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Women's Participation in the Brazilian Labour Market in the Context of Economic Growth with Income Distribution (2004-2013)

Summary: Between 2004 and 2013, Brazilian economy experienced economic growth with improvement in income distribution. In this context, the reduction of the participation of young people continued and it was accompanied by lower participation of adult men and deceleration in increase of adult women's participation. The good performance of the labour market increased the income of households in which women participated in economic activity. Despite the improvement, in 2013, the number of households with low socioeconomic status in which adult women faced difficulties to participate in economic activity remained significant. Thus, the deceleration in the increase in adult women participation rate occurred in the presence of a significant number of women from low income and low participation rates, while in households with higher income levels the participation rate of adult women reached a very high level.

Key words: Gender, Labour market, Socioeconomic inequality.

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The evolution of the female labour force in Brazil between the 1970s and 1990s revealed the intensity and constancy of its growth, despite of the difficulties faced by women to enter and stay in the labour market during the diverse economic contexts experienced by the country. In the 1970s, the increase in women's participation in the economic activity was exceptional and it remained intense in the 1980s and 1990s. In the 1970s and 1980s, the increase in the adult woman's participation simultaneously to the high participation rates of young men stood out, leading to a very marked increase of the Economically Active Population (EAP). In the 1990s, the participation of young people decreased, but the increase in the adult women's participation prevented a decrease of the total participation rate of EAP.

In the 2000s, the increase in women's participation rate lost strength, but women continued to consolidate their participation, improving the quality of their participation in the economic activity by reducing the unemployment rate as well as the share of non-paid work and domestic employment in the female occupation.

In the 2000s, notably between 2004 and 2013, the country experienced a period of economic growth with improvement in the income distribution, reactivating the labour market and inducing an intense increase in the employment in establishments. This increase of the economic activity was accompanied by a strong increase in the real minimum wage as well as an intense formalization of establishments and of employment contracts, contributing to the increase of households' incomes, especially of

those households of lower income levels, thus helping to reduce the income differences between households.

During this period, the international situation was favourable to Brazil and other countries in South America, especially the price of commodities. In addition, the country, like some other South American countries (Argentina and Chile), was governed by a political coalition that sought to implement social inclusion measures that helped to reduce the very high inequality in household income (Robert T. Buckman 2013; Nora Lustig, Luis F. Lopez-Calva, and Eduardo Ortiz-Juarez 2013).

In this context of increase in the lower and intermediate households' incomes, the rhythm of increase in women's participation lost its intensity and the traditionally high youth participation in the economic activity continued to decrease¹, while the adult men presented a slight decrease in their participation. Consequently, there was a significant decrease of the total participation rate of the Working Age Population (WAP), a striking aspect of the labour market during the period of economic growth with improvement in income distribution (Paulo Eduardo Baltar and Eugenia Troncoso Leone 2015).

The deceleration of the increase in the adult women's participation in a context of increasing economic activity was a new phenomenon in Brazil (Ana Luiza Neves de Holanda Barbosa 2014; Carlos Henrique L. Corseuil and Maíra A. P. Franca 2015; José Eustaquio Alves 2016; Simone Wajnman 2016) and was similar to that of those in other Latin American countries, as well as of developed countries (Ciro Martínez Gómez, Tim Miller, and Paulo Saad 2013). The study of the period from 2004 to 2013 is justified by the contrast with what was observed in the previous decades in which adult female participation in the economic activity increased, despite the fact that the labour market situation was unfavourable to workers while in the 2000s the participation rate of adult women lost impetus in a favourable labour market situation for workers.

Thus, for example, the participation rate of women aged 35 to 39 years old, which was 46% in 1982, rose to 59% in 1992 and 67% in 2002, reaching 70% in 2007 and remaining at this level in 2012. The hypothesis of this article is that the increase in adult female participation since the 1970s, reached in the 2000s, the majority of households in which adult women have a socioeconomic condition compatible with that participation. In Brazil, however a significant number of low socioeconomic condition households could not take advantage of the employment opportunities that were created and their income remained relatively low. These households could only benefit from the cash transfer programs that were introduced by the government to mitigate the most striking poverty manifestations of the most unprivileged population. It is possible that not only does the low socioeconomic status of the family impair the participation of adult women in economic activity, but also that income transfer programs

¹ This, in part, due to the delayed labour market entry and the longer stay in school (Maria Carolina Tomás, Ana Maria Hermeto C. de Oliveira, and Eduardo Luiz G. Rios-Neto 2008). This process started in the mid-1990s. The beginning of the drop in the participation of the very young people was related to the narrowing of the labour market, but was also an important governmental effort to universalize the access to the basic education.

have prevented adult women with low socioeconomic status from doing very poorly paid work.

The formal employment expansion, the increase in the real minimum wage value and the professional categories' wage adjustments above the inflation rate (between 2004 and 2013) contributed to the increase of the income of households whose adult members were able to participate in the economic activity. Their income was low in 2004 not only due to the difficulties in participating in the economic activity but only due to the high unemployment rate, high informality and low remuneration including in the formal employment. The economic growth with income distribution between 2004 and 2013 altered this situation, but households with specific difficulties to participate in the economic activity, notably adult women from these families continued with very low income.

The participation of adult women is already expressively high in the case of households who have a minimum socioeconomic condition to exert an economic activity. Therefore, this article aims to show that the continuation of the increase in adult women's participation rate in Brazil requires the increase of the low socioeconomic level still faced by a significant portion of Brazilian households.

The article is organized into three sections besides this introduction and the conclusion. The first section describes the consolidation of women's participation in the economic activity. The second section examines the evolution of the female participation between 2004 and 2013, taking into consideration the level of household income *per capita*. Finally, the third section analyses the relation between the female participation, the household income level and the educational level in 2013.

1. Consolidation of Women's Participation in the Economic Activity

An inequality between men and women with respect to the participation in the economic activity exists and it is fundamentally related to the distribution of the domestic chores and the care of children, especially when both partners exert a remunerated work. Women's overburden with the domestic chores and care of children has historical and cultural roots in our society and these activities burden women regardless of their age, occupation condition or socioeconomic level.

Many women who participate in the economic activity are totally responsible for the domestic chores and child care, making the conciliation between their domestic activities and their remunerated work very hard and burdensome. Some of these women can share these activities with their partners and, others, with a higher socioeconomic level, can hire specialized services or another woman (a domestic employee) to perform these activities. Hirata denominates these three situations as models of conciliation, partnership and delegation (Helena Hirata 2017).

The main question one can pose in this discussion is whether the conditions for the full and effective participation of women in the economic activity are being guaranteed. It is known that women's overburden with the household responsibilities plays an important role in the discrimination and disadvantages faced by women in the labour market as, because of this, their productivity is considered lower and they are deferred in the opportunities for professional growth (from the very access to the more

valued employment positions, to the training, professional growth and qualification opportunities, among others).

The notion, still in place, that the woman is a secondary source of labour who performs activities similar to those exerted in the household environment, such as care activities, while the role of main provider of the household income is taken up by men, needs to be overcome, as, in reality, women have consolidated their participation in the economic activity and have been increasingly sharing with men the responsibility of providing the household income. It is important that society is aware of the need of redefining the households' responsibilities, the market and the state in the reproduction of the labour force and of society itself. Equally important is the redefinition of men's and women's roles with respect to the household responsibilities and the domestic chores (International Labour Organization 2009).

The need to bring about these difficult and sluggish changes in the household, the economy and the state is present in the labour market dynamics. The hypothesis put forward here is that women's participation in the economic activity is strongly conditioned by the household socioeconomic level. Women belonging to low income level households face greater difficulties to enter and stay in the economic activity. In these households, women do not have a place to leave their children and the household does not have the economic conditions to hire specialized services or a domestic employee.

It is important to emphasize that the redefinition of the role of men and women with respect to the domestic responsibilities and chores is a particularly sluggish process and that even though women, especially the married ones, have been increasing their participation in the remunerated activities in the labour market, thus increasing their participation in the household income, no equivalent progress in the division of the domestic and care activities has been observed.

Despite the difficulties, women have been progressively engaging in the remunerated work outside the home, thus contributing more and in a more permanent fashion to the financial maintenance of the household, besides assuring their own financial independence and increasing their personal self-fulfilment. This has led, however, to most women accumulating their remunerated work with their non-remunerated work, facing a double workload. They have been reducing the number of hours dedicated to the household, partly aided by the public policies (day-cares, schools, nursing homes, etc.) and partly by the incorporation of technology to domestic work (appliances, such as washing machines, etc.).

It was in the mid-1960s that women started to present increasing participation rates in the labour market, driven by a confluence of factors and new cultural and ideological behaviour in the Brazilian society. An important factor was the expressive drop in the fecundity rate, which occurred simultaneously with the increase in women's participation in the labour market. This expressive drop in fecundity facilitated women's entry in the labour market, which in turn reinforced the decrease in fecundity rates. The Brazilian fecundity rate, according to the Brazilian Institute for Geography and Statistics (IBGE), which was 5.8 children per woman in 1970, reduced to 1.86 children per woman in 2010.

The enlargement of women's participation in the labour market has been one of the most outstanding facts in Brazilian society, which, as mentioned, resulted from a combination of economic, cultural and social factors. This enlargement has been present in the diverse economic contexts faced by the country. Therefore, women's participation in the labour market increased in the 1970s, a period of economic expansion at the peak of the urbanization and industrialization processes. Women's participation also increased in the 1980s, when the external debt crisis interrupted the country's industrialization process, and in the 1990s, when the productive restructuration provoked by the opening of the economy jeopardized the better structured sectors, without fully incorporating the new sectors.

The consolidation of women's participation in the economic activity continued in the 2000s, despite the deceleration of the increase in their participation. This consolidation, which initially occurred through the increase in female participation in the labour market, goes beyond this extensive dimension, as there was also an intensification of the quality of their participation, which was favoured by the significant changes that occurred in the labour market from 2004 onwards (Wajjnman 2016). Indeed, after this year, an inversion of the negative trend in economic performance verified in the previous decade, was observed together with a significant employment growth and the recovery of the average labour income level purchasing power. A remarkable aspect of the period between 2004 and 2013 was the decrease in labour income inequality.

The consolidation of women's participation in the economic activity thus materializes, on the one hand, through the increase in women's participation in the economic activity, which occurs also in so far as they no longer leave the remunerated work after marriage or the birth of their children, allowing working women to solidify their professional careers. On the other hand, this consolidation occurs through the intensification of the quality of their participation and, with respect to this aspect, their conquests in education, especially with respect to the higher education level, where women are the majority, are striking (Leone and Luciana Portilho 2018). Together with this is the increasing importance of their participation as a source of household income, as well as the smaller difference of their labour income to that of men (Lilia Montali 2006; Goran Therborn 2006).

However, this consolidation in women's participation in the labour market persists, marked by the rigid sexual division of labour that designates a specific type of work for each gender. Women are concentrated in a limited set of occupations typically defined as feminine because they are considered extensions of the household environment (domestic employment, teachers, nurses, etc.), expressing the basic inequality mentioned above.

The concentration of women in occupations typically considered feminine, however, has not prevented their access to relatively well remunerated occupations. Thus, the share of women in occupations that require a higher education level is significant. These occupations on average offer a much higher remuneration than those occupations that do not require a higher educational level. The different income levels between women and men, despite occurring at all educational levels, are higher precisely between people with a higher educational level, where women are more than

half of the working population (Leone 2017). Therefore, the sex income differences are still an important part of the enormous labour income inequality present in Brazil.

2. Women's Participation: 2004-2013

Since 2003, in the midst of favourable world conditions for the Brazilian exports, the Brazilian economic performance notably improved (Baltar and Leone 2015; Philip Arestis, Baltar, and Daniela Magalhães Prates 2016; Arestis and Baltar 2018). The GDP growth intensified, and the inflation lowered, impacting the labour market. The unemployment rate decreased, and the wage employment started to grow more than the total occupied population growth, besides an increase in the formalization of establishments and employment contracts. The strong formal employment growth was accompanied by the increase in labour income, not only in terms of the purchasing power of wages in formal employments, but also the purchasing power of informal employment wages and of self-employed labour income. Intense increase of the real minimum wage strengthened the increase of the lower remunerations of the formal employments and of the informal employments with remunerations close to the minimum wage, contributing to the increase in the labour income occurring with a decrease of the income inequality between workers, which has always been high in Brazil (the labour income Gini index reduced from almost 0.60 to close to 0.50 between 1998 and 2014. The novelty after 2003 was the maintenance of the reduction in inequality with an increase in the average labour income).

This expressive improvement in the labour market indicators was not just a consequence of the disproportional growth of the total working population. The enlargement of the employment opportunities occurred in a proportional rhythm to the GDP growth and the employment rate (ratio between employed and working-age population) in 2013 was slightly higher than in 2004 (varied from 66.4% to 66.7%). However, the participation rate decreased in the period (from 73.0% to 71.4%), indicating that the EAP grew at a lower rhythm than the WAP, allowing a relatively modest increase in the number of working people to cause an intense decrease in the unemployment rate, from 9.1% to 6.6%.

Therefore, the decrease in the participation rate was a relevant aspect of the good labour market performance during the growth period with reduction in the labour income inequality that occurred between 2004 and 2013. Table 1 shows that the reduction in the participation rate occurred in the active population less than 35 years old and between 60 and 64 years old, but not in the population between 35 and 59 years old. For the population from 15 to 24 years old, the reduction in the participation rate occurred for men and women, but for the ranges between 25 and 34 years old and 60 and 64 years old, the decrease in the participation rate occurred only for men.

The drop in the participation rate between 2004 and 2013 mainly affected very young men and women (15 to 19 years old). Especially in the case of very young men, the participation rate was extremely high in Brazil until the late 1980s. This high male youth participation was related to high failure and evasion rates in the first grades of primary school. The decrease in this participation rate since the 1990s mainly reflects a narrowing of the labour market that occurred with the opening and liberalization of the economy, but it also coincided with a public effort to improve elementary school,

resulting in an extension of the young people's permanence in school. On the other hand, the growth of formal employment since 2004 has been accompanied by increasing demands for formal education in order to access these jobs. In this context of a narrow labour market, improvement of primary schools and increasing schooling requirements for formal jobs, it seems difficult to oppose the hypotheses that young people are delaying the incorporation in the labour market to expand their qualifications or because the increase in the income of their parents allows them to forego their contribution to household income.

Table 1 Labour Force Participation Rates by Age and Sex; Brazil 2004 and 2013

Age	Men		Women		Total	
	2004	2013	2004	2013	2004	2013
15 to 19	59.4	47.7	41.6	33.6	50.5	40.8
20 to 24	88.5	84.8	66.8	65.2	77.5	74.9
25 to 29	94.2	92.2	70.4	71.5	82.0	81.5
30 to 34	95.5	93.9	71.9	72.7	83.2	82.9
35 to 39	95.2	94.8	72.8	73.2	83.5	83.6
40 to 44	93.8	93.7	70.9	71.7	81.9	82.1
45 to 49	92.1	91.0	65.3	67.4	78.1	78.7
50 to 54	85.6	86.7	57.2	59.1	70.7	72.1
55 to 59	77.7	78.6	45.4	46.5	60.6	61.5
60 to 64	65.0	63.2	30.8	31.2	46.7	46.0
Total	85.3	82.8	61.5	60.6	73.0	71.4

Notes: Labour force participation rates - EAP/working-age population.

Source: Brazilian Institute for Geography and Statistics (2019)².

Table 2 refers only to adult women (from 25 to 54 years old) and shows that the decrease in the participation rate occurred only in the households with *per capita* income lower than the value of real minimum wage of 2013, with this decrease being verified in all age ranges in these households of relatively low income level. With respect to the households with *per capita* income higher than the real minimum wage value of 2013, the female participation rate increased, and this increase also occurred in all age ranges.

Table 2 Women's Participation Rates by Age and per capita Household Income (in Minimum Wages); Brazil 2004 and 2013

Age	Total		Up to 1/4 MW		1/4 to 1/2 MW		1/2 to 1 MW	
	2004	2013	2004	2013	2004	2013	2004	2013
25 to 29	70.4	71.5	55.8	46.0	65.1	49.4	76.4	71.6
30 to 34	71.9	72.7	58.7	51.5	67.4	55.3	78.1	71.8
35 to 39	72.8	73.2	63.1	54.1	68.5	59.2	76.5	71.8
40 to 44	70.9	71.7	62.4	55.8	65.9	55.8	73.2	69.3
45 to 49	65.3	67.4	62.5	54.0	59.8	51.4	64.6	61.1
50 to 54	57.2	59.1	57.1	48.4	53.4	44.9	56.9	51.6
Total	68.6	69.7	59.7	51.5	64.4	53.2	71.9	67.1

Notes: MW - minimum wages.

Source: Luciana Bernardes Vasquez (2016).

² **Brazilian Institute for Geography and Statistics.** 2019. National Sample Household Survey. <https://www.ibge.gov.br/estatisticas/sociais/populacao/9127-pesquisa-nacional-por-amostra-de-domicilios.html?=&t=o-que-e> (accessed September 02, 2019).

Table 2 (Continued) Women's Participation Rates by Age and per capita Household Income (in Minimum Wages); Brazil 2004 and 2013

Age	1 to 2 MW		2 to 3 MW		3 to 5 MW		5 and more MW	
	2004	2013	2004	2013	2004	2013	2004	2013
25 to 29	82.8	85.0	83.7	88.4	86.1	90.4	88.4	90.0
30 to 34	82.5	84.1	82.4	88.7	85.9	90.7	88.0	90.9
35 to 39	80.0	83.3	83.7	86.9	83.4	89.8	87.8	90.7
40 to 44	76.3	80.9	78.2	81.6	81.4	82.4	85.8	88.3
45 to 49	68.5	74.5	70.6	81.9	73.8	80.8	82.8	86.6
50 to 54	59.3	65.2	54.9	68.4	60.0	74.7	67.2	75.4
Total	75.2	78.9	75.9	82.7	78.4	84.7	83.2	86.8

Source: Vasquez (2016).

Therefore, it is important to take into consideration the socioeconomic level of the households when studying the evolution of women's participation in the economic activity. In the households of low *per capita* income, not only is women's participation lower than in the households of intermediary and high *per capita* income, but also such participation decreased in the period under consideration. To assess the meaning of this decrease in the participation rate of women from low *per capita* income level households, it is important to consider that the economic growth with labour income distribution significantly altered the households' distribution according to the household *per capita* income level, as shown in Table 3.

The nominal minimum wage increased from R\$260 to R\$678 between May 2004 and January 2013. The average national consumer price index for the months from August to October increased 58.95% in this nine years period, a 5.3% average inflation rate per year. The value of the real minimum wage thus increased 64.1% in these nine years, or 5.65% per year, well above the productivity growth rate of the economy and well above the wage adjustments achieved by the professional categories in that period.

Table 3 Household Distribution according to Household per capita Income Level; Brazil, 2004 and 2013

Household per capita income in minimum wages of 2013	Households (millions)		% households		% WAP	
	2004	2013	2004	2013	2004	2013
No income	594,5	1,148,1	1.1	1.8	0.9	1.2
Up to 1/4 MW	9,062,0	3,949,6	17.4	6.1	19.5	7.0
1/4 to 1/2 MW	11,577,3	8,936,6	22.2	13.7	24.3	15.6
1/2 to 1 MW	14,391,7	17,944,3	27.6	27.6	26.0	27.3
1 to 2 MW	88,710,0	17,246,1	17.0	26.5	16.1	25.9
2 to 3 MW	2,756,5	5,793,5	5.3	8.9	4.9	8.3
3 to 5 MW	2,043,5	3,666,1	3.9	5.6	3.4	5.1
5 and more MW	1,584,7	3,228,4	3.0	5.0	2.3	3.9
No information	1,225,9	3,246,7	2.4	4.9	2.6	5.6
Total	52,107,4	65,129,7	100.0	100.0	100.0	100.0

Source: Brazilian Institute for Geography and Statistics (2019).

To assess the evolution of the household distribution by *per capita* income, the income was classified into ranges of minimum wages of 2013. The value of the real minimum wage of 2013, however, is equal to 1.64 the value of real minimum wage of 2004. The remunerations close to the minimum wage accompanied its evolution, while the higher remunerations had lower increases than the minimum wage, thus considerably altering the household distribution according to ranges of the 2013 minimum wage.

The number of households increased 25% or 2.5% a year between 2004 and 2013, in a context of population growth of just 1% a year. The average number of people per household substantially decreased, reflecting the expressive changes in the family structure. These changes deepened the alterations in the households' distribution by ranges of *per capita* income (Leone, Alexandre Gori Maia, and Baltar 2010).

The number of households with positive *per capita* income, but lower than half of the 2013 minimum wage, suffered a strong decrease (37.6%). These low *per capita* income households made up 39.6% of the household total in 2004 and encompassed 43.8% of the WAP (15 to 64 years old) and in 2013 constituted 19.8% of the households total, encompassing 22.6% of the WAP.

Consequently, the household distribution according to the *per capita* income presented a considerable improvement, but the number of low *per capita* income households remained expressive, encompassing more than one fifth of the population of active age. In 2004, many low income households had members who were able to participate in the economic activity, but the unemployment and the informal occupations were high and the remuneration was low, even in the formal employments. The economic growth with income distribution diminished the difficulties to participate in the economic activity. Yet, these difficulties remained for the low income households that had particular problems to participate in the economic activity and thus could not benefit from the improvements in the labour market.

The difficulties in participating in the economic activity faced by members of low income households are particularly severe in the case of women. The strong reduction of the number of these low *per capita* income households was accompanied by an intense reduction in the participation rates of women from these households, while, during the same period, women's participation rates increased in the households with *per capita* income higher than the 2013 minimum wage. In this year, women's participation rates in the households with *per capita* income above the 2013 minimum wage reached a relatively high level (above two thirds of women between 20 and 54 years old), even though Brazil does not have a Welfare State that offers special support in order to facilitate women's remunerated work, as verified in the European Nordic countries (Olanta Reingardiene 2006; Nima Sanandaji 2018).

During the period of economic growth with income distribution, a decrease in the growth of women's participation rate in the economic activity occurred. In this period, the consolidation of women's participation in the economic activity continued, but it altered from extensive (increase in the participation rates) to qualitative intensive (improvement in the absorption of women by the economic activity, reducing the unemployment and increasing the formality of labour relations). Many women from low socioeconomic level households, however, lacked the necessary conditions to

participate in the economic activity, which could have increased the household income substantially. This shows that the economic growth, even when accompanied by income distribution, does not have an automatic effect on all very low income level households, revealing the magnitude of the absolute poverty present in the country, which renders necessary specific public policies to improve the socioeconomic condition of this part of the population.

3. Women's Participation: Income and Educational Levels in 2013³

The difficulties to participate in the economic activity are related to the low educational level of both men and women from the low *per capita* income level households. Indeed, the formalization of establishments and employment contracts, which characterized the growth with reduction in the labour income inequalities, was accompanied by an increase in the educational requirements for formal employment positions, thus increasing the difficulties faced by people who lack the required education level to participate in the economic activity. Women present a higher educational level than men, but the formal employments that absorb women also present higher educational requirements (Leone and Portilho 2018). The formal employments in manual labour occupations present fewer education level requirements but started to demand the basic educational level. Access to these positions continues to be predominantly for men, and women are predominantly absorbed in formal employment in occupations of administration, sales division and science and arts professions, which required, or started to require, high school or higher educational levels.

Table 4 shows that the educational level of women between 25 and 54 years old from the low income level households is considerably lower than that of women of this age from the households with *per capita* income above the minimum wage. In the households with a positive *per capita* income, but lower than a quarter of the minimum wage, only 16.6% of women between 15 and 64 years old have studied for 11 years or more. This proportion is equal to 29.7% in the households with *per capita* income between a quarter and a half of the minimum wage and affects more than 60% of the households with *per capita* income above the minimum wage. In the households with *per capita* income between five or more minimum wages, the proportion of women between 25 and 54 years old who have studied for 15 years or more (higher education) reaches 72.5%.

³ The purpose of this item is not to analyze the effects of raising the population's level of schooling on participation rates, but only to show that the difficulties of participation in the economic activity of adult women of very low socioeconomic status cannot be attributed only to the lack of schooling required for that participation. For this reason, the analysis is restricted to 2013 when very low-income households express this condition of absolute poverty whereas in 2004, households with this low income level mixed situations of absolute poverty with situations resulting from the poor performance of the labour market.

Table 4 Distribution of Adult Women (25 to 54 Years Old) by Years of Study and Household per capita Income Level; Brazil, 2013

Years of study	Total	Household per capita income in MW		
		Less than ¼ MW	1/4 to 1/2 MW	1/2 to 1 MW
Less than 8	31.7	66.1	51.0	44.7
8 to 10	15.2	16.7	19.0	19.5
11 to 14	37.9	15.7	27.8	32.7
15 and more	15.0	0.9	1.9	3.0
Not available	0.2	0.5	0.3	0.1
Total	100.0	100.0	100.0	100.0

Source: Brazilian Institute for Geography and Statistics (2019).

Table 4 (Continued) Distribution of Adult Women (25 to 54 Years Old) by Years of Study and Household per capita Income Level; Brazil, 2013

Years of study	Household per capita income in MW			
	1 to 2 MW	2 to 3 MW	3 to 5 MW	5 or more MW
Less than 8	21.5	10.0	5.4	2.7
8 to 10	15.1	9.5	5.2	2.6
11 to 14	48.8	46.6	36.2	22.2
15 and more	14.5	33.9	53.2	72.5
Not available	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Source: Brazilian Institute for Geography and Statistics (2019).

The low education level, however, is not the only reason for the lower participation of women between 25 and 54 years old from the low income level households in the economic activity. As reported in Table 5, the participation rate of these women from the low income level households is quite low in all ranges of educational level. Yet, there is no strict correlation between women's participation rate and the level of household *per capita* income level when the educational level is controlled for. Thus, women from 25 to 54 years old with average education who have not completed higher education (11 to 14 years of schooling) and who have significant participation in all *per capita* household income ranges, have activity rates of 54.6% in households with *per capita* income below ¼ minimum wage and the activity rate increases with household income and affects 82% in the range of 1 to 2 minimum wages remaining at this level in households with higher *per capita* income. The participation rates of women in all educational levels reaches a maximum in the intermediary levels of *per capita* household income, suggesting that the role played by this participation in the increase of the household income is particularly remarkable because it places households in income levels above the critical level of a minimum *per capita* wage.

Table 5 Women's Participation Rates (25 to 54 Years Old) by Years of Study and Household per capita Income Level; Brazil, 2013

Years of study	Total	Household per capita income in MW		
		Less than 1/4	1/4 to 1/2	1/2 to 1
Less than 8	57.0	51.0	49.6	58.3
8 to 10	66.1	51.0	55.2	68.2
11 to 14	75.0	54.4	56.9	73.1
15 or more	88.2	53.9	69.6	78.9
Total	69.7	51.5	53.2	67.1

Source: Brazilian Institute for Geography and Statistics (2019).

Table 5 (Continued) Women's Participation Rates (25 to 54 Years Old) by Years of Study and Household per capita Income Level; Brazil, 2013

Years of study	Household per capita income in MW			
	1 to 2	2 to 3	3 to 5	5 or more
Less than 8	68.5	69.3	66.2	64.9
8 to 10	75.2	74.2	65.6	67.0
11 to 14	81.9	82.0	81.3	77.6
15 or more	88.3	90.0	90.8	91.2
Total	78.9	82.7	84.7	86.8

Source: Brazilian Institute for Geography and Statistics (2019).

Besides the low education level, other factors associated to the low socioeconomic level, hamper women's participation in the economic activity, such as the difficulty in reconciling remunerated work with household responsibilities. The alteration in the patterns of participation in the economic activity in low-income households is always a complex process and requires time and adaptation by families and, if there is no large public assistance for the care of children, sick and elderly people, this adaptation may be a sluggish process, especially in the low income level households with fewer resources to use the market (private nursery, maid, etc.) to conciliate women's remunerated work to their household responsibilities.

4. Conclusion

The aim of this article is to study women's participation in the economic activity in the context of economic growth with income distribution (2004-2013). The participation rate of women, after having increased in periods of poor performance in the labour market, throughout the 1980s and 1990s, decreased in a favourable moment in the labour market. The good performance of the labour market in the 2000s was not exclusive to Brazil. Other countries in South America, with governments concerned with the well-being of the population, have implemented policies to improve the situation of low-wage workers during the favourable international situation, due to the rise in commodity prices. Thus, during this period of economic growth, there was a deceleration of the increase in women's participation rate in the economic activity. The consolidation of women's participation was no longer a quantitative increase and the qualitative improvement in women's absorption by the economic activity was intensified.

This change in the nature of women's participation clearly reveals itself in the lower *per capita* income households. The growth with income distribution strongly decreased the number of households with *per capita* income level lower than half of the 2013 minimum wage. In 2004, many women from these very low income households participated in the economic activity, but the quality of their absorption was very poor, with high unemployment, high informality and low remuneration. Thus the income of the households in which women participated in the economic activity was barely different from the income of the households in which women could not participate in the economic activity.

Thus, in 2004 not only was the number of households with very low income level very high, but the participation rate of women from these households was also relatively high. The economic growth with income redistribution altered this situation, reducing unemployment, increasing both formal employment and the real minimum wage. This created the conditions for the professional categories' wage adjustments above the inflation rate. Consequently, the number of very low income level households strongly decreased and was accompanied by an intense reduction in the participation rate of women from these households.

The participation rate of women from relatively high income level households increased, but it was already high in 2004. Therefore, it is possible to attribute the deceleration of the increase in the female participation rate to the difficulties in extending this participation to many of the low income households. Women from these low income households face specific difficulties to participate in the economic activity and these households could not benefit from the occupational opportunities that emerged with the economic growth with income distribution, thus maintaining their low socio-economic condition. This difficulty of women to participate in the economic activity is related to the low education level, but the problem is larger and is also related to other aspects of their low socioeconomic condition.

From the perspective of the country's evolution in the last 50 years, one may highlight that since the 2000s has been a deceleration in the strong increase in this participation. The strong increase in the women's participation rate during the 1970s, 1980s and 1990s combined the three models mentioned by Hirata (2017) (conciliation, partnership and delegation). The good economic performance between 2004 and 2013 and the income distribution policy increased the income of those households that managed to benefit from the newly created occupational opportunities, many of which with a relatively high participation of women in the economic activity, but a non-negligible fraction of households, encompassing an expressive share of the PAA could not benefit from those opportunities. This suggests that a true resumption of the increase in women's participation in the economic activity presupposes a higher development of the economy and of the public assistance to enable women's participation to the point of diminishing the proportion of households of such a low socioeconomic condition that it prevents the female participation.

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