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Challenges to increase female labor force participation: **Gender Inequality in Costa Rica**

Pamela Jiménez-Fontana

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Introduction

Costa Rica is at the end of the demographic transition with an insufficient educational profile to meet the demands of the market. The benefits of the first demographic dividend were not realized due to the lack of public policies, that did not incentivize better skills for the new generations that will have to support an aging population. In this context, a potential opportunity arises. Low female labor force participation poses a scope for accelerating economic growth through greater incorporation of women into the market. This opportunity known as gender dividend, will only materialize if public policies reduce the barriers that limit a greater female participation. Despite the rapid growth of the participation rate of women in the market, in the last five years a stagnation of this indicator is observed, which suggests that factors such as care and unpaid work limit the participation of women in the market.

Gender inequality in Costa Rica is evident: low female political participation, policies hold women as the main person responsible for care, and policies do not encourage parental responsibility. Some efforts such as childcare networks intend to reduce female unpaid work. However, many of these programs have low coverage and also are targeted only for women in conditions of poverty.

In this paper I analyze gender inequality in market and unpaid production using the methodology developed by the international Counting Women's Work and National Transfer Accounts projects. In addition, per capita profiles of key domestic activities by age and sex were built.

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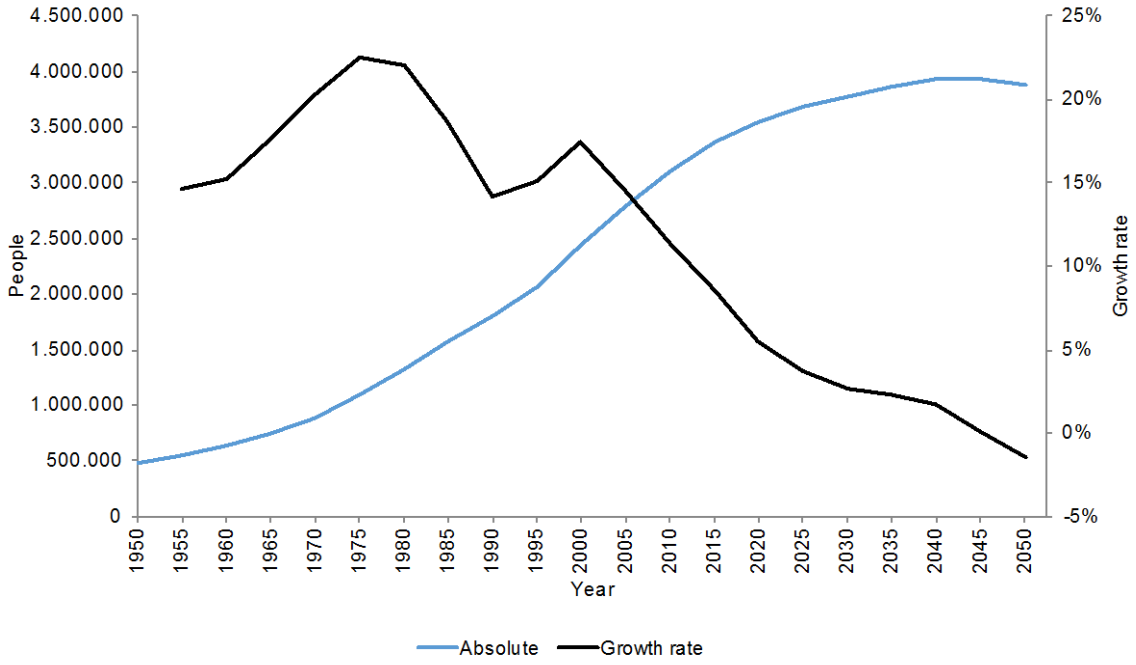
Background

1. Population aging and inequalities in the labor market

In 1970, Costa Rica began the process of the demographic transition, which was characterized by a sustained reduction in mortality and fertility rates (Rosero-Bixby and Robles, 2008). In the last stage of this process, the base of the population pyramid is reduced and aging increases; this is shown as a slowdown in the growth rate of people at working ages. Between 1950 and 1980, the number of people between 15 and 64 grew at an annual average rate of 22% (Figure 1). Since then, this group is growing at a slower pace. According to population projections (CCP and INEC, 2013), in 2045 the number of people at working ages will not increase, and by 2050 this group is expected to start reducing. The end of the demographic transition and aging are a challenge for economic growth, which means a possible shortage of labor force (Rosero-Bixby and Jimenez-Fontana, 2012). This does not imply a reduction in economic growth if the new generations have higher productivity levels as a result of improvements in education.

Figure 1
Population at working ages

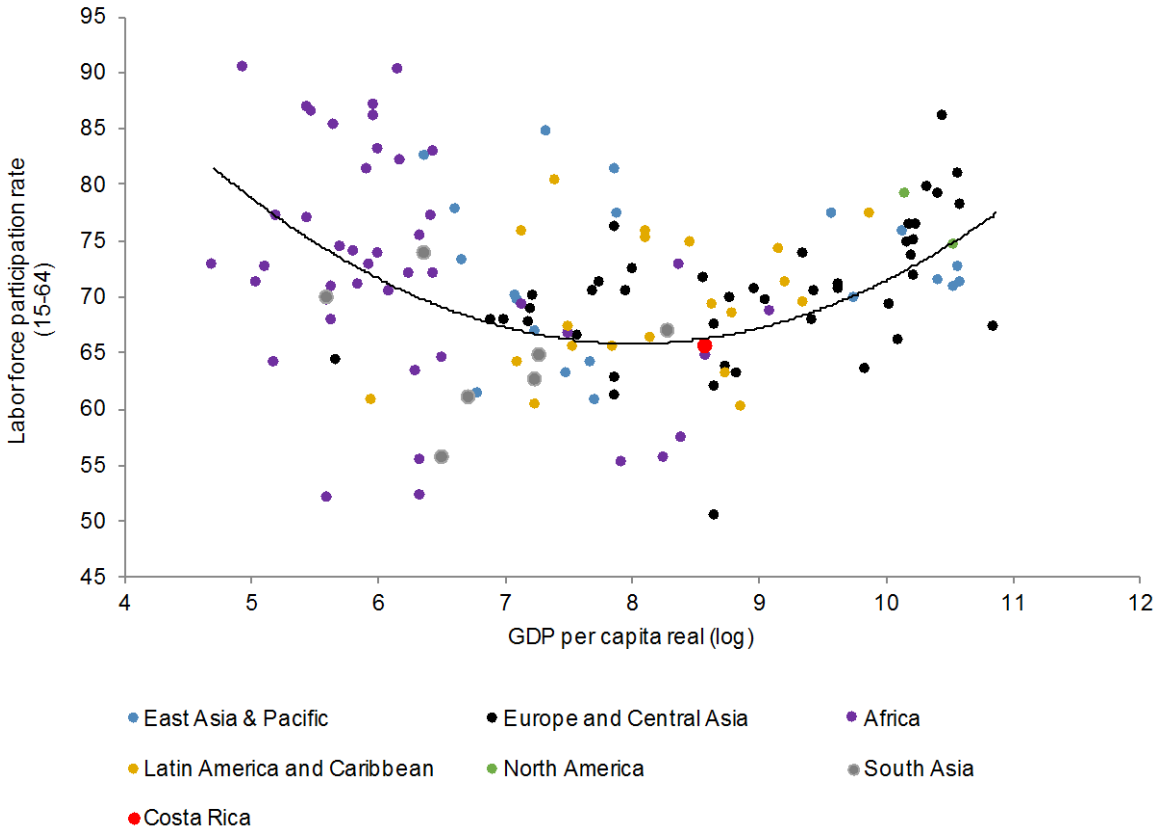


Source: Author's calculations with data of Instituto Nacional de Estadísticas y Censos, y Centro Centroamericano de Población.

In Costa Rica, the labor force represents more than 65% of people at working ages, similar to the world average (PEN, 2015). It is important to consider the quadratic relationship between GDP per capita and the labor force participation (Figure 2). Three thresholds were identified. The first is composed of countries with low income levels and high rates of labor force participation, over 80%. Most of the countries in this group are part of sub-Saharan Africa. The second threshold are mostly middle-income countries, which have a smaller labor force rate, such as the case of Costa Rica. Finally, the third threshold is composed of countries with high per capita income and greater participation in the workforce. Therefore, if Costa Rica wants to stimulate

economic growth, it is necessary to pay attention to the barriers that restrict a greater participation at the labor market.

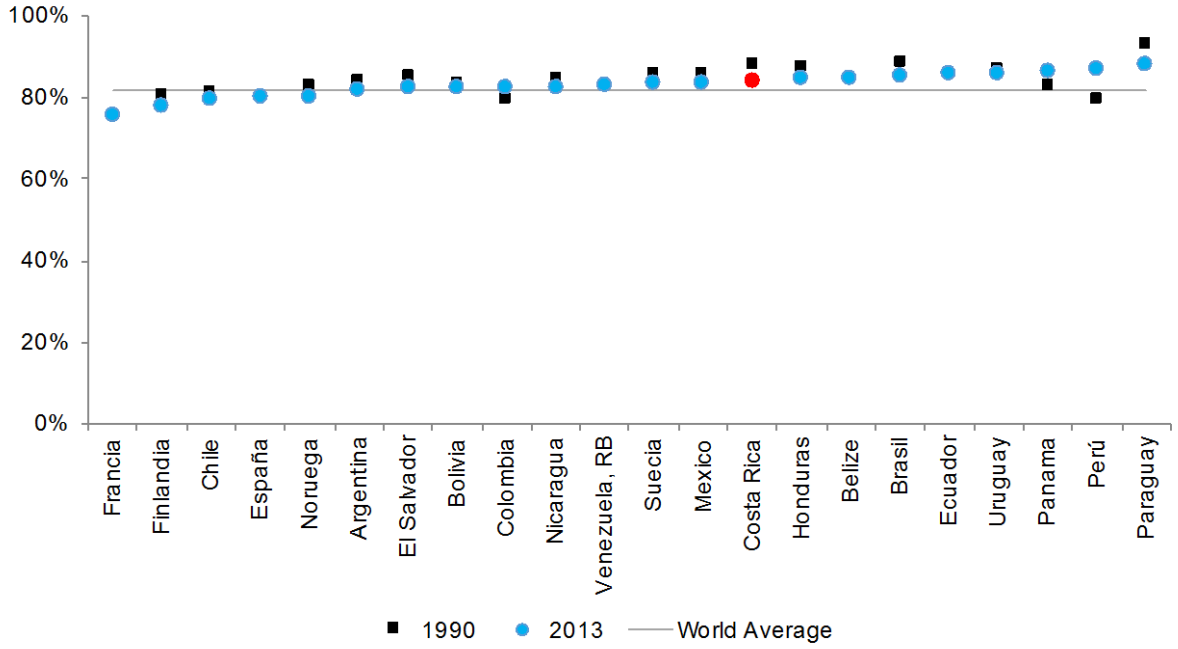
Figure 2
Real GDP per capita and labor force participation, 2011



Notes: Labor force participation of 2007. Real GDP of 2011.
Source: World Bank and ILO.

The availability of labor force is essential for growth. However, population aging might cause difficulties for higher economic growth due to the reductions in the workforce. Between 2015 and 2020, the number of people in Costa Rica at working age will grow by 5%, with an annual average of approximately 20,000 additional people working in the market. The opportunity to increase the Costa Rican labor force depends on the participation rates by sex and age. Although Costa Rica is located in an average position, there are important gaps in labor force participation by gender. In Costa Rica, the male labor force participation rate is about 85%, above the level of Spain, Chile, Mexico, Sweden, and slightly above the world average (Figure 3). In the past 23 years, a slight reduction in the indicator was observed in most countries. This means that the proportion of men at the labor force might reached a level close to the frontier. In other words, the possibility of having a significant increase in male workforce participation in Costa Rica is low. Countries with rates above 90% belong mostly to sub-Saharan Africa. Public policies related to male employment should be focused on reducing unemployment.

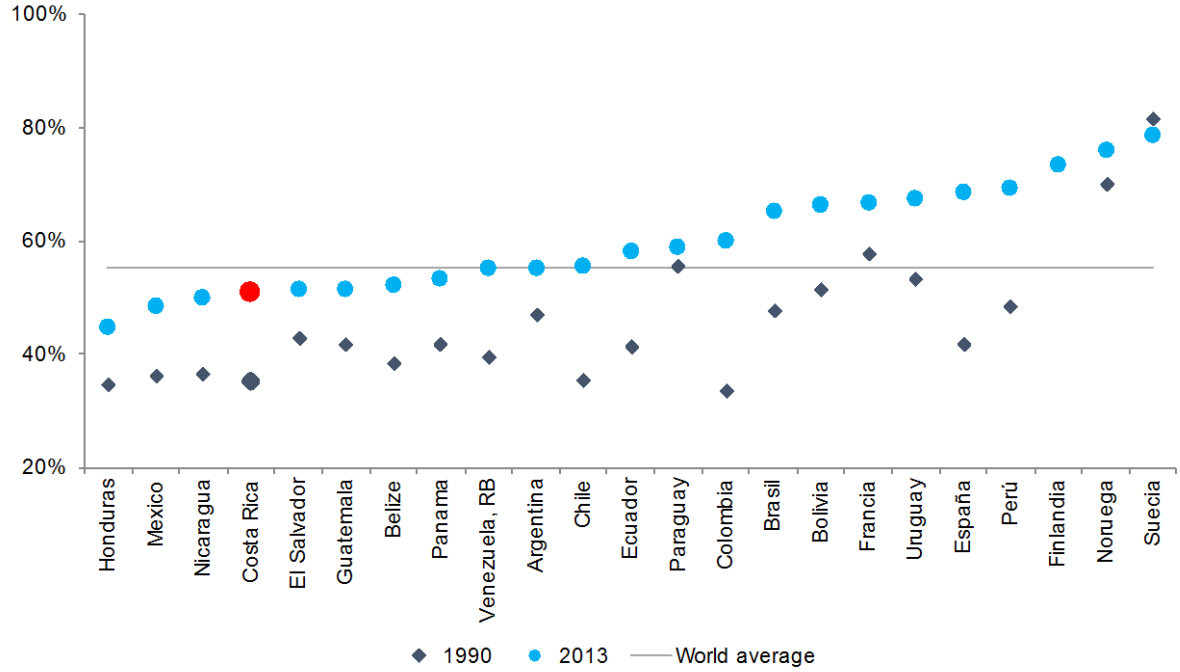
Figure 3
Male labor force participation, 1990-2013



Source: World Bank.

Despite the economic growth of the last twenty years, the main indicators of inequality reflect a slow progress in reducing gender gaps. Women suffer higher poverty and unemployment levels (CEPAL, 2012). The higher educational qualifications of women are not being reflected in better employment opportunities (PEN, 2015). Costa Rica is the fourth Latin American country with the lowest female participation. Although since 1990 the country increased this indicator by almost 15 percentage points, it remains low compared to the world average (Figure 4). In other words, there is room to increase female labor force participation. The countries with higher female labor force participation rates include Norway, Sweden and Finland: countries that are recognized by low levels of gender inequality and generous family policies. These countries have a female participation rate of approximately 75%, 25 percentage points above Costa Rica. Currently, in the gender inequality index, Costa Rica is located in the 68th place out of 187 countries worldwide. This reflects the broad gender inequalities that still remain in the country (United Nations, 2016).

Figure 4
Female labor force participation, 1990-2013

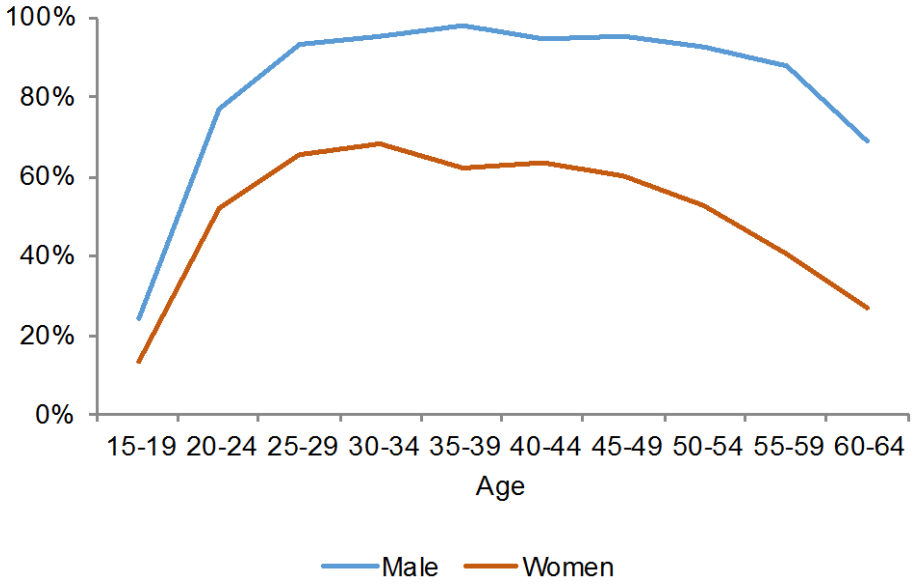


Source: World Bank.

Gender gaps are more evident by looking at participation rates by age group. Out of every 100 men between 25 and 49 years, there are 95 in the workforce, while for women this rate is 64 per 100 (Figure 5). This confirms that there is small margin to increase male labor, while the main opportunity is in the female labor force. Also, the graph shows that women retire early from the labor market, which might be a generational effect. Changes in the participation of women in the labor market depend on the incentives of public and private policies. In addition, a generational change depends not only on educational qualifications, but also influences the availability of support networks and family responsibility in domestic work.

Why is this important? We need to ensure women have the freedom to choose if they want to work in the labor market, or if they want to specialize in housework. What if a woman wants to stay at the house cleaning or doing childcare? Working, or not, in the labor market has to be part of a personal decision and not a result of cultural norms.

Figure 5
Labor force participation rates, Costa Rica 2014



Source: Author's estimations using Household Surveys (INEC).

Given the inevitable process of aging, it is a public concern that the country might not have the labor force required to generate economic expansion. Considering the labor participation rates by sex, further increases in the labor force must be the result of a sustainable incorporation of women. This is known as gender dividend, which is explained as the potential economic growth derived from increased participation of women in the labor market (Martínez-Gómez, Miller and Saad, 2013). The implementation of a comprehensive care policy could increase the participation of women in the market and boost economic growth (ILO, 2010)

Although in recent years Latin America has reduced gender gaps, women still bear great inequalities and discrimination throughout their lives. Women are the main individuals responsible for unpaid work, and in many cases maintain a double burden for their role in the labor market (INAMU, 2011, INEC and INAMU, 2008). There are few public or private solutions to balance housework with market work (CEPAL, 2010) in Latin America. Women's empowerment is a prerequisite for achieving gender equality conditions. The lack of autonomy, combined with high family responsibilities, limit the freedom of women to act on their own decisions (Benavente y Valdes, 2014). Chile and Uruguay are the only countries of the region showing further progress on designing childcare and elderly care public policies. For its part, although Costa Rica has implemented different models of care, coverage is low, compared with the potential demand.

2. Childcare and elderly care networks in Costa Rica

Since 2014, in Costa Rica there is a National Network for Child Care and Development (REDCUDI). The beneficiaries of this program are mainly families in poverty. The law seeks to encourage an active participation of women in the market and improve the educational development of children under seven years, in social vulnerability. According to official reports, the program consists of approximately 32,000 children. The network works with a number of programs and institutions. According to Guzman (2014), the REDCUDI is formed by the Ministry of Social Welfare, the Institute for Social Assistance, the Ministry of Public Education, Public Universities, the Ministry of Health, the National Institute of Technical Education, the National Institute of Women, the Costa Rican Social Security, and communities. The aim of the law was to establish a comprehensive policy on childcare. The network gives priority to beneficiaries who are below the poverty line. Therefore, many families still in vulnerable economic situations are excluded from the network. But at the same time, these families do not have the income to pay for private care centers. REDCUDI is not limited to the care service; they also subsidize companies, individuals and organizations that aim to improve childcare development. The main challenge of the network is expanding the program to a larger number of beneficiaries, which could run through partial subsidies or co-payments that facilitate access to different strata of the population.

In order to ensure the care of all vulnerable sectors, the Progressive Care Network was established for the care of elderly people 65 years or older, living in poverty. Like the childcare network, this project is formed by multiple public and private actors dedicated to the care of older adults in 41 of the 81 cantons of the country. By 2012, the network had provided support to 5071 seniors. Among the main weaknesses of these programs are a lack of monitoring and evaluation, inadequate human resources, low coverage of beneficiaries, and the lack of information and records (Conapam, 2012, 2016)

3. Making unpaid work visible

The System of National Accounts (SNA) led by the United Nations registers the paid work that takes place in the labor market (United Nations, 2009). The Central Bank of Costa Rica uses this methodology to account for the size of the country's economy. One of the limitations of the SNA is that it registers only macroeconomic aggregates. Another limitation of National Accounts is that it does not include unpaid work. If market production is disaggregated by sex, it might look like women contribute less than half of production than men do (Donehower and Mejia, 2011). This conclusion is a biased one, that also minimizes unpaid work done mostly by women (Landefeld and McCulla, 2000). Satellite Accounts seeks to complement National Accounts by using different sources of information. In Costa Rica, the Congress recently approved a law for the creation of a satellite account of unpaid work (INAMU, 2015).

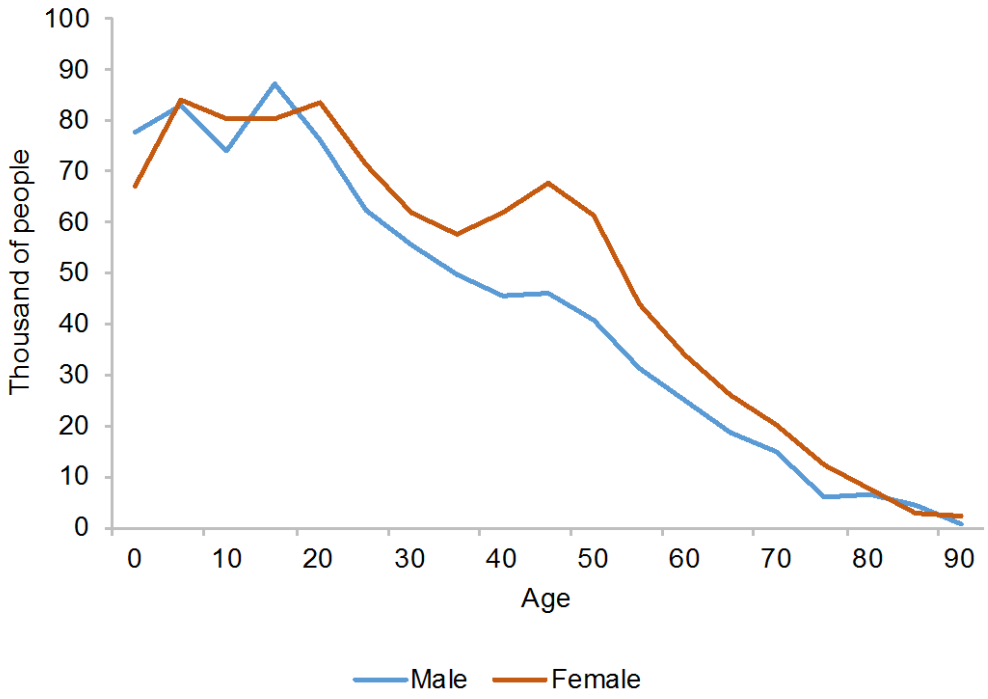
The National Transfer Accounts (NTA) project aims to measure and analyze the generational economy, which widens the horizon of macroeconomic aggregates. This includes estimates of production, consumption, savings, and transfers by age group. In order to include unpaid work and to draw attention to gender inequalities in production, the NTA network drives the Counting Women's Work project, which seeks

to complement the methodology by estimating unpaid production profiles by age and sex. Previous studies of this project in Costa Rica confirm that women are primarily responsible for unpaid work, and that there is little family responsibility (Jimenez-Fontana, 2015b).

Sources of information

Since unpaid work is not registered on the System of National Accounts, traditional sources of information such as administrative records cannot be used to measure unpaid work. This study uses time use surveys to estimate the time spent on productive and non-productive activities. In Costa Rica, there is no nationally representative time use survey. For background, in the 2004 Household Survey (INEC), a time use cluster of questions were included; however, this section does not include a breakdown of time spent on various activities at home. Given past experience, the National Women's Institute built the first time use survey for the Great Metropolitan Area (INAMU, CICTF, 2011). This survey is not nationally representative, since fieldwork was developed only for the metropolitan area. Despite the above, this survey has detailed information that allows the analysis of unpaid domestic work. The survey interviews approximately 4,800 people aged twelve or more, regarding various activities. Figure 6 shows the distribution of the sample of the entire family by age group.

Figure 6
Sample distribution by age groups and sex, Costa Rica, 2011



Notes: Sample adjusted by the population factor.
Source: Author's estimations using the Metropolitan Time Use Survey, 2011.

One of the limitations of the survey is that the interviewee does not have to limit the total time of hours reported to 24 hours a day. Therefore, an important over-reporting response was observed. To correct these cases, each activity was adjusted proportionally in order to not affect the distributions. The correction adjustment is

shown on the equations (1) and (2) below (Jimenez-Fontana, 2015b). For the estimation of the per capita profiles of unpaid production and consumption, the adjustment is performed only for the cases of an excess of time reported. If the surplus is negative (underreporting), the methodology establishes that the remaining time is not productive, so this will not affect the estimate of the profiles. Only when the total distributions of time spent on all household chores, including nonproductive activities, are estimated, underreporting of time is corrected to adjust to 24 hours.

$$(1)\quad \epsilon_i = 24 - \sum_{\lambda=1}^{n} T_{\lambda i}$$

$$(2)\quad T'_{\lambda i} = T_{\lambda i} - \left[\varepsilon_i \times \frac{T_{\lambda i}}{\sum_{\lambda=1}^{n} T_{\lambda i}}\right]$$

i: person
ϵ: surplus
λ: activity
$T_{\lambda i}$: time spent on the activity λ for the person i
$T'_{\lambda i}$: time adjusted dedicated on the activity λ for the person i

The household income surveys of 2004 and 2013 were used to estimate the labor income profiles and market consumption. Both surveys are representative at a national level.

Methodology

1. Unpaid consumption and production

This study is based on the methodology developed by the international project, Counting Women's Work (Donehower, 2014), led by the University of California, Berkeley, and the University of Cape Town. The activities of the survey were classified into three groups: paid or registered activities in national accounts, unpaid production, and non-productive activities. Regarding the former, it consists of activities that received, in exchange for work, a remuneration in kind or cash. The second group consists of productive activities that did not receive remuneration in return. To determine whether an activity is considered unpaid production or not, the criterion of the third party developed by Reid (1934) is used. This criterion states that unpaid production is made up of all the activities that can be delegated to a third party: like cooking, washing, cleaning, care and home maintenance. The activities that do not meet this criterion are classified as the non-productive group, which includes time spent on activities like sleeping, studying, eating and recreation (Jimenez-Fontana, 2015b). Once you have identified the unpaid productive activities, the per capita profiles for each activity are estimated as the average time spent on each activity by sex and single ages, weighted by the expansion factor.

The unpaid production profiles allow an insight into the contribution of women to the economy. However, it is necessary to determine who is consuming this production. This unpaid consumption data is obtained by indirect methods, because the survey does not include questions of who is consuming the time produced by each household member. Two types of consumption were constructed: general and specific. The first includes those activities whose beneficiaries are all household members. This group consists of activities such as cleaning, washing, cooking and home maintenance. For the estimation of these profiles, the total time production of

each activity is divided equally among all household members, including the producer (equation 3). For example, in a household of three members, if one person produces three hours a day cleaning the house, then each member of the household will consume one hour of cleaning per day.

$$(3)\quad \overline{C_{\lambda j}} = \frac{\sum_{i=1}^{n} T_{\lambda ij}}{n}$$

i: person
j: household
λ: activity
n: total household members
$T_{\lambda ij}$: time produce on the activity λ by the person i on the household j
$\overline{C_{\lambda j}}$: avarage time consumed on the activity λ by each household member j

Regarding specific consumption, it is defined when the question identifies the age range of the consumer. For the case of Costa Rica, the only specific consumption was childcare for children under twelve. To assign this consumption a linear regression between the time of childcare produced as the dependent variable, and age as independent variables (equation 4), is estimated. The regression coefficients are used as weights to assign the childcare produced to the potential consumers. The linear regression allows us to assign greater weight to small children, given the estimated variability between households with different structures by age and sex.

$$(4)\quad C(ci)_i = \sum_a \alpha(a) M_j(a) + \sum_a \beta(a) H_j(a) + \varepsilon_j \quad si\ a < 12$$

a: age
j: household
$M_j(a)$: number of women producers of childcare at the age a in the household j
$H_j(a)$: number of men producers of childcare at the age a in the household j
$C(ci)_j$: childcare consumption for the individual i on the household j j

Regarding the production of care of the elderly, care of the disabled and also people outside the household, the methodology of general consumption was used (given the small sample size and the lack of specification on the survey). The care of other household members aged twelve or more was also assigned to the general method, since producers belong to the same age range as potential consumers, so the weights cannot be estimated by linear regression.

An economic value was imputed to all of the profiles using the specialist replacement method (Donehower, 2013). The wages were estimated with the Household Survey of 2011 (INEC).

2. Scenario

In order to analyze the barriers that women face in entering the labor market in Costa Rica in depth, this study estimates the theoretical impact on unpaid production by an increase in the female labor force. According to the Time Use Survey (2011), 57% of women in the greater metropolitan area are engaged in the labor market. This indicator is higher than the average national level, because the survey excludes the rural areas. The methods and assumptions used to estimate the impact of the increase in female labor force are detailed below:

- Two types of women were considered: women working in the labor market, and women that do not work in the labor market. The unpaid production profiles disaggregated by employment status were estimated.
- The scenario considered an increase of 4 percentage points in female labor force participation, in order to reach 61%. The increase was achieved through a random selection of women aged between 20 and 35, that were not working in the market.
- To estimate the impact on unpaid production, the following assumption was made: if a woman who did not work in the market decides to join the labor force, then the time spent on each activity of unpaid production was reduced by the average time spent by a woman of the same age that was working in the labor market, as shown in the equation (5).

$$(5)\ T^{*}_{\lambda ia}(N) = \overline{T_{\lambda a}}(S) \quad \text{si } T_{\lambda ia}(N) > \overline{T_{\lambda a}}(S)$$

i: individual
λ: activity
a: age
$T_{\lambda ia}(N)$: Time spend on the activity λ by woman i at the age a that does not work at the market
$T^{*}_{\lambda ia}(N)$: Adjusted time spend on activity λ by woman i at the age a that now will be working on the market
$\overline{T_{\lambda a}}(S)$: Average time spend by women on the activity λ at the age a that work at the market

3. Market consumption and production profiles

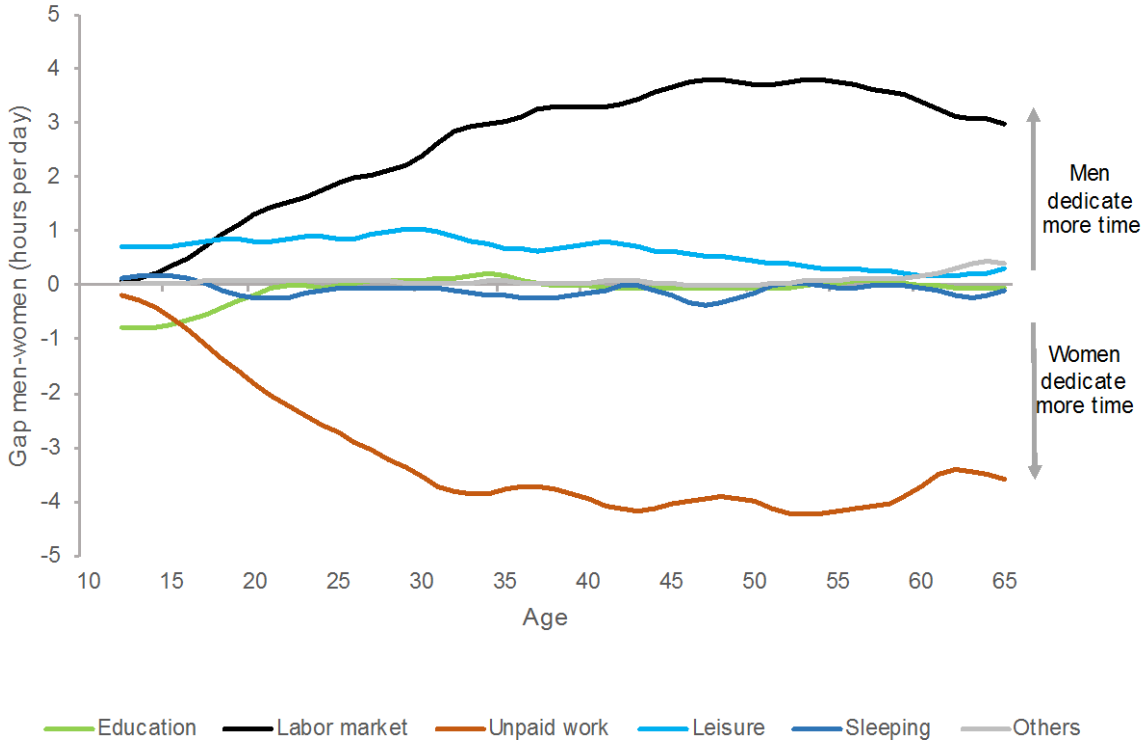
These profiles were estimated using the manual of the National Transfer Accounts Project (United Nations, 2013). The macroeconomic adjustment was made using the Central's Bank National Accounts report base on the SNA 1991 manual. Recently, the Central Bank published a new set of National Accounts indicators with the 2008 manual. Therefore, the estimates presented in this study are preliminary, given that the new macroeconomic aggregates have to be updated.

Results

1. Gender inequality on the distribution of time

Figure 7 shows the gender gaps on time distribution of all the activities of daily living. Regarding non-productive activities, the biggest difference is observed in daily hours devoted to leisure and recreation, in which men under age 40 spend almost one hour more than women. Women spend more time on education than men do. The social pressure of men to quickly enter the labor market could explain the lower time dedicated to education.

Figure 7
Gender gaps on time use, Costa Rica, 2011.

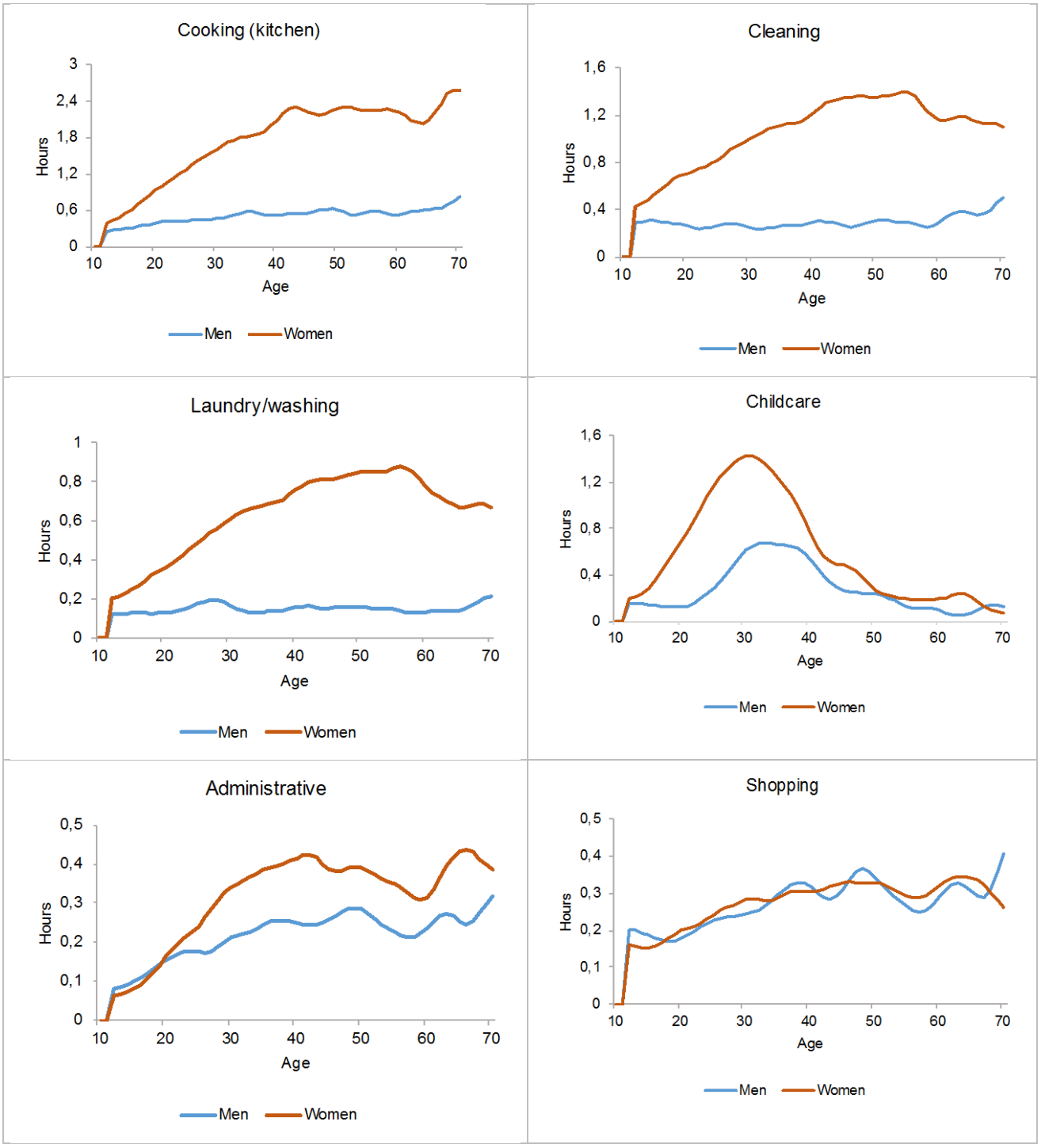


Notes: The profiles were adjusted for underreporting and reporting for more than 24 hours per day per person.
Source: Author's calculation using Time Use Survey (2011) and Donehower, 2014.

Regarding the productive activities, important gender gaps were found, explained by a sexual division of labor: men are mainly responsible for paid work, while women bear much of unpaid production responsibility. Men spend more than 2 hours on average in the labor market than women do, while women spend 3 hours more than men doing unpaid work. The main objective of this research was to identify some of the barriers that explain the difficulty for women to enter the labor market.

Using the methodology developed by Donehower (2014), the unpaid production profiles by sex (Figure 8) were estimated. When the profiles are disaggregated, the gender gaps are evident. Men spend on average only 9 minutes per day washing the dishes, 18 minutes doing housecleaning, and 31 minutes cooking. There are no important differences in the distribution by age. Meanwhile, time spent by women in these activities increases with age until about 50 years. In other words, women dedicate most of their lives to unpaid work. On average, the time spent by women on the most important unpaid activities, is triple that by men.

Figure 8
Unpaid production profiles for the 6 main activities, Costa Rica, 2011
(hours per day)

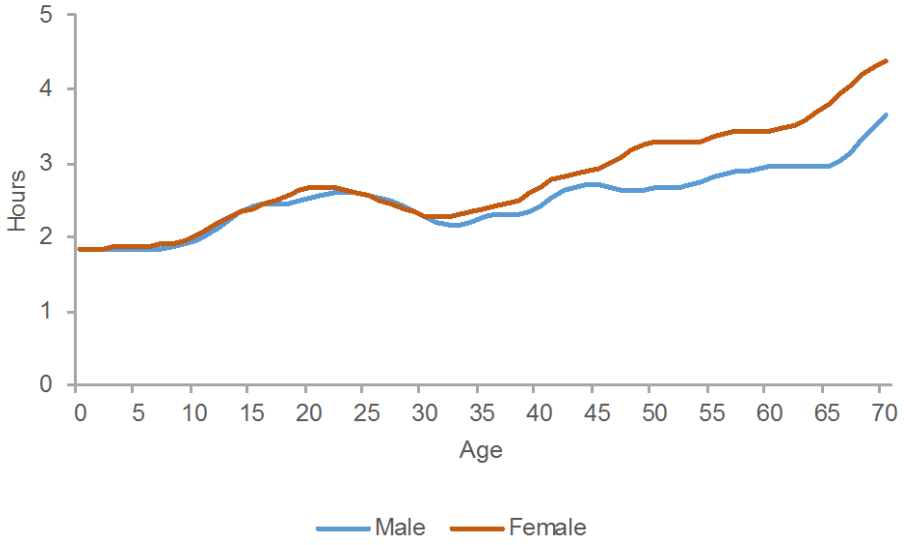


Source: Author's calculation using Time Use Survey (2011).

The time dedicated to childcare is concentrated in the reproductive age groups. Proportionately, men contribute more to childcare than other general work such as cleaning or cooking. This finding is consistent with previous studies on time use (see module 2004) (Jimenez-Fontana, 2015a). Despite this, women maintain most of the burden of caring for children.

The methodology to allocate unpaid consumption assumes there is no gender inequality in non-remunerated consumption; however, this does not mean the gaps do not exist. Future research should focus on using different weights in the allocation of overall consumption. Overall, the distribution of unpaid consumption is relatively constant until age 40, the age at which consumption starts to slightly increase, especially for women (Figure 9).

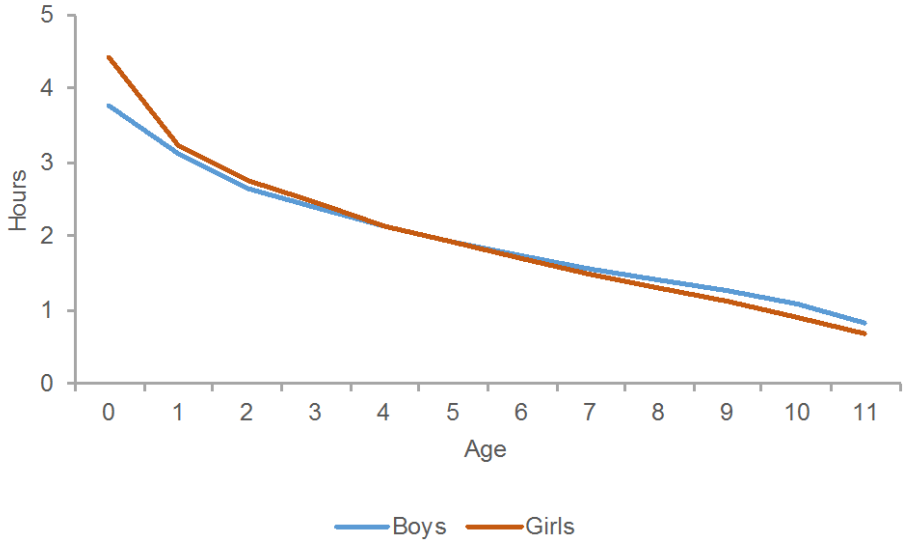
Figure 9
Unpaid consumption for general activities, by sex, Costa Rica, 2011.
(hours per day)



Notes: Time spent cleaning, washing, cooking, home repairs, gardening, administrative, pet care, shopping, and others. Excludes care to older adults and other household members.
Source: Author's calculation using Time Use Survey (2011).

Regarding childcare, this was assigned using relative weights for age and sex by analysis of variability in the production of childcare among households with different structures. The methodology assigns a higher childcare consumption to people in the early years of life. A newborn consumes an average 4 hours of exclusive care (Figure 10). The distribution of childcare consumption has a negative slope: the greater the age of the child, the less time s/he will require. Therefore, this distribution can be considered as the (per capita) demand for childcare. This distribution reflects some of the barriers to entering the labor market, that women face. A woman with a newborn, without access to public care networks, will have to determine whether the income received in the labor market is significantly higher than the cost of private care services. If the income received is less, she will likely not join the workforce. In other words, if the opportunity cost of entering the labor market is low, or the price of care services is very high, the incorporation of women into the workforce is discouraged.

Figure 10
Unpaid consumption of childcare, Costa Rica, 2011
(hours per day)

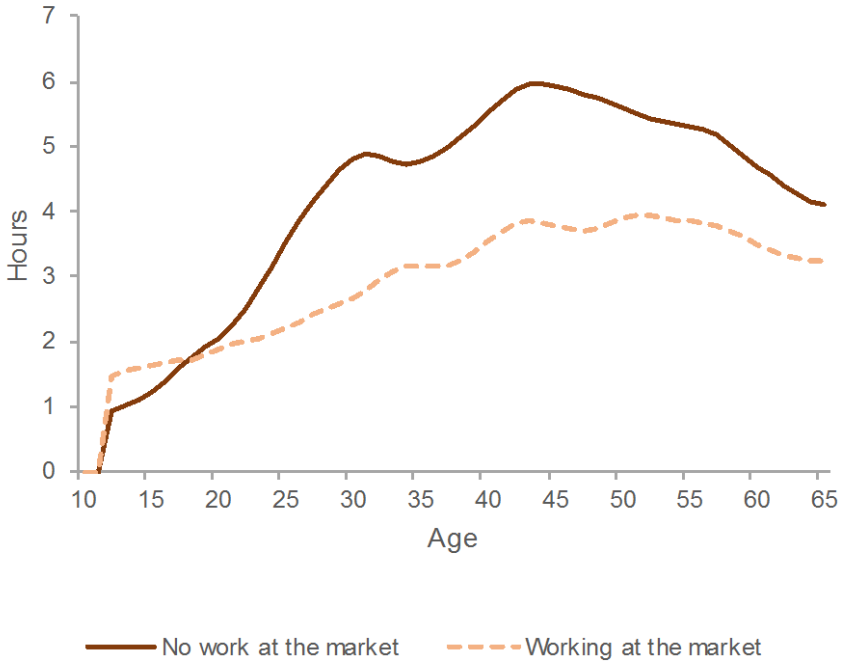


Source: Author's calculation using Time Use Survey (2011).

2. Differences in unpaid production profiles by labor condition

Women's decision on entering or not entering the labor market is determined by the remuneration, or the opportunity cost. Previous studies show that there is significant variation in unpaid production profiles by education level (Jiménez-Fontana, 2015a). Since the 2011 Time Use Survey is limited to the metropolitan area of Costa Rica, this study disaggregated the profiles by employment status. Women working in the market reported almost half the time spent on unpaid production compared with women who are not part of the labor force (Figure 11). Although, generally, women in the labor force have a double workload, the time spent on domestic activities is somehow reduced.

Figure 11
Per capita profiles of time spent on general activities, by women's employment condition, Costa Rica, 2011
(hours per day)



Source: Author's calculation using Time Use Survey (2011).

Regarding childcare, the profile also varies significantly by occupational status, but with a similar distribution (Figure 12). A woman who does not work in the market devotes a little over two hours every day to childcare, while women who work in the market spend less than half. An important aspect is that the gaps in distribution does not represent a lower demand of care – the gaps correspond to the care that is being covered by other household members, by the market, or with public care services. Another aspect that could explain the variations between these profiles are differences in fertility rates. Women with low education have on average more children, reducing the opportunity cost of not entering the labor market.

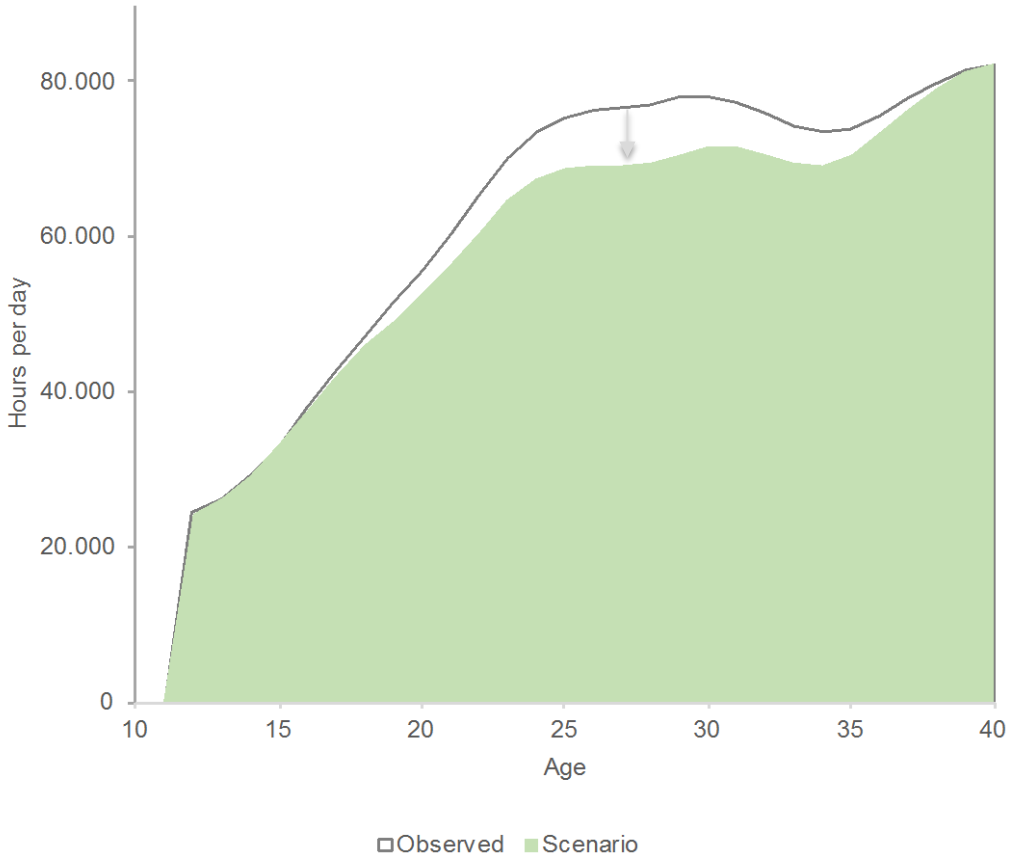
Figure 12
Production of childcare, by women's employment status, Costa Rica, 2011
(hours per day)

Source: Author's calculation using Time Use Survey (2011).

3. What is the impact of an increase of female labor force?

Given the importance of realizing the potential opportunity of the gender dividend, this section analyzes the impact of an increase of 4 percentage points in the rate of female labor force participation. The incorporation of these women into the market implies a reduction in the time spent on unpaid work (Figure 13). The increase of the female labor force participation yield on an unmet demand for 97.700 hours of production dedicated to cooking, washing and cleaning is generated. The unmet demand is measured as the difference in real and estimated aggregated distributions. Some of these unmet demands might be replaced by goods and services purchased from the market, such as buying prepared foods or hiring domestic services.

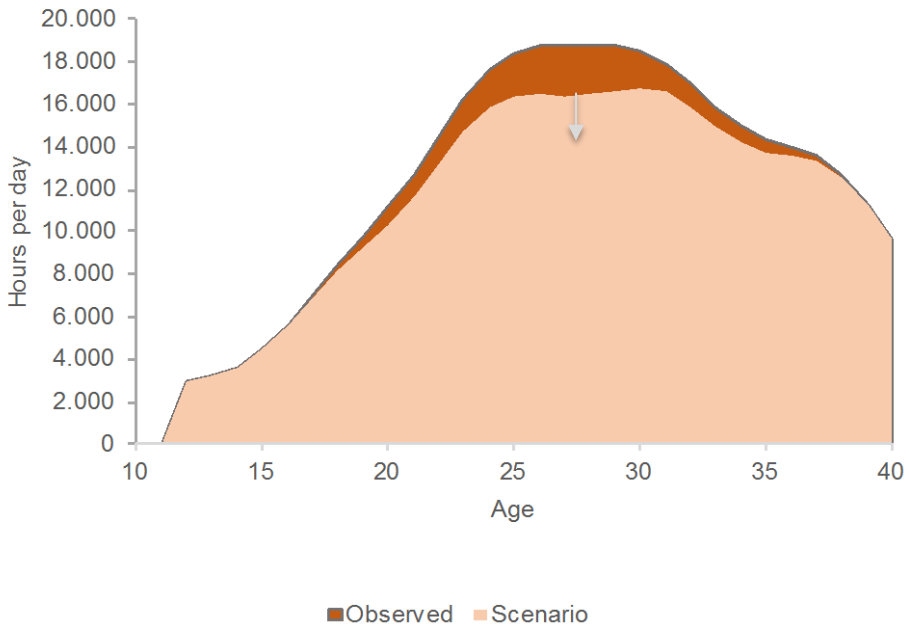
Figure 13
Aggregate production of unpaid work dedicated to general activities. Costa Rica, 2011
(hours per day)



Source: Author's calculation using Time Use Survey (2011).

Childcare is more difficult to delegate given the high price of private childcare services. By increasing female participation in the market by 4 percentage points, there would be an unmet demand for care of 26.020 hours per day that was being covered by women (Figure 14). If the government decides to cover this unmet demand for care through public policies to encourage women's participation, this could involve hiring 3,252 child care specialists as workers who would work 8 hours per day; however, in this scenario economies of scale should be taken into account. For example, if there is one child per household, the care center can take care of at least 10 children, or 10 households. In other words, a public policy that encourages the incorporation of women into the market, is a platform for economies of scale in child care networks.

Figure 14
Aggregate production of unpaid childcare. Costa Rica, 2011
(hours per day)

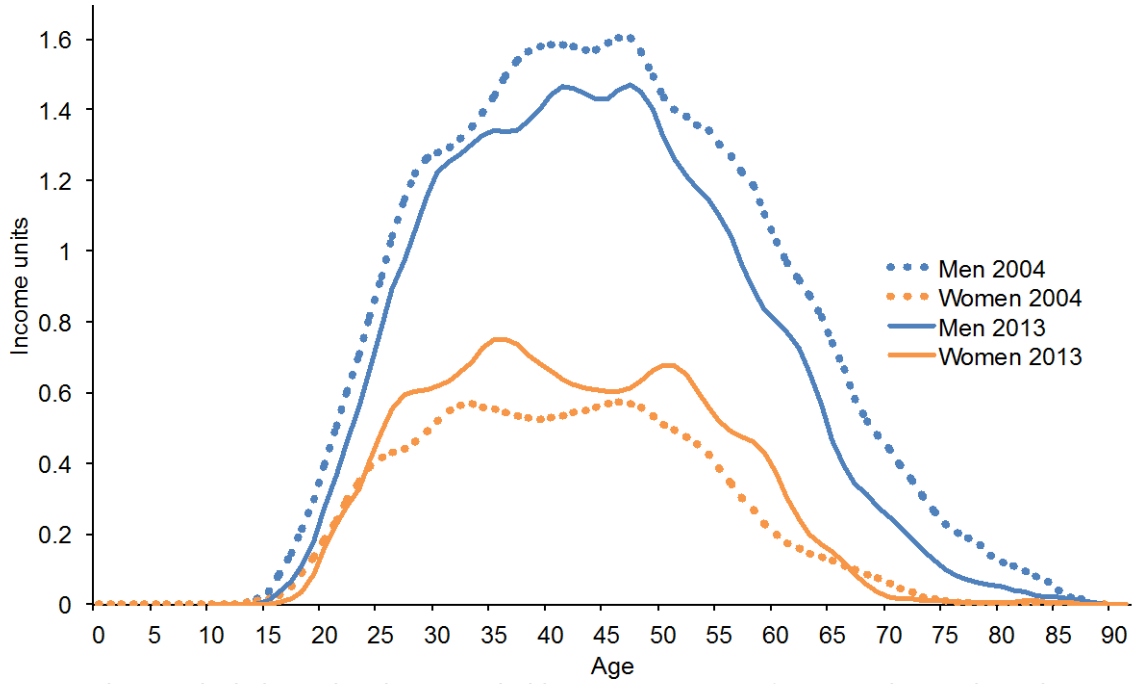


Source: Author's calculation using Time Use Survey (2011).

3. Evolution of the labor income profile

Results show that in 2004, women's labor income starts to increase later than men's does. On average, women contributed only 27%to the labor income, less than half of what men produce (Figure 15). After ten years, gender gaps have been reduced due to the increase of women's labor income and a reduction in men's. Also, men and women are spending more time studying, given the delay of their entrance to the labor market; however, men do start earlier than women. The cavity in the labor income profile between age 35 and 45 might correspond to the lost generation of the 80's: this cohort were the children who quit school during one of the worst economic crises in Costa Rica's history.

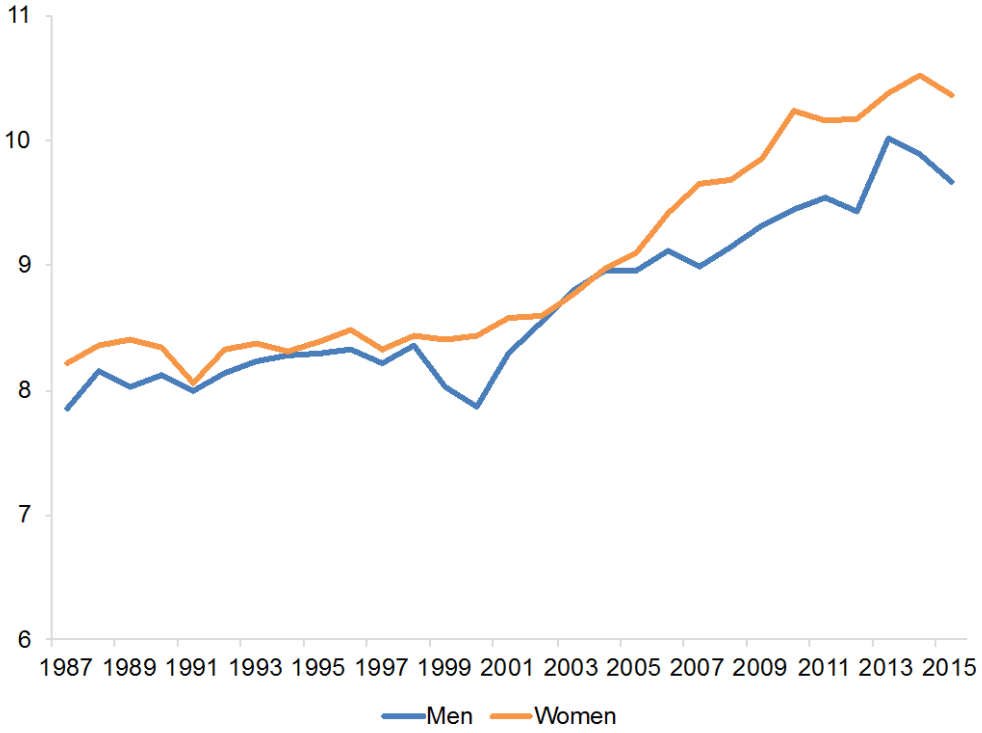
Figure 15
Labor Income profiles, by sex, Costa Rica 2004 & 2013



Source: Author's calculation using the Household Income Surveys of 2004 and 2013 (INEC).

Changes in the educational qualifications explain the evolution of the labor income (Figure 16). Women invest more time in their own human capital. Men, due to the social pressure of being a provider for their household, start their participation to the labor market earlier, sacrificing their own human capital. In other words, gender inequality is also affecting men. On the other side, women are doing very well with their educational achievement, and that explains the increase in their labor income, however, women still have a higher unemployment rate and higher participation in the informal sector.

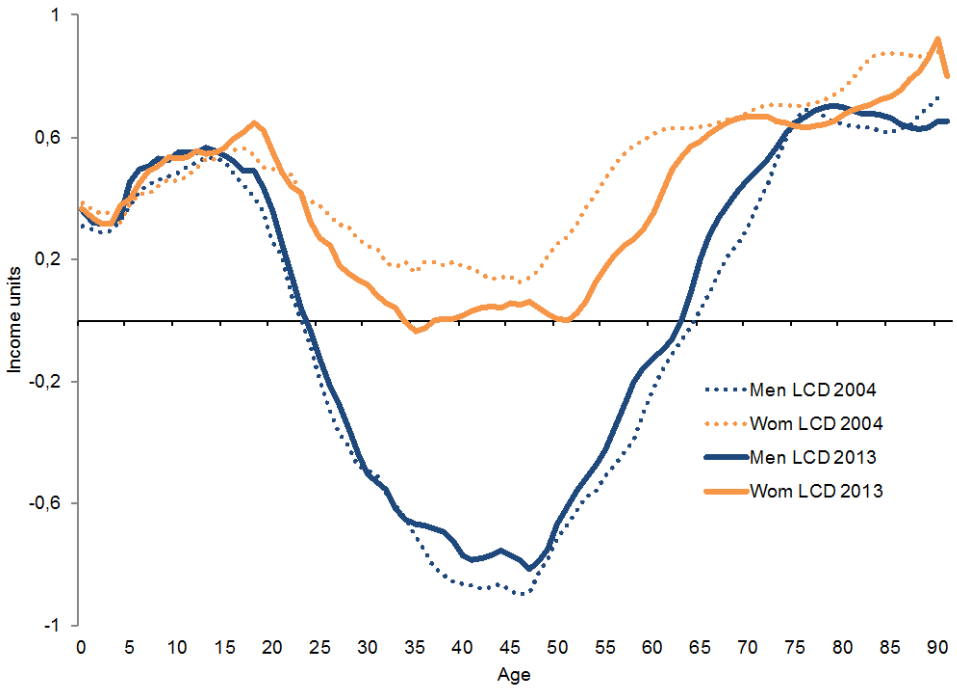
Figure 16
Average years of schooling by sex, Costa Rica



Source: Author's calculation using the Household Surveys (INEC).

If only the market economy is considered, the final balance measure is that men are the main providers for dependents (children and elderly) (Figure 17), even though, women's life cycle deficit is reduced.

Figure 17
Market Life Cycle Deficit, by sex, Costa Rica 2004 & 2013



Source: Author's calculation using the Household Income Surveys of 2004 and 2013 (INEC).

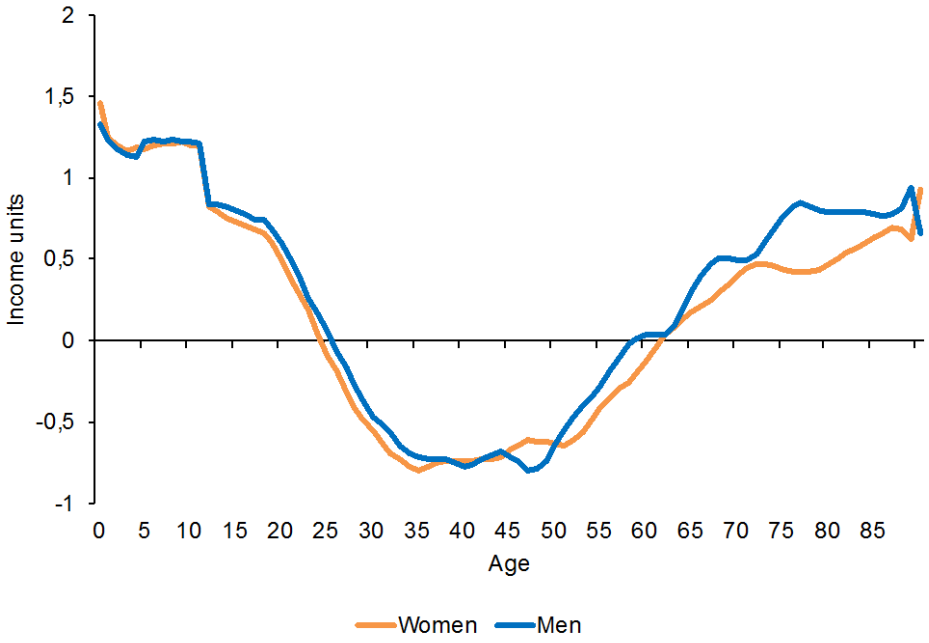
It is necessary to include unpaid work, in order to have a complete picture of the economy. The total non-market production of the metro area represents about 13% of GDP. The unpaid life cycle deficit has a different distribution than the figure presented above. Men have a deficit at early ages, while women have an important surplus after the age of 20 (Figure 18).

Figure 18
Non market Life Cycle Deficit, by sex, Costa Rica 2011

Source: Author's calculation using the Time Use Survey (INAMU, 2011).

The unpaid estimations are only for the metropolitan area of Costa Rica for 2011, which means that most of the rural areas in which women invest a lot of time on unpaid work, are excluded. The market estimations are nationally representative for 2013. Given that the estimates are normalized by labor income at productive ages, the market and unpaid profiles can be compared. Even though the profiles are excluding the unpaid work of rural areas, the combination of the profiles can suggest the distribution of the complete life cycle deficit. Figure 19 shows the full life cycle deficit by sex. It seems that men and women have a similar life cycle deficit; the main differences are that men have a bigger deficit at more advanced ages. Given that the unpaid production of rural areas is missing, women's surplus might be bigger than men's, if the unpaid production of rural areas is included.

Figure 19
Complete Life Cycle Deficit, by sex, Costa Rica



Source: Author's calculation using the Time Use Survey (INAMU, 2011) and the Household Income Surveys (INEC, 2013).

Conclusions

The estimates presented in this article are evidence of gender inequalities in the intergenerational transfers. Women are the main individuals responsible for unpaid work, especially in activities like cleaning, cooking, washing and caring for children. On average, a man spends two hours more than a woman in the labor market, while women spend 3 hours more than men doing unpaid production. Men contribute proportionately more to care than other unpaid activities.

Unpaid production is an obstacle for women to enter the market. This is clear when the profiles are disaggregated by employment status. Women who report being part of the labor market dedicate fewer hours to housework. Some activities such as cooking or cleaning can be easily delegated to a third party, while care has a high cost. Estimates of the potential demand for care show the challenges to increase the participation of women. On average, a child under two years demands approximately 4 hours of exclusive care. In the short run, public policies should increase the coverage of childcare networks, and should encourage greater participation of women in quality jobs in the formal sector. In the long run, the challenge is to create a culture of family responsibility among all household members.

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