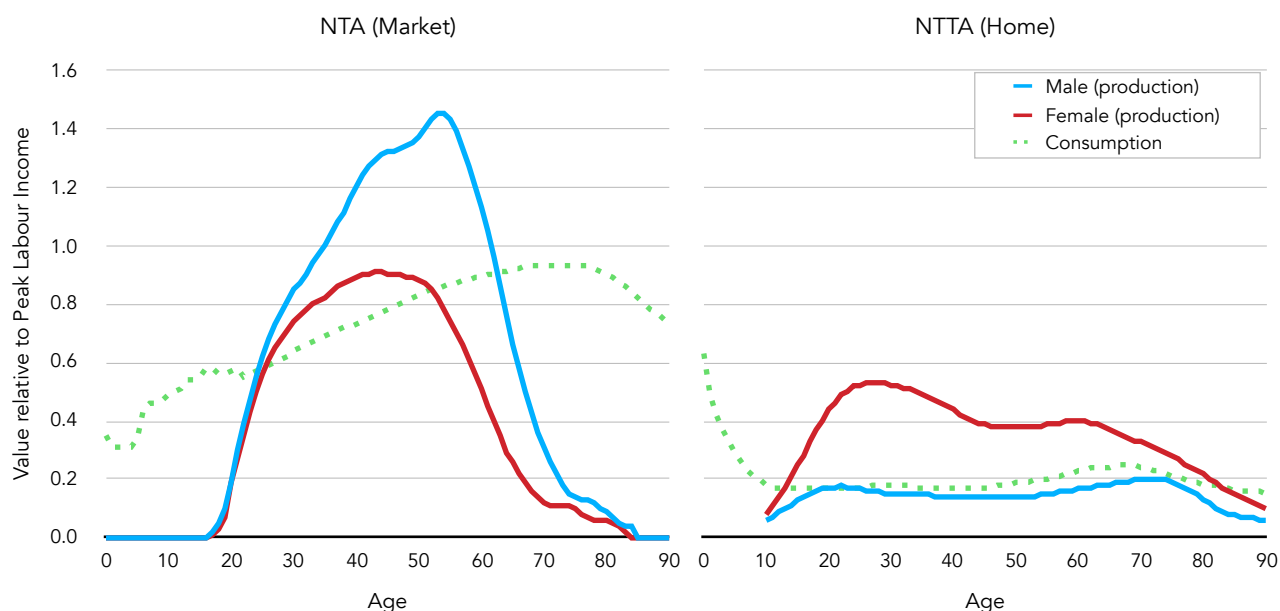
chosen to value the time. It would be preferable to value the output at a suitable price instead, but this is more difficult to do consistently across the countries in the NTA and CWW projects, so we use wage imputation instead. This makes our estimates comparable across countries, but in the end also likely underestimates the total value of the production.

In choosing a suitable wage, there are a number of options available. We use a specialist replacement wage to value the time inputs in household production. This wage is pre-tax since we are valuing the full price of the production were someone to purchase the service. One alternative is to use the wages of a generalist across tasks rather than specialist workers for each task. We do this for some countries if there is very little available wage data, although that is not the case for South Africa.

In valuing NTTA production, wages are not differentiated by gender since differences in market wages may already be the outcome of labour market disadvantage experienced by women. For South Africa, the mean wage across all activities is equivalent to 22.67 South African Rand in August 2016 prices (US\$ 1.62 at current exchange rates). In 2010, assuming an 8-hour day, this was roughly 90 percent of daily per capita GDP.<sup>1</sup> Using a specialist replacement wage, unpaid work in South Africa is valued at 24.8 percent of GDP in 2010, of which roughly three-quarters is contributed by women. This compares with 51.1 percent of GDP for all labor income in the same year.

The right-hand panel of Figure 3 shows the value of NTTA production and consumption using the chosen wage. The same scale is used in both panels to aid comparison. Although production is disaggregated by gender, we do not do the same for consumption as we are unable to accurately gauge the complex nature of intra-household distribution. The patterns observed are broadly similar to the time patterns in Figure 1. NTTA production rises rapidly for women and peaks in the late 20s at around 53 percent of peak labour income, with a second peak around age 60 at 40 percent of peak labour income. From there, the value of per capita NTTA production declines gradually to 10 percent of peak labour income for women aged 90+.

**FIGURE 3: PRODUCTION AND CONSUMPTION IN THE MARKET AND THE HOME, BY AGE AND GENDER (2010)**



The value of per capita NTTA production for men is substantially lower than for women from age 10. It peaks in the early 20s at 17 to 18 percent of peak labour income, and again in the early 70s at 20 percent.

<sup>1</sup> Daily GDP per capita is calculated as GDP per capita divided by 365 days.

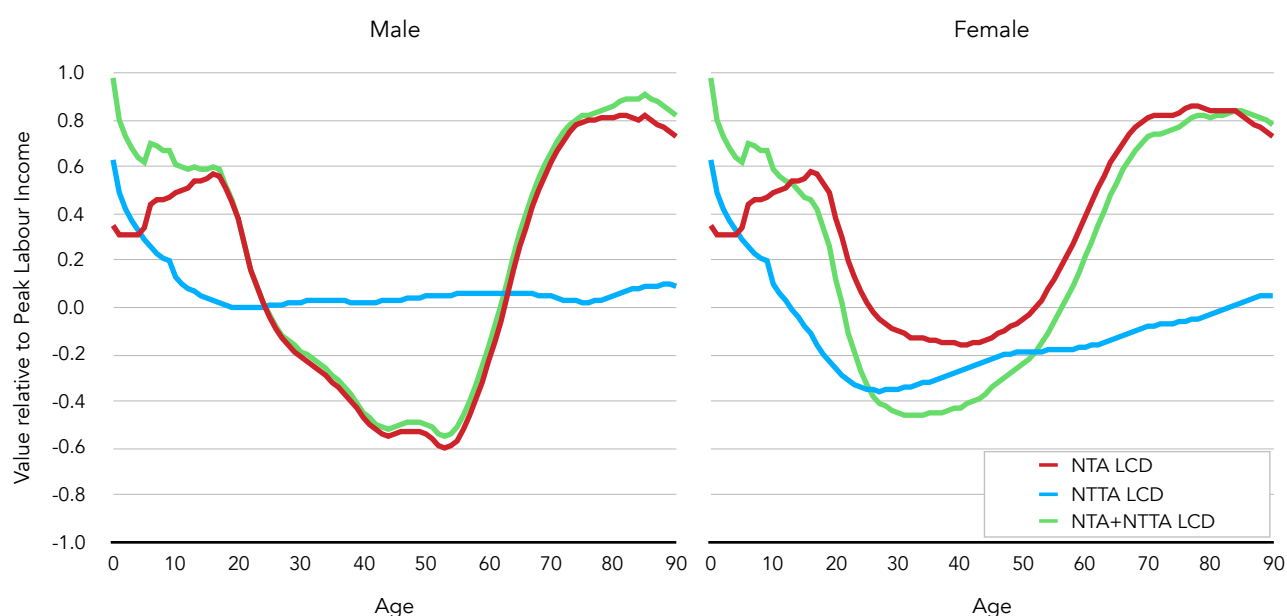
Compared with women, the value of per capita NTTA production for men remains within a much narrower range: between the ages of 16 and 80, it ranges between 14 and 20 percent of peak labour income.

Unsurprisingly, young children have the highest per capita NTTA consumption levels. Infants' consumption is equivalent to 63 percent of peak labour income, falling to 49 percent at age 1 and 29 percent at age 5. NTTA consumption remains below 20 percent of peak labour income between the ages of 10 and 52, after which it rises gradually to peak at 25 percent of peak labour income in the late 60s.

The contrast with NTA production and consumption (the left-hand panel of Figure 3) is clear. NTTA production peaks at lower levels for both men and women than NTA production, but is spread more evenly across the life course and persists into old age. In the first five years of life, children's consumption of care and housework is much larger in value than their consumption of market goods and services, effectively raising the 'cost' of children.

One of the key concepts of the National Transfer Accounts is that of the lifecycle deficit (LCD), which is the difference between consumption and labour income. While the conventional lifecycle deficit involves market production and consumption, the concept can be extended to cover production and consumption in the home. The impact of "counting women's work" on the lifecycle deficit is illustrated in Figure 4.

**FIGURE 4: THE LIFECYCLE DEFICIT IN THE MARKET AND THE HOME, BY AGE AND GENDER (2010)**



The conventional (NTA) lifecycle deficit typically shows a deficit (positive values) for children and the elderly, and a surplus (negative values) for prime working age adults. Calculated separately by gender, the lifecycle deficit retains this general pattern, but the key difference is in the extent of the surplus: for men, the surplus peaks at 60 percent of peak labour income at age 53, while for women it peaks at just 16 percent at age 40. The NTTA lifecycle deficit, in contrast, shows a surplus for women aged 13 to 82 years and reaching as much as 36 percent of peak labour income. Men, on the other hand, do not generate a surplus at any age.

Combining the NTA and NTTA lifecycle deficits reveals a much more equal pattern between men and women, with women's care and housework adding significantly to the lifecycle surplus. The combined lifecycle surplus peaks at 46 percent of peak labour income for women, compared with 55 percent for men. The impact of including NTTA work in our understanding of the economic lifecycle is clear: while men contribute 79.4 percent to the aggregate NTA lifecycle surplus, they contribute just 45.2 percent of the surplus once NTTA work is included.

A second important result is the increased cost associated with children, once we account for unpaid care and housework. For infants under the age of one, the NTA lifecycle deficit (and consumption) rises from 35 percent of peak labour income to 98 percent of peak labour income once NTTA work is included in the estimates. For children under the age of 10, the NTA lifecycle deficit ranges between 35 percent and 47 percent of peak labour income; this rises to between 62 percent and 98 percent of peak labour income once NTTA work is included. Elders, in contrast, do not have large NTTA lifecycle deficits, and so including NTTA estimates with NTA estimates of the lifecycle deficit has little impact.

Since the lifecycle deficit underpins our estimates of the first demographic dividend—the potential boost to living standards and economic growth resulting from falling fertility—these results have important implications for our understanding of the full economic impact of demographic change.

## Conclusion and policy recommendations

Our current measures of the economy remain flawed in that they overlook the significant production and consumption of unpaid services within the household. Building on other efforts to quantify the household economy, as well as the NTA framework, the NTTA methodology allows us to quantify various aspects of gender inequality and household production, including differences between men and women in market work and wages, the potential barriers posed by household responsibilities to women's participation within the labour force, the excess total work time that most women spend relative to men, and the 'hidden' costs of children.

The results of this research are also important in terms of countries' ability to achieve the Sustainable Development Goals. Specifically, Target 5.4 of the Sustainable Development Goals requires that countries "[r]ecognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate".<sup>2</sup> CWW provides the measurement and monitoring tools to understand these issues and follow them over time.

In addition, the Counting Women's Work research for South Africa highlights a number of key lessons with bearing on social and economic policy.

**Reliance on standard economic measures underestimates the full economic contribution of women in particular.** The estimates presented here confirm that unpaid care and household work represents a significant proportion of total output within South African society—equivalent to roughly one-quarter of GDP in 2010—with the bulk of this work being undertaken by women. This contribution, often overlooked and rarely acknowledged, is vital to the South African economy: it is critical for the reproduction of human capital, in caring for a new generation of potential workers, and underpins the ability of men to specialise in market work.

**Women are particularly burdened with responsibilities of care and housework during peak childbearing years, often forcing them out of the labour force and potentially limiting their future earnings potential.** Women in their twenties spend the most time in NTTA work, driven by a surge in care work associated with bearing and raising children. This age group spends at least 15 percent more time in NTTA work than their slightly younger or slightly older counterparts. Many women therefore experience significantly increased time pressure, which may also limit their ability to find employment (Floro and Komatsu 2011).

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<sup>2</sup> See <https://sustainabledevelopment.un.org>.



**Care and housework responsibilities may be impacting on the education of girls and young women, with negative impacts on gender equality in later life.** Girls and young women are spending more time in NTTA work than boys and young men and it is therefore not surprising that they spend less time in education and learning. At ages 17 and 18, equivalent to the final two years of secondary education, they spend 10 to 12 hours per week more in NTTA work and just over 6 hours per week fewer in education and learning. This may compromise young women's academic performance and limit their ability to access higher education, their access to more challenging courses within higher education or their performance in higher education; each of these impacts may have long-term consequences for the economic well-being of women, their children and their families more broadly.

Results from the Counting Women's Work research, therefore, suggest a number of potential policy interventions, including:

- Acknowledge the important contributions that millions of women make every day to well-being and total production in South Africa.
- Encourage a national conversation on norms around gender roles, within the household but also within the labour market, and a reconsideration of the designation of certain activities as "women's work".
- Consider policies to support market-provided childcare for adult women, but also potentially for younger women whose care responsibilities for siblings or their own children may be crowding out their time for secondary schooling.
- Within the labour market, promote policy interventions that encourage men to take more active roles in the home, particularly in South Africa with respect to childcare, and interventions that create greater flexibility within the workplace, allowing mothers (and fathers) to juggle employment and parenthood.

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