

Counting Women's Work in Vietnam



New time use survey reveals gender in the market and household in Vietnam

Vietnam is a lower middle-income economy—GDP per capita in constant 2010 US\$ of \$1,685 in 2015—that has experienced rapid development and increases in living standards over the last several decades, related to the vast array of economic and political reform policies known as “Doi Moi” that were begun in 1986. Since that time, Vietnam’s GDP per capita growth has averaged over 6 percent per year, growing much faster than the rest of the world overall. On an inflation-adjusted basis, Vietnamese GDP per capita has grown by a factor of 4.2 from 1986 to 2015, while the same statistic for the whole world has only grown by a factor of 1.5 (World Bank 2016). This increase in the overall standard of living took place alongside significant demographic changes as well: from the 1985-1990 period to the 2010-2015 period, the total fertility rate fell from 3.9 children per woman to 2.0, life expectancy rose from 70 to 76 years, and infant mortality fell from 37 infant deaths per 1,000 live births to 19 (United Nations 2016). Additionally, the nation has made significant investments in its physical infrastructure as well as its human capital, with many indicators pointing to improved health and education for the population.

Vietnam, like many other communist or formerly communist countries, has long had high female engagement in market labor. This emphasis on equality may have contributed to Vietnam’s success in closing gender gaps in school enrolments (WEF Global Gender Gap Report 2016). While commentators have noted a significant gender wage gap in Vietnam (VOV, 2016), another recent report cites Vietnam’s success in narrowing that gap in recent years compared to other lower-middle income countries (WEF Global Gender Gap Report 2016).

With this suggestive evidence of increasing gender equality in education and workplace outcomes, it is an obvious question to wonder if this extends to work done inside the household. Until now, that has been impossible to measure, but Vietnam fielded its first ever time use survey in 2015 and data is now available to see how men and women, and boys and girls, spend their time.

This brief describes the results from the Vietnamese 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. While the results are preliminary and the findings must be supported by future replication with larger time use surveys, there is evidence that men and women are sharing some household tasks much

In Brief

-  The average Vietnamese adult (aged 20+) in 2015 spent 22.3 hours per week in market work, and 32.6 hours per week in unpaid care and housework, traditionally referred to as “women’s work”. For women, these figures are 19.7 hours and 38.7 hours, and for men 25.1 hours and 26.2 hours.
-  Unpaid care and housework represent 61% of all work time in Vietnam, and women are responsible for 60% of it. Women also do 45% of all market work.
-  Valuing time spent in unpaid care and housework at minimum market wage, this sector’s production is equal to 17-48% of GDP, depending on how unpaid care work is valued, compared with 70% of GDP for market labor.
-  Young people spend about the same amount of time in total work until about age 20. From age 20 to 80, women spend more time in total work than men.
-  Girls spend less time in education compared with boys. At age 18, girls and boys spend 28 hours and 33 hours per week respectively on school and study. Sample sizes at young ages were small, however, and this finding is preliminary.
-  The value of unpaid care a child receives in the first year of life is estimated at more than three times the value of market goods and services he or she consumes.

more equally in Vietnam than in many other countries. Gaps still exist, however, and the data shows that women work more total hours than men and that girls spend less time on education than boys. On the market side, women earn significantly less per hour than men earn.

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). 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 specialize in the unpaid work of raising children, maintaining households, and caring for others, while men specialize 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. Consumption of that time is imputed based on the type of activity (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.

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 labor or the value of that labor 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 labor.

Time use and gender specialization in Vietnam

Patterns of gender specialization in time use are estimated using the Vietnam Time Use Survey (VTUS), the first-ever time use survey in Vietnam. It was conducted in 2014-2015 as an additional part of the Vietnam Accessibility Rural Household Survey. That survey had about 3,760 households and a sub-group of

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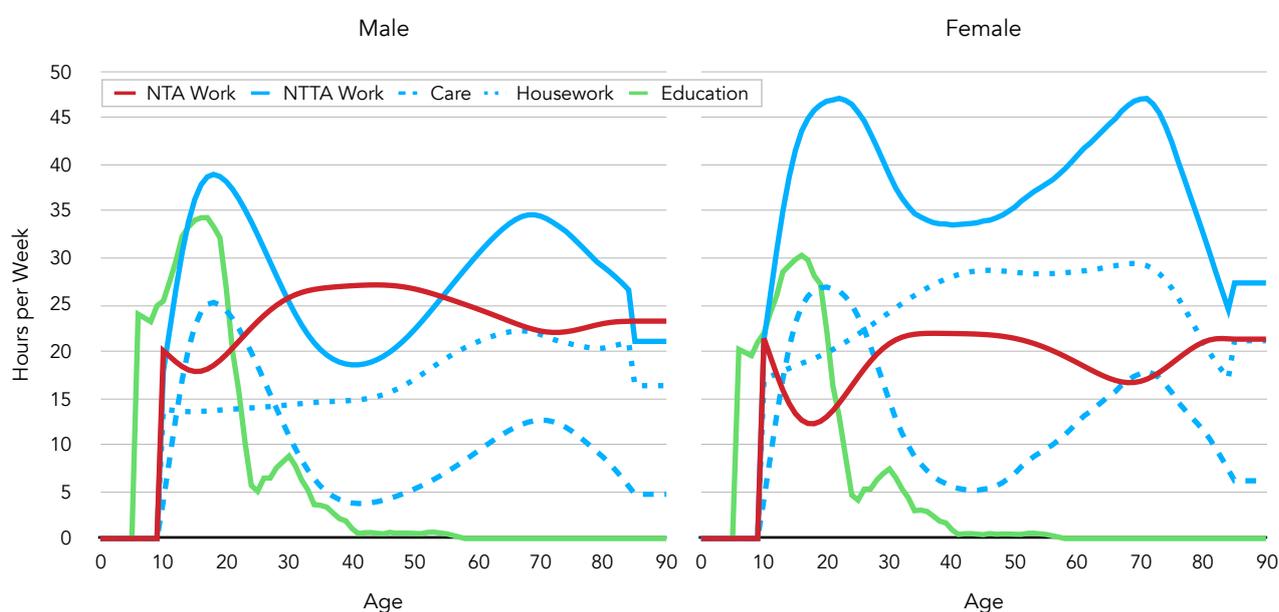
Counting Women's Work (CWW) is a project within the National Transfer Accounts (NTA) research network, and is coordinated by the University of California, Berkeley; the Development Policy Research Unit at the University of Cape Town; and the East-West Center, Honolulu. The research is funded by the William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

households in six cities was asked to participate in the time use portion, implemented by the Institute of Labor Science and Social Affairs (ILSSA). That sub-sample yielded 585 respondents age 10 and older who were asked to account for 24 hours of activities in 15-minute intervals. The activities were coded using the International Classification of Activities for Time Use Surveys (ICATUS), a classification scheme maintained by the United Nations and used in many time use surveys. Time use is impacted by a variety of factors including employment status, household structure and socioeconomic status. Because these factors are related to life course events like childbearing and ageing, average patterns of time use vary systematically by age and gender. Adding the age dimension to what are often simple statistics for working-age adults only makes our approach more useful for deriving key policy inputs for creating gender-sensitive public programs, gender budgeting, and promoting the advancement of women in Vietnam.

Time spent in education is a good example. Children and young people are typically enrolled in school and, as a result, spend large amounts of time in education. In Vietnam, boys and girls aged 10 to 16 years spend an average of 29.0 hours per week in education (Figure 1), but the number for boys is 31.0 hours while for girls it is 27.1 hours, a disadvantage for girls of 3.8 hours per week. Thus, parity in enrollment rates can be undermined if boys and girls have different patterns of absences or of time before or after school for study.

FIGURE 1: TIME USE, BY AGE AND GENDER (2015)



We know that children in this age group perform significant amounts of work. In many countries, girls do more unpaid care and housework and boys do more market work, helping with household farms and businesses. There is still a total work time disadvantage for girls in Vietnam, but the specialization is much less than in other many other countries with data from Counting Women’s Work. Specifically, for ages 10 to 16, boys do an average of 48 hours of total work per week, 39% of it market work and 61% unpaid housework and care. Girls do an average of 50 hours of total work per week, 33% of it market work and 67% of it unpaid housework and care. In terms of gender specialization, we can contrast the shares with India’s 10 to 16-year-olds, where 59% of girls’ work time was spent in unpaid care and housework, but for their brothers the figure is only 12%.

As children grow older, time spent in education declines, while time spent in market work begins to increase. Figure 1 distinguishes between time spent in NTA work and in NTTA work. For both boys and girls, NTTA work (in blue) is very high peaking at age 20 (although women have another peak at much older ages). NTA work, which includes both paid labor and unpaid work for household owned farms or businesses, is highest between ages 30 and 50 for both men and women, but is several hours greater for men. NTA work is surprisingly constant at older ages showing little evidence of a retirement trend at oldest ages, while NTTA work falls after about age 70 but is still higher or very close to the level of NTA work. Even men and women in the oldest age groups are working at a level similar to much younger persons.

This represents a great deal of sharing NTA work and NTTA work across both genders. While these estimates are from a cross-section of different age groups at one point in time, if we imagine that they represent a person's life accurately, we could see that a man's work life would be divided almost in half between NTTA and NTA work (51 percent NTTA, 49 percent NTA). Women are more specialized and, if we imagine the cross-section as representing one woman's life, she would spend 66% of her time in NTTA work and 34% in NTA work.

It is also an intriguing preliminary finding that much more care is being produced by very young persons and less by those at peak working ages. If this finding is replicated in a larger study, this would provide evidence of a unique childcare strategy – with younger people and older people providing more direct care than those at peak working ages who can commit more time to market labor. Of course, if that is so, it would represent a large demand on young people's time at the same ages when they are participating most fully in education.

FIGURE 2: GENDER SPECIALIZATION IN TIME USE, BY AGE (2015)

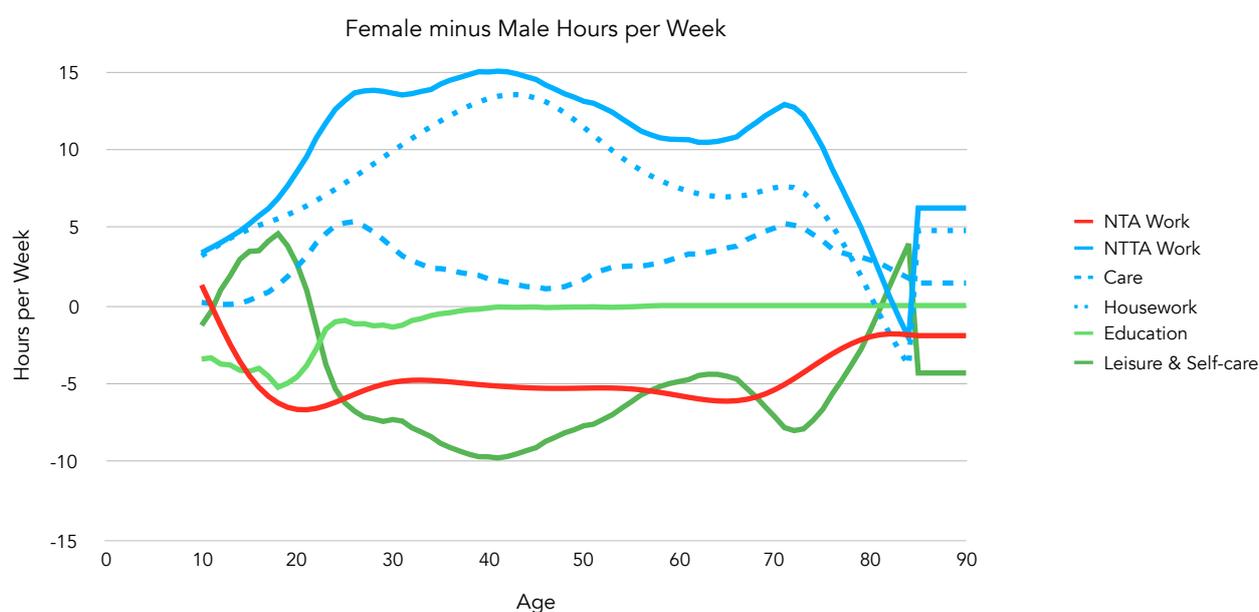


Figure 2 looks at the same information but in a different way that reveals the extent of gender specialization in time use in Vietnam. It shows at each age, the difference in time spent on various categories of activities. The difference is calculated as the female level minus the male level, so positive numbers represent tasks that women spend relatively more time in, while negative numbers reveal tasks that men specialize in.

Women are clearly specializing in NTTA work, doing more care and housework than men at almost all ages. Men on the other hand specialize in NTA work. Adult men have up to 10 more hours of time spent in leisure and self-care than adult women, but in interesting contrast girls and young women have more time in leisure and self-care, 4.6 more hours a week at age 18 compared to 18-year-old boys, although boys have more time for education in roughly the same amount. The largest gender gap in time for leisure and self-care occurs at age 41, when men have 9.8 more hours per week than women, more than an hour per day. The gap reverses somewhat at oldest ages, but the sample sizes here are quite small and it is unclear whether there is a consistent pattern.

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 so a suitable wage needs to be chosen to value the time. It would be preferable to value the output by price instead, but this is more difficult to do consistently across the countries in the NTA and CWW projects. We use wage imputation instead to make our estimates comparable across countries, but this 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.

FIGURE 3: PRODUCTION AND CONSUMPTION IN THE MARKET AND HOME, BY AGE AND GENDER, RELATIVE TO AVERAGE MARKET LABOR INCOME AGE 30-49 (2015)

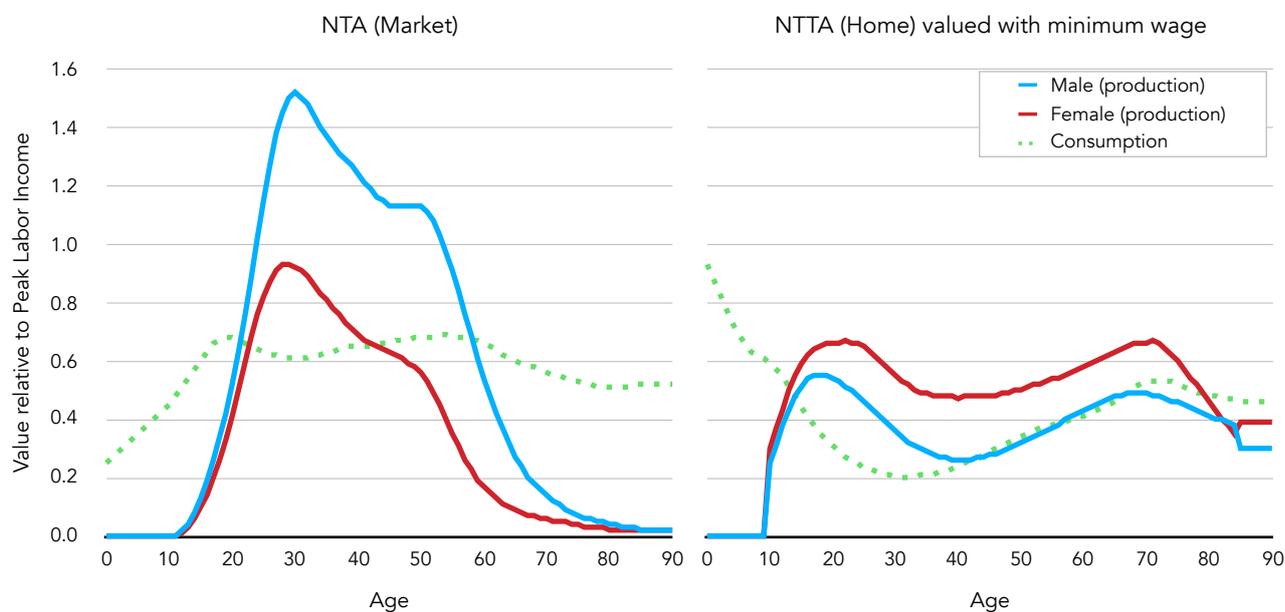
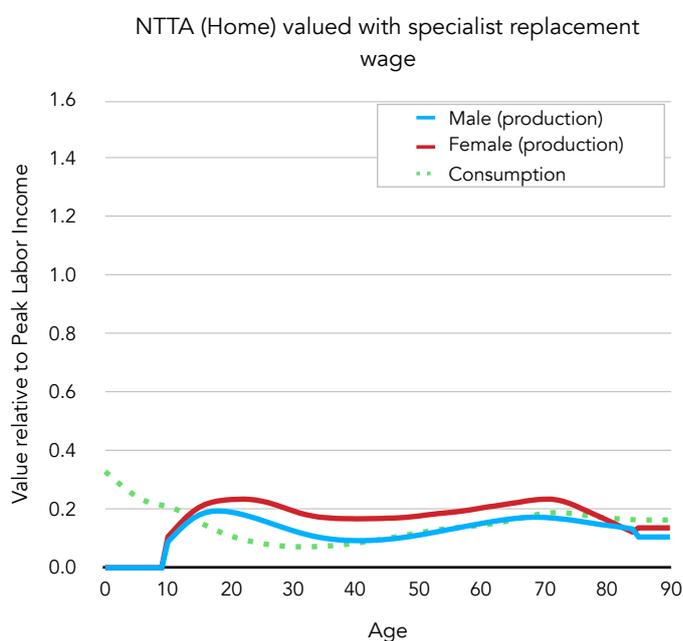


Figure 3 shows the results using two different methods. In the bottom graph, we use a specialist replacement wage to value the time inputs in household production, about 5,000 VND per hour. This wage is pre-tax since we are valuing the full price of the production were someone to purchase the service. In the other method shown in the upper-right graph, we use an average of the legal minimum wages in Vietnam around 2015, around 15,000 VND per hour, averaging across the various levels in different sectors and areas. Contrast these wage levels with the observed average pay per hour for NTA work: 40,000 to 60,000 VND per hour for men aged 30 to 50, 25,000 to 45,000 VND per hour for women aged 30 to 50. Using the two different types of imputed wages, unpaid work in Vietnam is valued at 48.2 percent of GDP in 2015 using the minimum wage or 17.0 percent of GDP using the lower replacement wages. This compares with 70.4 percent of GDP for all market labor income in the same year.



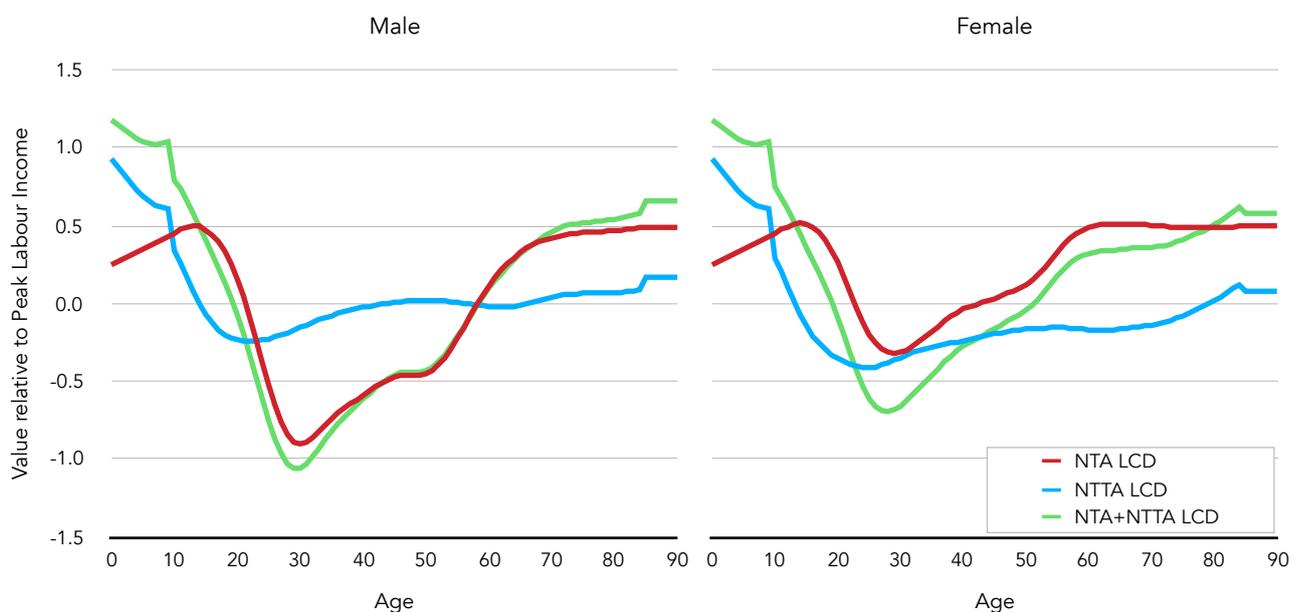
In Figure 3, the same scale is used for all panels to aid comparison. Although production is disaggregated by gender, we do not do the same for consumption as we are unable to accurately gauge the complex nature of intra-household distribution. When looking at production in monetary terms instead of time, the gender differences change. Because of their higher wages, men earn much more in NTA work than women, despite the similar levels of time spent. For NTTA work, men and women are closer in range. In terms of time, men's

economic lives looked very balanced between NTA and NTTA production, but in terms of money, they are more specialized in market work.

When we impute the value of care and housework produced to the age groups that likely consume that care and housework, it is expected to see young children have the highest per capita NTTA consumption levels. Indeed, infants consume much more in NTTA time than they do in NTA market goods and services. This is true even if we value the care time by the very low imputed specialist replacement wages.

One of the key concepts of the National Transfer Accounts is that of the lifecycle deficit (LCD), which is the difference between consumption and labor income. These are shown in Figure 4. While the conventional lifecycle deficit involves market production and consumption (labeled “NTA LCD,” in red), the concept can be extended to cover production and consumption in the home (labeled “NTTA LCD,” in blue). The impact of “counting women’s work” on the overall lifecycle deficit (labeled “NTA+NTTA LCD,” in green) is to make children seem costlier in terms of the deficit of consumption over production that they must receive in the form of transfers from parents, other family members or members of society. In contrast, persons in the oldest age groups do not get much more expensive because they themselves are doing a great deal of unpaid care and housework. This puts the prospect of future population aging in a different light than if we only considered market goods and services in figuring the cost of young or old dependents.

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



Combining the NTA and NTTA lifecycle deficits, as shown in the green line in Figure 4, reveals a much more equal pattern between men and women than the NTA deficit alone (in red), with women’s care and housework adding significantly to the lifecycle surplus. The combined lifecycle surplus peaks at 69 percent of peak labor income for women at age 28, compared with 106 percent for men at age 30. The impact of including NTTA work in our understanding of the economic lifecycle is clear: while men contribute 83 percent of the aggregate NTA lifecycle surplus, they contribute a much more balanced 65 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 just 25 percent of peak labor income to 118 percent of peak labor income once NTTA work is included in the estimates. For children under the age of 10, the NTA lifecycle deficit ranges between 25 percent and 45 percent of peak labor income; this rises to between 75 percent and 118 percent of peak labor income once NTTA work is included. Elders have smaller NTTA lifecycle deficits, and so including NTTA estimates with NTA estimates of the lifecycle deficit has less impact. Both men and women are in NTTA deficit at oldest ages, but it is very close to zero, suggesting that older people in Vietnam give about as much care time as they receive.

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 connections

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 labor 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".¹

In addition, the Counting Women's Work research for Vietnam highlights a number of key lessons:

Reliance on standard economic measures underestimates the size of the economy and the full economic contribution of women in particular. The estimates presented here confirm that unpaid care and household work represent a significant proportion of total output within Vietnamese society—roughly 17 to 48 percent of GDP in 2015—with more of this work being undertaken by women than men. This contribution, often overlooked and rarely acknowledged, is vital to the Vietnamese economy: it is critical for the reproduction of human capital, in caring for a new generation of potential workers, and underpins the ability of persons to engage in market work.

Young people are doing a great deal of unpaid care work at the ages when they also are investing heavily in their future human capital through education. Young women are more burdened with responsibilities of care and housework than young men, but both groups are spending substantial amounts of time caring for others. Further research is needed to understand who is receiving this care and how young people are allocating their time.

Girls and young women are spending less time in education than boys and young men, which could have negative impacts on gender equality in later life. Girls and young women are spending more time in NTTA work than boys and young men, but they are also spending more time on leisure and self-care. Thus, they spend less time in education and learning. At ages 17 and 18, equivalent to the final two years of secondary education, girls are spending about 5 hours less per week in education and this gap continues through the tertiary education ages. This may compromise young women's academic performance and limit their ability to access to higher education, with potential long-term consequences for the economic well-being of women, their children and their families more broadly.

Women's average wages for market work are much lower than men's wages. Our evidence shows the gender wage gap, and other studies indicate that when women do participate in market labor, they are more likely to be involved in insecure and vulnerable employment than men, with the related lower wages (Huong et al. 2016). While some of this is likely related to their lower education levels compared to men, it could also be other factors such as gender discrimination in wages. Another possibility is that women's greater unpaid care work responsibilities make it more difficult for them to conduct an optimal job search so they end up with fewer options for employment than men.

Results from Counting Women's Work research, therefore, suggest a number of potential policy areas for further investigation. These possibilities include:

¹ See <https://sustainabledevelopment.un.org>

- **Replicate the pilot time use study** on a larger scale to validate the unique Vietnamese patterns in unpaid care work.
- **Acknowledge** the importance of unpaid housework and care in Vietnam, and the larger role that women play in providing these services for their families and communities.
- Examine the possibilities of further **infrastructure investment** in water, electricity, and transportation to reduce the amount of time spent on unpaid household tasks.
- Encourage a **national conversation on norms around gender roles**, within the household but also within the labor market, and a reconsideration of the designation of certain activities as “women’s work”.
- Implement programs to **support women in developing businesses** through greater access to credit and skills training, and to **empower women in the workplace** to seek better wages and fight gender-based wage discrimination.
- Consider policies to **support market-provided childcare** for adult women, but also potentially for younger women and men whose care responsibilities for family members may be competing with their time for education.

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