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Initial effects of Constitutional Amendment 72 on domestic work in Brazil

Institute for Applied Economic Research

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Inclusive Labour Markets, Labour Relations
and Working Conditions Branch

***Initial effects of Constitutional
Amendment 72 on
domestic work in Brazil***

Institute for Applied Economic Research (IPEA)*

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1. INTRODUCTION

In Brazil, even now in the 21st Century, domestic work remains an important occupation for women and a key component of our social organization of care work. In recent years, within a context of international debate, legislative measures have been approved that aim to expand the rights of this historically fragile category of workers.

The main objective of this report is to examine recent changes in labour relations in domestic work in Brazil, especially with respect to legal mechanisms and, subsequently, provide a profile of women engaged in domestic work. As one of the earliest forms of labour relations in Brazil, domestic work maintains ambivalent links with the public and private spheres of modern Brazilian society. Between the invisibility of domestic workers (both male and female) and of the tasks they perform, and the affirmation that such workers are subjects of rights, a series of distinct images has been produced, ranging from postulation that this is an occupation on the verge of “extinction”, to resistance to the granting of undue “privileges” to this category of workers. Some of these representations applied to women in domestic work reflect traditional sentiments of deeply ingrained prejudice that perpetuate the country’s historical social inequalities.

Recent enactment of Constitutional Amendment 72 (CA 72) in 2013, which expanded the rights of domestic workers, and of Enabling Law (LC) 150, of 1st June 2015 that brought most of these rights into effect, was the outcome of political disputes and, above all, of a dispute over values involving various social players, most notably, organisations of domestic workers, certain sectors of the Executive, Judicial and Legislative Branches, and international bodies such as the International Labour Organisation (ILO).

Comprised of four sections, aside from this introduction, this paper first presents a brief background on legislation relating to domestic work in Brazil and recent changes; followed by presentation of the profile of domestic workers and of labour relations, based on data from the National Household Sample Survey (PNAD- 2013) and on the most recent data from PNAD Contínua. The final section presents an econometric model that aims to interpret possible impacts of the enactment of CA 72 of 2013.

2. BACKGROUND

Domestic work, considered by the ILO as one of the occupations with the worst quality of employment, is characterised by long work days, low pay, limited social protection coverage, and high levels of noncompliance with labour standards. Such characteristics owe much to historical images and sentiments associated with such activities, traditionally performed by subservient individuals, slaves, former-slaves, the marginalised poor, migrants, etc. Within the scope of modern capitalism, conventions of the sexual division of labour have reserved productive activities, in the public sphere, for men; and reproductive activities, in the private sphere, for women. In this manner, the labour force was sold in the public space; whereas, in the domestic space, labour was not acknowledged as a productive unit. Care for the home, for children or for the elderly, carried out for pay or by a family member, is undervalued or rendered invisible (Ávila, 2004; Ávila & Ferreira, 2014).

In Brazil particularly, domestic work was performed by slaves from the time of the arrival of the Portuguese. Such slaves remained as domestic workers even after the abolition of slavery, under the Golden Law [*Lei Áurea*] of 1888. Lacking access to formal schooling and with few opportunities to learn a new trade, especially for women, domestic work was the main entrance to the “market society”. However, in the absence of specific legislation, such labour relations were based, on the one hand, upon labour-market dynamics in which the labour force had low value and, on the other, severe moral and ethical requirements, given that former-slaves were regarded as ignorant, subversive and violent people, who owed obedience and respect to their employers (Schwarcz, 1987). As has been demonstrated by Lima (2005), from an economic standpoint, there was pressure and a strong effort to realign labour relations to the aspirations of a modern society. However, there was no corresponding investment toward building a new social fabric, nor even attribution of new meanings for the status of those freed, thus posing an important reference of apposition to the modern and the traditional for employers and for workers:

...this idealized apposition, on the one hand, the meanings of the actions of the “new” subjects, emphasising their individualism, their understanding and clarity as to their own interests, their unlimited access to information and resources, univocity of actions and coherence of strategies, etc.; and, on the other, a largely underestimated “rational” component of the actions of free independent workers, supposedly imbued with a reactive and visceral (social and economic) behaviour, in the final instance, “vestiges” of slavery (LIMA, 2005, p.300).

Motivated by subjective subsistence “interests” (when they bought their own freedom), or material interests (when exchanging their labour for housing, food, clothing and medicine) former-slaves obtained formal freedom, but continued submissive under regimes of indenture and subservience to the employer through labour contracts or debt bondage that could last decades. A perverse dynamic was applied in the

reinterpretation of relations between former owners and former-slaves, transforming freedom into indebtedness; dependence into minionship; obedience into extravagant manifestations of respect.

With the passage of time, changes took place in labour-market dynamics and also in the laws that regulated that market; however, within the sphere of domestic work, these representations persisted. It remained an undervalued activity, circumscribed by a dynamic of subservience and dependence. Aside from the figure of the former-slave, over time, other characters became inscribed into this scenario, including immigrants from neighbouring countries lacking qualifications and with low schooling, or even girls from poor families from the countryside or municipalities in the interior who, in exchange for lodging and access to formal schooling, offered (and continue to offer) their labour, thus leading to relations of minionship and, all too often, cases of sexual abuse.

A series of contemporary studies has brought to light relations of affection, ritual kinship, dependence, abuse and subjugation between employers and domestic workers [both male and female] (Kofes, 2001; Ávila, 2009). More recently, amidst public debate surrounding CA 72, the media has reproduced discourse, both reiterating late 19th-Century prejudices that view domestic workers as unworthy of such “privileges”, and acknowledging inequalities of labour rights and thereby strengthening the claims of domestic workers for equality of rights with other categories of workers.

Indeed, if true citizenship is associated with full enjoyment of social, civil and political rights [by both sexes] as described by Carvalho (2001), Brazilians who do not benefit from such rights are not full citizens. Though the Consolidated Labour Laws (CLT) and the Federal Constitution of 1988 strengthened the modern concept of workers as subjects with rights; they nonetheless failed to do so more broadly by excluding domestic workers. Such exclusion reflects and reproduces the low value attributed to this activity, skills required for which are regarded as innate to women, and learnt among generations of poor, black and unschooled women, for whom domestic employment is the main trade.

Under the aegis of freedom sought in the late 19th century, the goal was relief from the deepest forms of oppression. Under the aegis of rights, the goal sought under the current scenario is relief from modern forms of subjugation.

2.1. Expansion or equalisation of rights

Although the main focus of this text is on recent changes in the law relating to domestic work, it is nonetheless worth considering the background of previous legal provisions relating to this occupation, in order better to understand the significance for domestic workers of the advances achieved under CA 72 of 2013 and Enabling Law (LC) 150 of 2015. Generally speaking, it can be affirmed that their essential purpose is to regulate relations between employers and employees, essentially with the aim of protecting the former, in detriment to the “interests” of the latter, and only very gradually to do the opposite.

Although Brazil became an independent Republic in 1889, only in 1916 was the first Civil Code promulgated, in which standards referent to domestic workers were circumscribed, under the scope of hiring of services. Up until 1916, the legislation in effect relating to labour relations of domestic workers were the Philippine Ordinances,¹ Book IV of which provided for the sum to be paid by a lord/master to his minions for each period of service. In São Paulo in 1884, the Code of Postures of the Municipality of São Paulo was instituted, title XX of which provided for the activities, rights and duties of minions, wet-nurses² and their masters. Such servants were defined as “... any free person who, for an agreed wage, maintains or applies for a position as a busboy at a hotel, inn or eating house, cook, waiter, postillion, horticulturalist, wet-nurse, nanny, laundress or seamstress, and is generally engaged in domestic work” (p.49, M.S.P 1886).

Among their duties was an obligation to register the signing and termination of contracts at the Secretariat of Police; for wet-nurses, especially, there was also the requirement of a medical certificate in order to perform their duties. Penalties, depending upon the degree of noncompliance, could range from a fine to imprisonment. Nonetheless, they had the right to advance notice of dismissal, to receive wages for the remaining month/period of contract if dismissed without just cause, and to compensation for losses and damages in the event that such were caused by the employer.

The most interesting aspect of these standards was the supposed moral obligations of servants toward their duties and toward their employers, including “[not to] promote discord; go out at night without permission; contract pregnancy without husband etc.”, all of which implied a set of stigmas for disparagement of their ethical and moral character as free persons. Soon after, with abolition under the *Lei Áurea*, of 13th May 1888, a highly significant number of domestic workers entered the labour market, under conditions analogous to that of minions and wet-nurses in São Paulo, yet under no specific legislation. According to Pereira (2011), in the final years of the 19th Century and the early 20th Century, over 70 per cent of the economically-active former-slave population was engaged in domestic work.

With approval of the Civil Code³ in 1916, which provided for hiring of services, domestic workers could be encompassed by this legislation, however, it contained no specific mention of this type of activity. In section II - Hiring of Services, there were indications as to the duration of contracts, which could extend for up to four years, whereas the value, in the absence of an agreement, would be that customarily paid at said location. Termination of contract could be effected by the employer, with advance notice of dismissal of up to eight days, and by the employee only for just cause, on pain of responding for losses and damages.

¹ The Philippine Ordinances resulted from a reform by Phillip II of Spain (Phillip I of Portugal) of the Manuelino Code, during the period of the Iberian Union. They remained in force in Portugal until dissolution of the Union, by confirmation of Don João IV. In Brazil, they remained in effect until promulgation of the first Brazilian Civil Code in 1916.

² *Código de Posturas do Município de São Paulo*, 6th October 1886.

³ Law 3.071, of 1st January 1916.

Only in 1923, did Decree 16.107 provide the first Brazilian legislation referent to domestic work. Among those offering domestic works were:

cooks and helpers, waiters, cleaners, laundresses, ironers, gardeners, horticulturalist, porters or helpers, polishers, nannies or wet-nurses, seamstresses, ladies in waiting and, in general, all those employed, for wages, in any other identical services, in hotels, restaurants or eating houses, inns, bars, offices or consulting rooms and private homes (BRAZIL Decree 16.107 of 30th July 1923).

As of this decree, the service contract was replaced by a work booklet which must contain: identification of the service provider (with photograph and fingerprints), the value of the wage, the period of validity of the service-provision contract, and other annotations on the conduct and aptitude of the employee, to be effected by the employer upon entrance into service. Along with this came the obligation to provide personal identification, a certificate of no criminal background, conditions for claiming dismissal for just cause, and guidance for cases of noncompliance.

The effects of this legislation were more detailed specifications regarding the supply of such services and persistence of strong moral requisites for workers, whose record could not contain any report of deviant behaviour or crime against property, and whose contractual duties included obedience and respect for the employer and family hiring his/her services. It is worth underscoring that the regulations considered it an obligation of a service provider undergoing a process of dismissal to obtain immediately “*an express declaration of professional conduct and aptitude*”, to which it added a full chapter on processes of infractions, providing for penalties and procedures to be followed in the event of conduct contrary to this legislation, be it by the employee or the employer.

In 1941, with Decree 3.078, domestic work was thenceforth circumscribed to the home, and no longer to a broader set of activities. It included, among the documentation necessary for contracting, a vaccination certificate valid for two years. Moreover, it required that the work booklet be signed by both parties, concurring with the information therein recorded. The employer was thenceforth obliged to pay wages punctually, whereas the worker gained a record of payments in the work booklet, thereby providing a viable instrument for filing claims with the competent public authority. Just cause for dismissal was established as noncompliance with duties defined for employer and employee, which could result in a fine for the former or forfeiture of advance notice of dismissal for the latter. It was the first law to mention inspection procedures which, in cases involving large numbers of employees, could be carried out by health professionals. The decree made no provision with respect to social security, but indicated that studies to this effect should be carried out, as evidenced in the following passage:

Art. 16. The Minister of Labour, Industry and Commerce shall commission studies necessary for establishment of a social-security regime for domestic workers and shall, to this end, issue such instructions as may be necessary for inclusion of such workers into one of the existing Retirement and Pensions Institutes, or draw up a bill of law instituting a new modality of insurance for their benefit (BRAZIL, Decree 3.078 of 27th February 1941).

Two years later, in 1943, from a legal standpoint, promulgation of the Consolidated Labour Laws (CLT) was considered an important framework for urban workers who, at that time, were a minority, but whose numbers grew enormously in subsequent decades, thus making CLT the principal charter of social rights, until promulgation of the 1988 Federal Constitution. The CLT contained a highly detailed set of standards governing labour relations, among which the following stand out: a limit on the number of hours worked each week, and also the rest period; annual holidays; equal pay for equal work; maternity leave, and institution of the work booklet. However, these rules did not apply to domestic or rural workers, both of which were expressly excluded from this great achievement of the working classes.

If it might be possible to characterize failure to regulate labour relations for domestic workers at the time [of abolition] the *Lei Áurea* as an oversight, failure to apply the CLT to this category can only be viewed as a deliberate act of social exclusion, not only from the standpoint of the inter-subjective dimension of social relations within the domestic environment between employers and employees but also, and above all, in the legal field. It resulted in subsequent legislation which provided, regulated or characterized new benefits for urban workers, while disqualifying domestic workers and rendering them invisible.

In 1949, Law 605, of 5th January, that introduced paid weekly rest and payment of wages on civic and religious holidays, likewise did not apply to domestic workers. This was only redressed in 2006,⁴ i.e., only 57 years later was equality of such rights finally achieved. The same occurred in relation to social security: in 1960, Law 3.807, which provided for such rights, once again excluded rural and domestic workers, despite the indication that studies had been commissioned for this purpose, and even a deadline for application determined, as evidenced by the following text:

Art. 166. For extension of the regime [provided for in] this law to rural workers and to domestic workers, the Executive Branch, through the Ministry of Labour, Industry and Commerce shall commission the necessary studies and enquiries that shall be concluded and submitted to the Legislative Branch, accompanied by a draft bill of law, within one year, counted as of publication of this law (BRAZIL. Law 3.807, of 26th August 1960).

Only in 1972, with Law 5859,⁵ did domestic workers have their own legislation providing for specific rights and bringing them into line with other urban workers, but only with respect to twenty days of holidays after having completed twelve months of work. The work booklet, a certificate of good conduct and, optionally, a health certificate became requisites for contracting of a domestic worker. When signed and completed by the employer, the work booklet gives the worker access to labour rights and social security. As of that time, this category of workers has been covered by the Organic Social Security Law and automatically inscribed in the National Social Security Institute (INPS) in which they could also

⁴ Law 11.324 of 19th July 2006.

⁵ Law 5.859, of 11th December 1972, that was only brought into effect by Law 5.890, of 8th June 1973.

register their dependents. They were eligible for sickness, retirement or disability benefits, and the social-security contribution was set at 8 per cent for the employee and for the employer, with a fine upon the employer in the event of noncompliance.

So, it took some 30 years for the law to formally acknowledge the social rights of domestic workers and, even so, this occurred only partially, through gradual changes over decades. The same occurred with changes relating to social-security contributions in 1980⁶ (and to further changes in subsequent years). The 13th salary [Christmas Bonus] was introduced in 1962,⁷ however, domestic workers only began to enjoy this benefit in 1989⁸ when the 13th wage became part of the contribution wage. In 1977, the CLT was amended to expand annual holidays from 20 to 30 days, and to include a holiday bonus and due regulations. For domestic workers, however, this right was only achieved in 2006, through Law 11.324, that also instituted job stability during pregnancy, enjoyment of religious holidays, and prohibited payments in kind, such as on meals, housing, clothing and items of personal hygiene. (When transport vouchers were instituted, in 1985, their extension to domestic workers was already foreseen.)

Promulgation of the 1988 Constitution ushered in a new charter of social, civil and political rights. Particularly with respect to social rights, it consolidated and expanded a number of features contained in the CLT. Nonetheless, once again domestic workers were expressly excluded from several of these. Of the 28 items in article 7, which provides for the rights of workers, only 9 were assured to domestic workers.

Under the egis of a new era, the unfolding transition to democracy, following the dictatorial military regime, took eleven long years. Time was required for new realities of the scenario to consolidate within Brazil's social mentality, to shift aside incongruities of this new idealized Brazil and shatter the contradictions of a State that, while claiming to be a social-democracy, retained a legacy of pre-modern conventions and morality of a clearly segregationist, disqualifying and dehumanizing nature.

The new Constitution represented advances in securing of rights and exercise of citizenship. For a portion of the population, or for certain sectors of society, the implications of this "Magna Carta" were automatic; for others, it was necessary to continue articulating and pressing demands, with the aim of pressuring and realigning forces to secure rights and ensure equality with other categories.

Whereas Brazilian families enjoyed a new framework of rights, domestic workers remained marginalised, serving as a fall-back for free and full exercise of the citizenship of the families that

⁶ Law 3.807, of 26th August 1960, that provided for social security, underwent a series of alterations and adjustments in subsequent years, i.e., in 1980, 1989, 1991, 1995 etc. With respect to social-security contributions, fines and bases for calculation of contributions, domestic workers, like other workers, were subject to regulations.

⁷ Law 4.090, of 13th July 1962.

⁸ Lei 7.787, of 30th June 1989.

employed them and, above all, in support of the reproductive work of such families, as a means of ensuring the productive labour of their employers.

Among the reverberations of the Constitution that led to implementation of a set of policies needed for Brazil's economic and social development, were new demands brought to light in the political arena. These claims were not only for access to income and to jobs, but also and above all, for greater guarantees of job stability and security. In this context, in 1990⁹ benefits such as unemployment insurance, the wage bonus and the Time of Service Guarantee Fund (FGTS) were instituted. Nonetheless, it was only a decade later that unemployment insurance and FGTS were extended to domestic workers, and then, only on an optional basis.¹⁰

Domestic workers continued their arduous struggle against the various forms of invisibility imposed upon them and their labour. Though it is true that, on the one hand, the Constitution opened access to public policies and services for a major portion of the population that had previously been marginalised, it is equally true that a new alignment of political forces came into being in the struggle to bring them into effect, ensuring equal treatment, and securing new rights. Moreover, even decades after promulgation of the Constitution, domestic workers, alongside a significant portion of the population, remained marginalised in relation to the entire set of social, civil and political rights.

In recent years, however, a new political and symbolic space has been secured. Articulating in the form of associations since 1936, Brazil's domestic workers have finally succeeded in being acknowledged by the Brazilian State as subjects of rights. Against a background of the discussion of fourth-generation rights (i.e., collective or diffuse rights), this category of workers, which had raised alarms at international bodies, in view of their circumscription among the more precarious and undignified forms of labour in the world of work, has managed to bring about a review of exclusionary legislation.

In 2013, 25 years after promulgation of the Constitution, a Constitutional Amendment (CA 72) was approved which finally placed domestic workers among the other categories of workers mentioned in article 7 of chapter II, which provides for social rights. Part of the rights were obtained immediately, whereas others were brought into effect two years later, through promulgation of Enabling Law (LC) 150, of 2015. Moreover, in 2014, Law 12.964, of 8th April, altered the former law on domestic workers of 1972, imposing fines for employers who fail to formalise the work contract by recording it in the work booklet.¹¹

⁹ For more information, see Law 7.998, of 11th January 1990, and Law 8.036, of 11th May 1990.

¹⁰ Law 10.208, of 23rd March 2001.

¹¹ Moreover, Normative Instruction 110/14, of the Secretariat for Labour Inspection (SIT) was published, which provides procedures for inspection and compliance with standards relating to protection of domestic workers.

Only in 2015, after enactment of the Enabling Law of 1st June, was it possible to state that the occupational activities of domestic workers were fully defined and regulated.

With promulgation of CA 72, Brazilian domestic workers are now assured 25 of the 34 rights described in the insets of article 7 of the Constitution,¹² From a legal standpoint, the sixteen new rights achieved through this Constitutional Amendment, are an important acknowledgement of the status of domestic workers, and are as follows:

1. Compensation in the event of dismissal without just cause;
2. Unemployment insurance;
3. FGTS;
4. Wages not less than the minimum;
5. Bonus for night work (20%);
6. Wage protection, it being a crime to intentionally withhold wages;
7. Family-Wage;
8. A work day of no more than eight hours and forty-four hours a week;
9. Workday of six hours without interruption or 12/36 hour shifts¹³ (optional);
10. Overtime, no less than 50% higher than the normal hourly rate;
11. The right to work in a place where standards of hygiene, health and safety are met;
12. Recognition of collective labour agreements and conventions;
13. Insurance against work-related accidents;
14. Prohibition of wage differences;
15. Prohibition of wage discrimination against workers with disabilities;
16. Prohibition of employment of minors of less than 16 years in night, dangerous, or unhealthy work.

Most of these rights came into effect only after approval of the enabling law of 2015. The challenge at hand thus consists of assessing the real impacts of recent legislative changes for domestic workers. To this end, initially, we shall draw up a profile of this group, with emphasis on labour relations, the characteristics of which shall be examined in the next section.

¹² The nine items not covered do not apply to this category, and include, among others, profit sharing, equality among permanent and temporary staff.

¹³ This refers to a 12-hour shift followed by a 36-hour rest period.

3. CHARACTERISATION OF DOMESTIC WORKERS

The best data source for the characterisation of domestic workers is the National Household Sample Survey (PNAD) of the Brazilian Institute for Geography and Statistics (IBGE). Having been applied over many decades to a representative sample of Brazilian households and including significant questions on the socioeconomic profile of participants, PNAD and its historical series provide a rich resource for examining the profile of Brazil's domestic workers, notwithstanding its limitations with respect to analysis of the families of employers. This section presents data from the latest PNAD published by IBGE, dating from 2013, the year of promulgation of CA 72. In other words, it was applied months after discussion and approval of CA 72. Unquestionably, in such a context, the situation of domestic work reflected by the survey had already been influenced by the legal changes.

With a view to refining the analysis, newly published survey data from IBGE's Integrated Household Survey System, known as PNAD Contínua, which will gradually replace PNAD is presented. The latest PNAD Contínua data are from 2015; thus making it possible to present a snapshot of the period immediately prior and immediately after promulgation of CA 72. However, a number of important variables, such as colour/race and length of workday, have not yet been made available and are thus outside the scope of this study.

This section will thus first present some data from PNAD 2013, with special focus on aspects of race/ethnicity, followed by more detailed data from PNAD Contínua, in both cases with the aim of drawing up a profile of domestic workers in this recent period.

3.1. Domestic workers in PNAD 2013

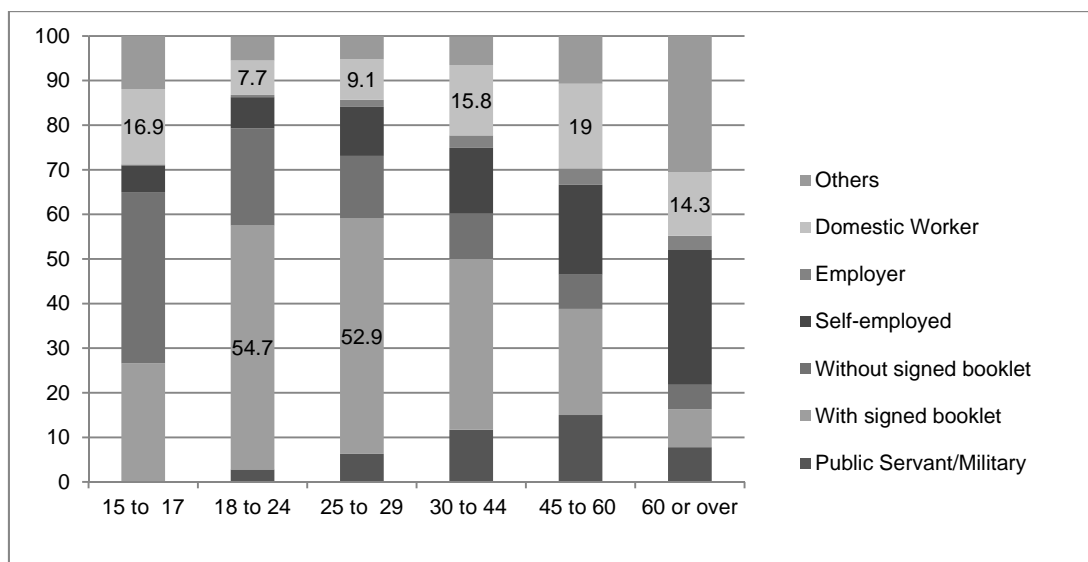
Domestic work accounted for 6.7 per cent of occupations in 2013, amounting to a total of 6.4 million people, of which 92.6 per cent were women. It is unquestionably an occupation dominated by adult (81.6 per cent aged 30 years or older) and black (64 per cent) women workers.

One third of the paid domestic work force, historically comprised of women whose schooling and professional-training opportunities were scarce or non-existent, is made up of poor or extremely poor women. In other words, 30 per cent live in families with a per capita income of no more than half of the minimum wage.

Domestic work remains an important gateway for young women without qualifications, considering that, of working adolescents between the ages of 15 and 17 years, 17 per cent are engaged in domestic work. However, this occupation is being replaced by others as opportunities for study and training open up for these young workers. Among youths aged 18 to 24 and 25 to 29 years, the proportion of domestic workers was 7.7 per cent and 9.1 per cent, respectively. In other words, there has been a

significant drop in relation to adolescents. In subsequent age groups, the proportion of women in domestic work is higher, as is shown in Graph 1.

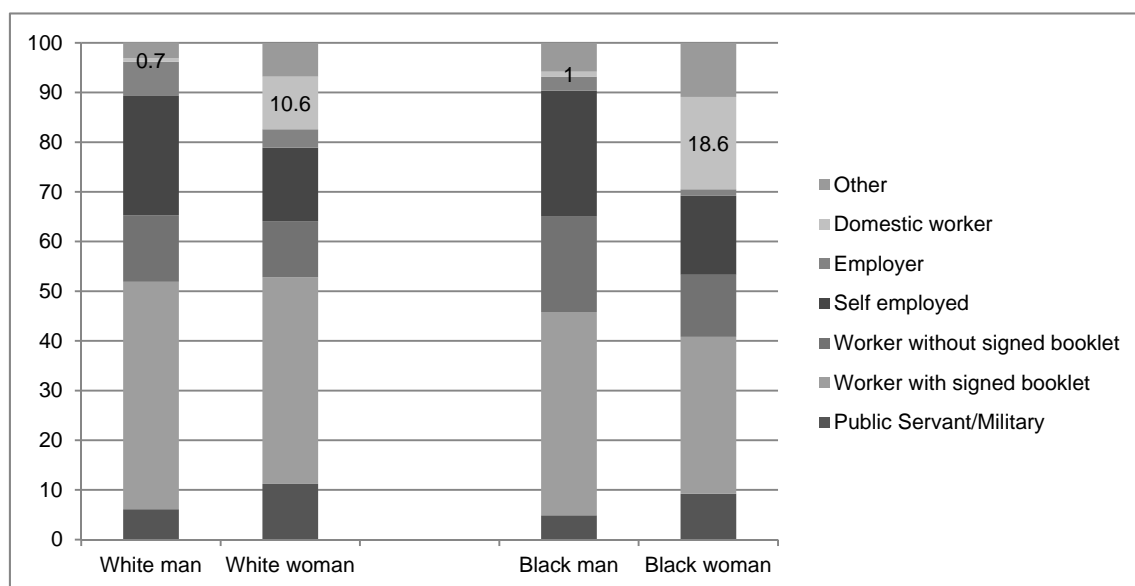
Graph 1 Percentage Distribution of the Gainfully Occupied Population age 16 years or over, by Age Bracket and Position in the Occupation- Brazil, 2013



Source: IBGE/PNAD - Prepared by: IPEA/DISOC

Also with respect to position in the occupation, it is worth underscoring that the differences between men and women, as well as white and black workers strongly reflect the way in which domestic work is an occupation for female and black workers. Among gainfully employed white men, only 0.7 per cent are engaged in domestic work, as opposed to 1 per cent of black men. Among white women in this category, the proportion grows exponentially to 10.6 per cent, whereas among black women, it rises to 18.6 per cent (see graph below).

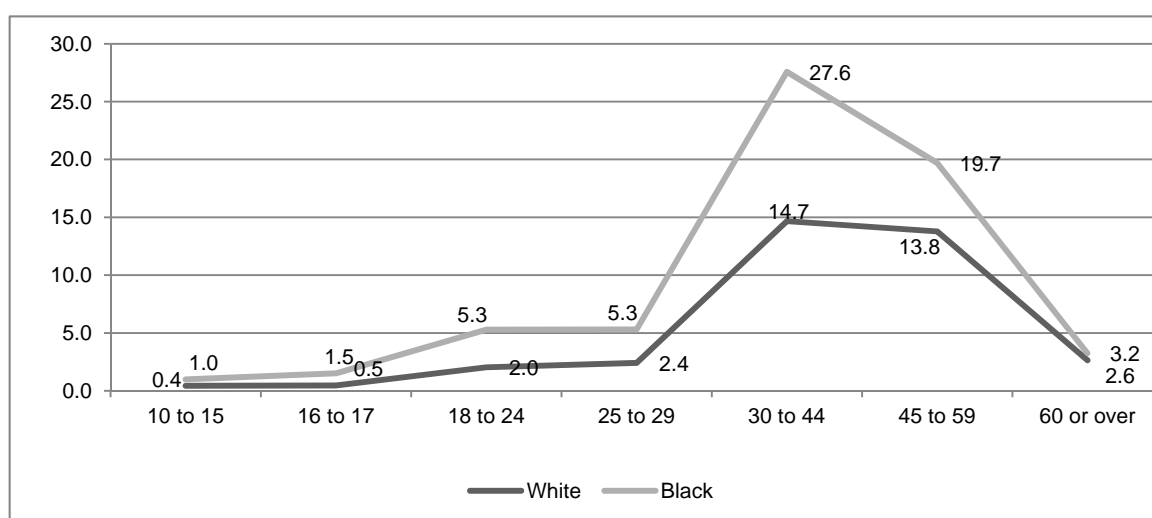
Graph 2 Percentage Distribution of the Gainfully Occupied Population aged 16 years or over, by Colour/Race, Age Bracket and Position in the Occupation- Brazil, 2013



Source: IBGE/PNAD - Prepared by: IPEA/DISOC

Thus, no analytical approach can lead to an understanding of this occupation if it fails to consider distinctions of sex and race/ethnicity. Of the total of domestic workers, 2.8 per cent are white men; 4.5 per cent are black men; 33.7 per cent are white women; and 58.9 per cent are black women. In the younger age bracket, where the proportion of women domestic workers is fairly small, there is relatively little distance between white and black women. However, in the age brackets where the larger proportion of women workers is found, this difference rises steeply, as is shown in the graph below.

Graph 3 Female Population Engaged in Domestic Work, by race/ethnicity and Age Bracket - Brazil 2013



Source: IBGE/PNAD - Prepared by: IPEA/DISOC

Considering that in recent decades access to school and the subsequent raising of schooling levels has deeply affected social indicators of the Brazilian population as a whole, and especially of the younger segments, utilisation of such gains by white and black domestic workers has not been sufficient to overcome discrepancies with other occupational categories.

Frame 1 Average Years of Schooling of persons aged 15 years or over, by colour and occupation, 1995 to 2013

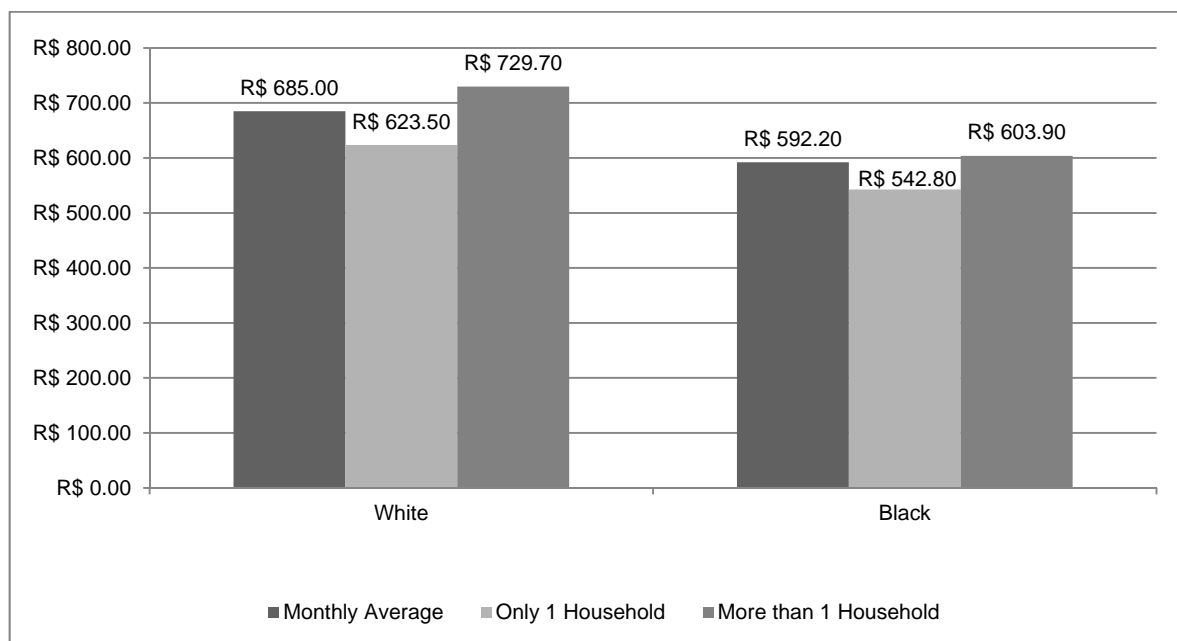
	Brazil	White	Black	White domestic workers	Black domestic workers
1995	5,5	6,4	4,3	4,2	3,8
2013	8,0	8,8	7,2	6,8	6,4

Source: IBGE/PNAD

The proportion of domestic workers with signed work booklets is 35.3 per cent among white, and 29.8 per cent among black domestic workers. With respect to the proportion that contributes toward social security, the gap between black women (26.6 per cent) and white women (45.3 per cent) is even greater. Length of workday, however, showed practically no difference, with an average of 33.7 hours worked per week among white women, and 33.8 among black women.

Remuneration appears as one of the main indicators of the low professional prestige of black women in relation to white women. Whereas the average earnings of the former were R\$592, for the latter they were R\$685, i.e., a difference of almost R\$100 in monthly earnings. Although wage agreements are individually set by each employer and are strongly affected by the dynamics of the local labour market, the sale of labour depends to a great extent upon social recognition of the tasks and responsibilities performed. The relative increase of remuneration for those that work in more than one home, in the case of black women, is insufficient to match the earnings of white women working at only one job.

Graph 4 Average Monthly Earnings of Domestic workers, by Colour/Race - Brazil, 2013



Source: IBGE/PNAD - Prepared by: IPEA/DISOC

Precariousness affects practically the entire category of domestic workers, but the racial breakdown reveals even greater disadvantage for black domestic workers. The struggle to overcome historic barriers to accessing education and rights did not give black women a more favourable position in the domestic work labour market relative to white women.

3.2. Domestic work in PNAD Contínua 2013-2015

3.2.1. Contingent of workers

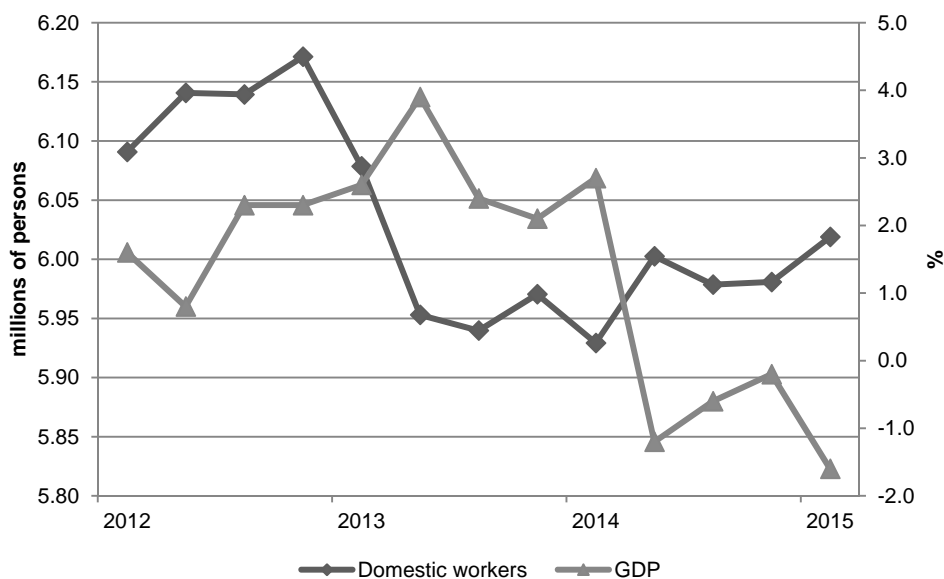
In 2015, Brazil had roughly six million domestic workers (Graph 5). This number has fluctuated in recent years, rising to 6.2 million in the final quarter of 2012, followed by declines in both halves of 2013. The declining trend was reversed in 2014, and growth continued into 2015.

It is interesting to note that the contingent of domestic workers is inversely proportional to the performance of the economy. Graph 5 also shows Brazilian GDP growth in each quarter¹⁴ (right axis). Generally, it can be observed that slowing of the economy can be associated with an increase in the number of domestic workers. This is compatible with the hypothesis that domestic work provides a

¹⁴ Source: National Accounts – IBGE.

“cushion” for the labour market, in much the same way as does the informal market, by absorbing a portion of the less-qualified labour force when the economy slows down.

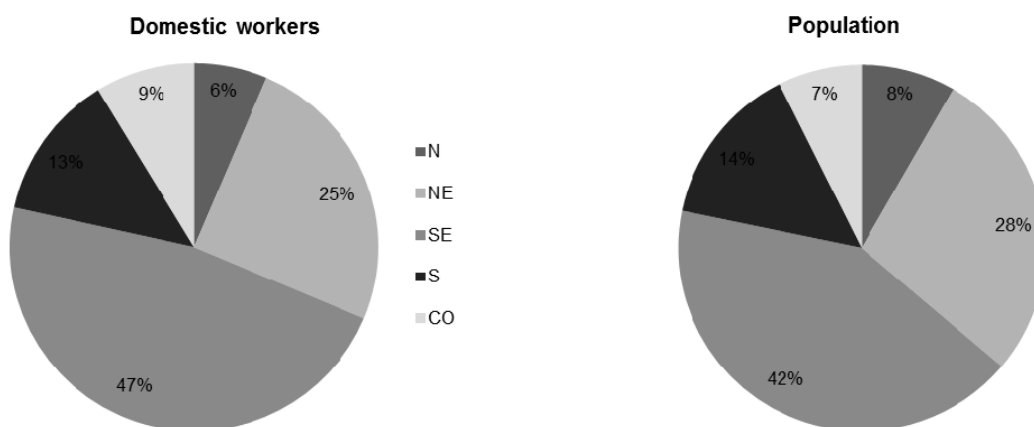
Graph 5 Number of domestic workers and quarterly GDP changes Brazil 2012-2015



Source: PNAD Contínua/ IBGE

Figure 1 shows the distribution of domestic workers in Brazil by geographic region in the 1st quarter of 2015. This distribution closely follows that of the Brazilian population, according to the 2010 Population Census. Note also that the Southeast region accounts for almost half of Brazil’s domestic workers.

Figure 1 Distribution of domestic workers and of population by region



Source: PNAD Contínua/ IBGE

The occupations of domestic workers are presented in Table 1, that uses the Classification of Occupations for Household Surveys (COD) determined to four significant digits, and was prepared in the first quarter of 2015. The vast majority work in general domestic works; however, minders of children, drivers and cooks, among others, are also classified as domestic workers.

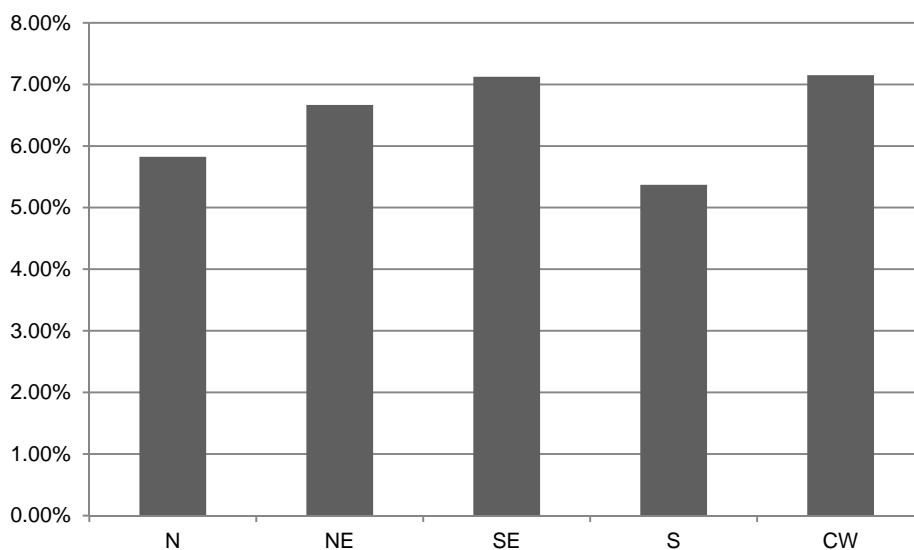
Table 1 Occupations performed by domestic workers 1st quarter/2015

Occupation	per cent
Seamen, deck officers and stewards	0.01
Cooks	0.96
Governesses and butlers	0.20
Child minders	7.91
Personal and home-care workers	6.19
Security guards	0.12
Drivers of automobiles, taxis and light lorries	0.81
General domestic works workers	82.70
Basic gardening and horticulture workers	1.11
Sample	15574

Source: PNAD Contínua/ IBGE

There is little variation in distribution of the percentage of domestic workers among those occupied by geographic region in Brazil. Graph 6 presents averages per quarter between 2012 and 2015, by region. The South region, with an average of 5.4 per cent over the period, is the one with the lowest percentage of individuals occupied as domestic workers, whereas the Central-West and Southeast regions each have an average of 7.1 per cent.

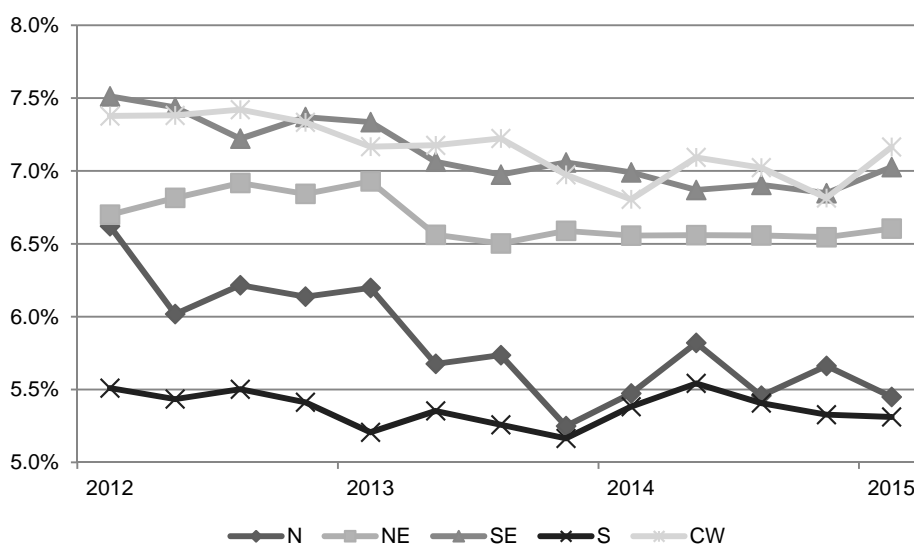
Graph 6 Percentage of domestic workers among those occupied by geographic region (average 2012-2015)



Source: PNAD Contínua/ IBGE

Graph 7 shows the change in the percentage of domestic workers among those occupied, by region. The regional pattern is similar to that observed for Brazil as a whole: there is a drop at the beginning of the period up until the end of 2013 (except in the Northeast region) followed by a slight rise as of 2014. In the first quarter of 2015 particularly, there was a steeper increase for the two regions with relatively higher shares of domestic workers: the Southeast and Central-West.

Graph 7 Change in the percentage of domestic workers among those occupied by region, 2012-2015



Source: PNAD Contínua/ IBGE

In summary, the contingent of domestic workers in Brazil is highly significant, and this type of occupational activity is widespread throughout the country.

3.2.2. *Socio-demographic characteristics*

Table 2 shows the main socio-demographic characteristics of domestic workers and of the total employed population in general. In Panel A, note that the domestic workers are women, with an average age of 41 years. In contrast, among those occupied, only 42.6 per cent are women, with an average age of 38 years.

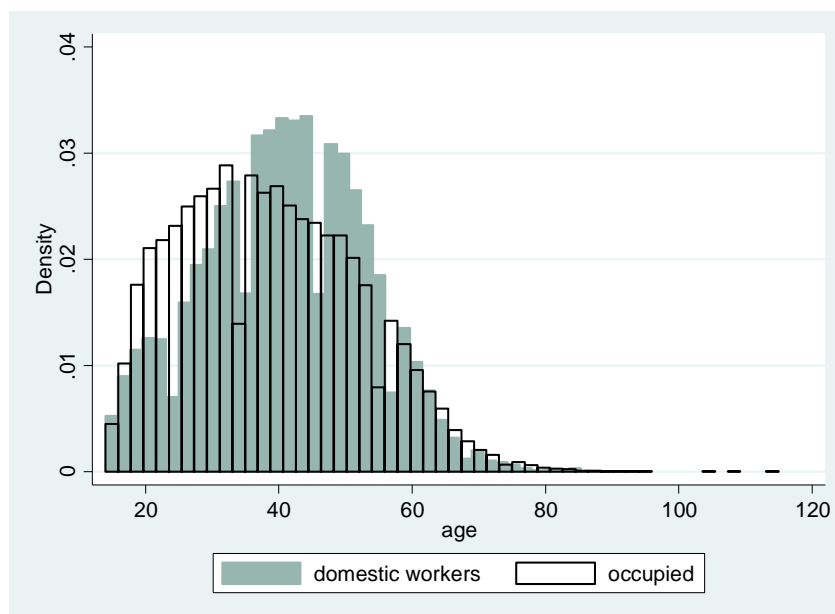
Table 2 **Socio-demographic characteristics by occupation and sex (average 2012-2015)**

	Panel A - Total		Panel B – Women	
	domestic workers	occupied	domestic workers	occupied
Women %	93.3	42.6	-	-
Age	41.1	38.3	41.0	38.0
Years of schooling	6.3	8.9	6.3	9.7
% head of household	41.5	47.3	39.6	30.5
Monthly wage R\$	676	1706	660	1421

Source: PNAD Continua/ IBGE

Age distribution did not undergo great changes during the period under analysis. Graph 8 shows the distribution for occupied and domestic workers for the 1st quarter of 2015, revealing a greater percentage of workers below the age of 40 years among those occupied.

Graph 8 Age distribution of domestic and other occupied workers 1st Quarter/2015



Source: PNAD Continua/ IBGE

Note also the low schooling levels of domestic workers, who possessed only 6.3 years of schooling, meaning that, on average, these workers had not completed primary schooling (equivalent to eight full years). Average schooling for the occupied group was 43 per cent higher, amounting to almost nine years of schooling.

Panel A also shows that 41.5 per cent of domestic workers are heads of household, a percentage only slightly lower than the average for the occupied group. Taking into account that the average monthly wage of domestic workers is roughly only 43 per cent (R\$ 676 or US\$ 257)¹⁵ of the average wage of the occupied group (R\$ 1706 or US\$ 649), this illustrates the worse condition of families headed by domestic workers.

In view of the predominance of women among domestic workers, Panel B presents the same statistics only for women. Average ages remain the same, but note that the difference in average schooling levels between domestic workers and other occupied women increases, given that the occupied group have almost 10 years of schooling.

On the other hand, the percentage of occupied women who are heads of households is 30.5 per cent, almost 10 percentage points lower than for domestic workers. In view of the statistics on schooling

¹⁵ Average R\$/US\$ exchange rate in January 2015: 2.63.

and earnings, this seems to bear little relation with the empowerment of women; rather, the difference suggests greater vulnerability.

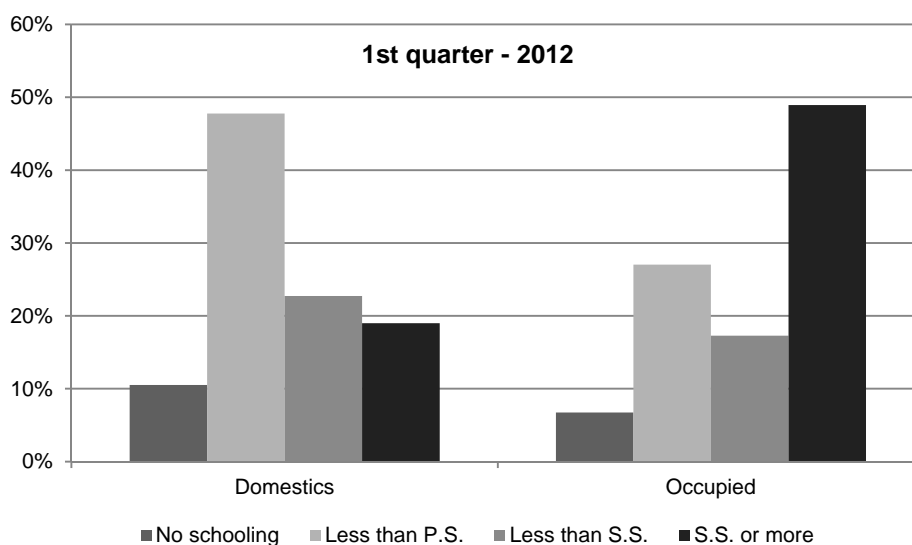
Lastly, when considering only women, although schooling has remained the same for domestic workers and has increased for those occupied in general, note that the average wage is lower both for domestic workers and for the occupied group, reflecting gender-related wage inequality in the Brazilian labour market.

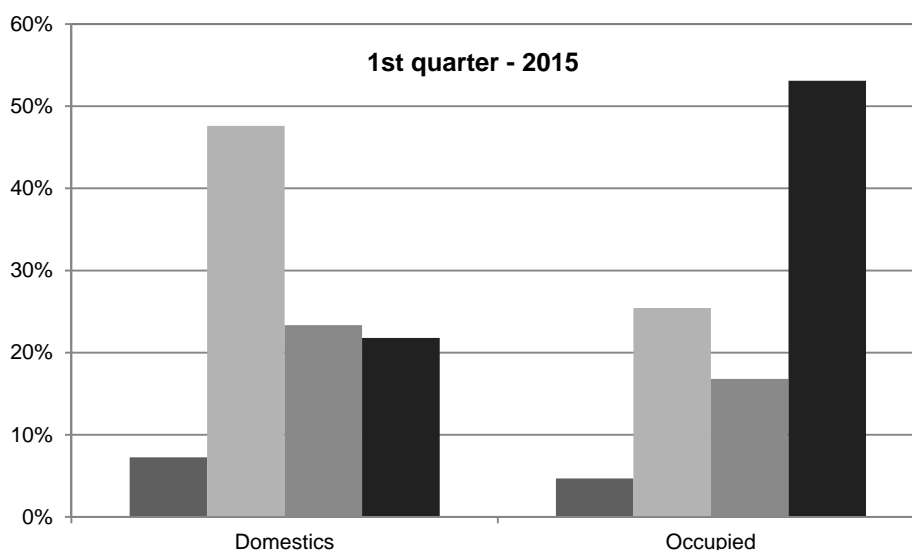
So as better to assess schooling, Figure 2 shows the distribution of schooling by level of instruction for domestic and occupied workers, for two periods: 1st quarter of 2012, and 1st quarter of 2015. No schooling means equivalent to zero years of schooling; less than primary schooling, means from 1 to 7 years; less than secondary schooling, means from 8 to 10 years; and more than secondary schooling, means equivalent to 11 or more years of schooling.

Whereas fewer than 50 per cent of domestic workers have less than primary schooling, almost 50 per cent of the occupied group have completed secondary schooling or more, which reflects the low qualification requirements for exercise of domestic work. Within an interval of three years, the distribution shifted slightly to the right, reflecting an increase in average schooling for both groups.

It is interesting to note that, both for domestic workers and for those occupied, there was a 4 percentage-point increase in the proportion of individuals with at least full secondary schooling. Thus, even with higher schooling, domestic workers remained in the same relative position in the occupation. This could be a consequence of worsening of the economic crisis in Brazil at the end of 2014, which reduced employment opportunities in practically all sectors of the economy.

Figure 2 **Distribution of schooling by level, occupation and period**





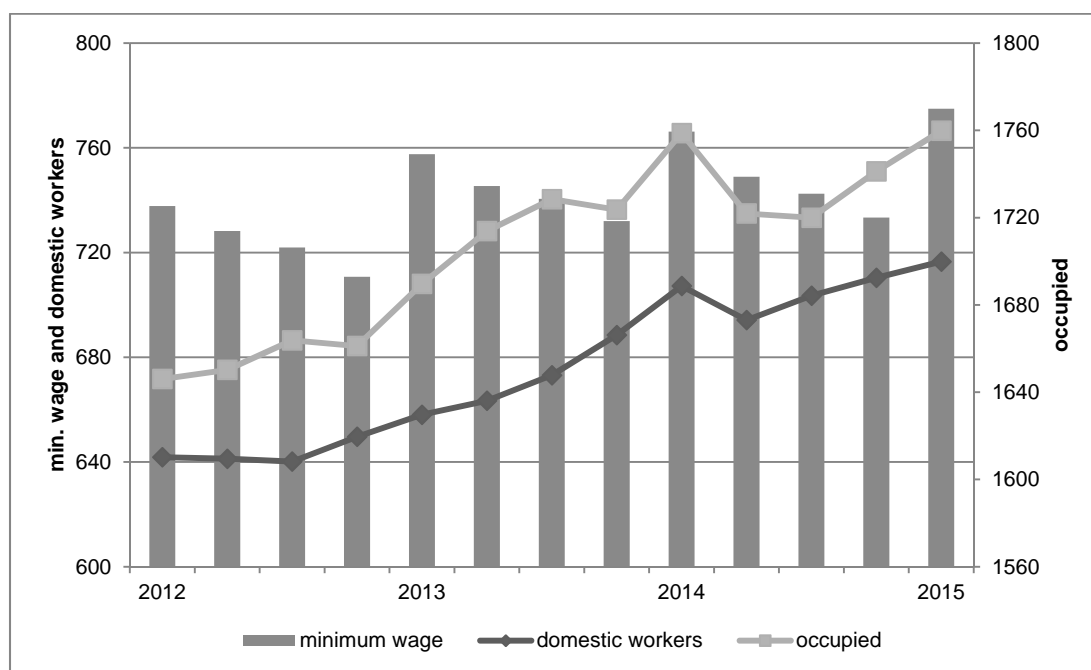
Source: PNAD Continua/ IBGE

Regrettably, the PNAD-Contínua microdata referred to in this paper contains no information on daily working hours, making it impossible to calculate workers' hourly wage rates. Thus, Graph 9 reports on real average monthly wages¹⁶ of domestic workers (left axis) and of employed workers in general (right axis). In order to have a benchmark, minimum wage is also represented on Graph 9 (left axis).

The wages of domestic workers have increased continuously since late 2012 (with just one decline in the 2nd quarter of 2014, which was also observed for the occupied group). Throughout the period under examination, the average monthly wage of domestic workers increased 11.6 per cent, which represents an average of 3.7 per cent per year. As shown in Table 2, the wages of the occupied group are, on average, roughly 150 per cent higher than those of domestic workers. With a 7 per cent increase in the average wage of the occupied group over the period (2.3 per cent per year) although the difference in average schooling has remained approximately constant, the difference between average wages declined by roughly 11 per cent over the period. It is also worth noting that there seems not to have been any change in wage trends between the 1st and 3rd quarters of 2013, the period when CA 72 was promulgated.

¹⁶ Deflated values for January/2015 using IPCA.

Graph 9 Average monthly wages of domestic and occupied workers (R\$ Jan/2015)



Source: PNAD Continua/ IBGE

Change in average wages considered only for women is quite similar to the general change, as shown in Graph 9, and is thus not reported here. Changes between the first and last quarters of the sample, in percentage terms, are presented in Table 3. In 2012, the wages of all occupied women were 119 per cent higher than of women in domestic work. In the period examined, wages of occupied women rose less than those of women in domestic work (10 per cent and 13 per cent respectively), but more than those of all occupied workers (both men and women). Thus, the wage difference of women in domestic work as compared to the average of all occupied workers, despite significant growth of the former, declined by a mere 6 per cent.

Table 3 Change in average real monthly wages for domestic and occupied women workers

	Domestic workers	Occupied	Difference
1 st Q/2012	621	1357	119%
1 st Q/2015	699	1487	113%
Change	13%	10%	-6%

Source: PNAD Continua/ IBGE

This section has presented evidence relating to the vulnerability of domestic workers, showing that domestic work is characterised by low schooling, low pay and average remuneration below the minimum wage. Nonetheless, almost half of domestic workers are heads of a household. In view of the generally high average age of domestic workers, even though domestic work may be considered a cushion

in times of economic crisis for a portion of the population and especially for women, for most of them domestic work does not appear to be a transitory occupation. This amplifies the importance of CA 72 that aimed to improve the working conditions of this category of workers.

3.2.3. Employment relationship

Informality is a striking characteristic of domestic workers. Graph 10 shows the great disparity in the percentage of domestic workers that have a signed work booklet (left axis) as compared to those occupied in general (right axis) that enjoy such a relationship. Whereas less than a third of domestic workers have formal employment ties, more than two thirds of occupied workers have signed work booklets.

With respect to changes in this percentage, a two percentage-point decline in informality can be observed for domestic workers between the 1st and 3rd quarters of 2013 (the period when regulations were being brought into effect). On the other hand, for occupied workers, formalisation rates remained stable. In this respect, CA 72 may have had a momentary effect of raising formalisation rates for domestic workers, given that, as of the final quarter of 2013, there has been a trend toward greater formalisation for both groups. Uncertainties in the wake of promulgation of CA 72¹⁷ may serve to explain this momentary effect, such as when an employer opted to dismiss an employee.

Graph 10 Percentage of domestic and occupied workers with signed work booklets, Brazil 2012-2015



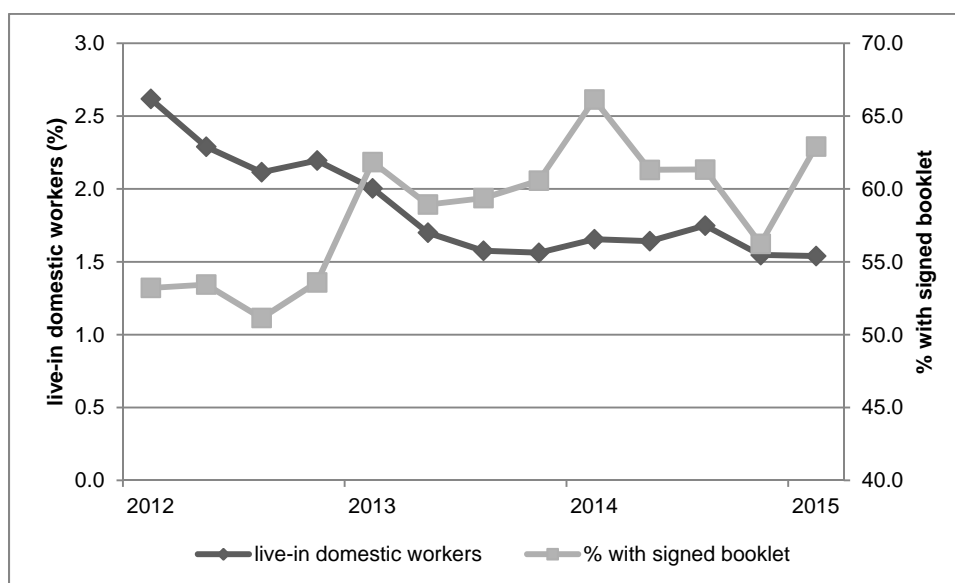
Source: PNAD Contínua/ IBGE

¹⁷ Some items, such as INSS collection and FGTS rates, have yet to be regulated.

A peculiar characteristic of domestic workers is that they may reside at their workplace. This situation makes inspection of working conditions more difficult, especially with respect to length of the workday. Graph 11 shows that this percentage is low (less than 3 per cent of domestic workers, left axis) and that it has declined in recent years. On the other hand, despite the difficulties of inspection, the percentage of such live-in workers who have signed work booklets is approximately double (right axis) that of domestic workers in general.

With respect to change, there was an increase in formalisation between the end of 2012 and the beginning of 2013, i.e., prior to CA 72. This may be linked with public debate on the rights of domestic workers, possible pre-emption by employers, and to greater awareness of the labour rights of the category. On the other hand, the fact that few domestic workers reside at their workplace makes for a small sample, thus increasing variance of the statistics¹⁸.

Graph 11 Percentage of domestic workers who reside at the workplace and percentage of such domestic workers with signed work booklets Brazil 2012-2015



Source: PNAD Contínua/ IBGE

In terms of socio-demographic characteristics, there are no great differences among domestic workers with respect to having a signed work booklet. Table 4 shows that, on average, registered domestic workers include a lower percentile of women, are older, and have more schooling. Moreover, there is a higher proportion of heads of households among those that have signed work booklets. Nonetheless, these differences are not large. On the other hand, those that are in a formal situation receive almost 62 per cent

¹⁸ There were 435 live-in workers in the sample for the 1st quarter of 2012, and 228 in the 1st quarter of 2015.

more than informal workers. Indeed, informal workers, on average, tended to receive less than the nominal minimum wage for the period, which was R\$ 683.

If only women workers are considered, the situation hardly changes. But, as might be expected, both the percentage of those who are heads of households and the average wage drops when men are excluded. The most delicate situation is of women workers without signed work booklets: 40 per cent are heads of households, receive less than the minimum wage, and enjoy no labour rights.

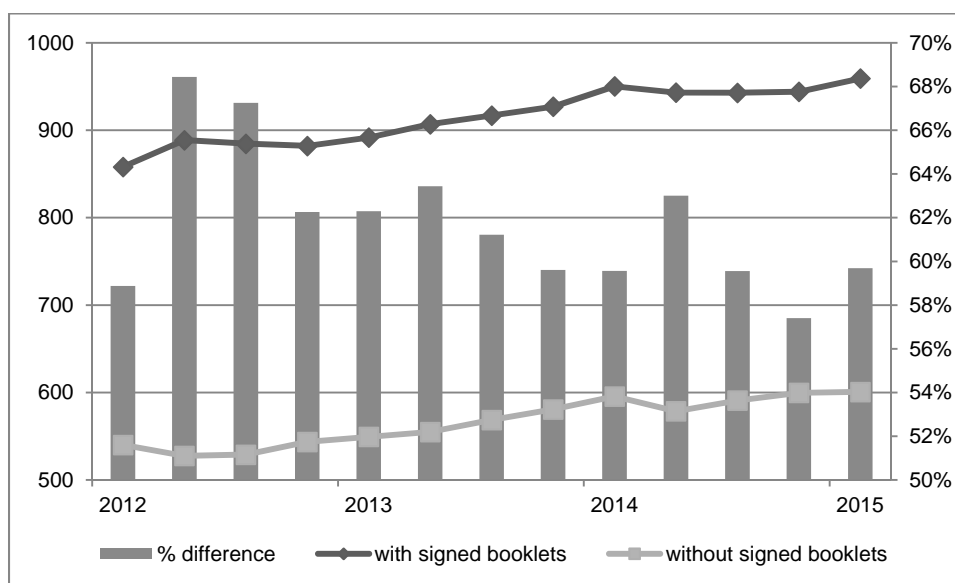
Table 4 **Characteristics of domestic workers according to employment relationship (average 2012-2015)**

	Total		Women	
	with booklets	without booklets	with booklets	without booklets
% women	90.2	94.7	-	-
age	42.6	40.4	42.6	40.2
years of schooling	6.6	6.1	6.7	6.2
% head of household	43.7	40.4	40.4	39.2
monthly wage R\$	915	566	897	557

Source: PNAD Contínua/ IBGE

The growth of real wages of domestic workers observed earlier occurs regardless of employment relationship and in practically all quarters during the period (Graph 12); whereas, relative wages between the groups have displayed certain volatility. The columns in the graph below indicate, in percentage terms, how much greater the wages of formal workers are, as compared to those of workers without a signed work booklet. After a nine percentage-point increase from the 1st to the 2nd quarter of 2012, there was a declining trend of wage differentials, with some reverses always in the first half of each year. Even so, workers with signed work booklets received 60 per cent more than those without, at the beginning of 2015.

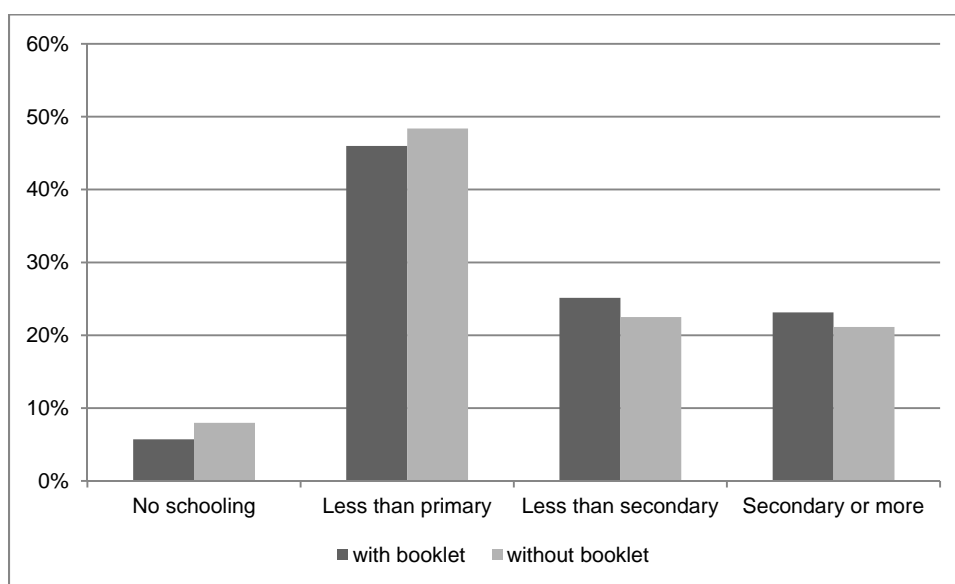
Graph 12 Changes in average monthly wages for domestic workers, according to employment relationship



Source: PNAD Continua/ IBGE

The wage difference between domestic workers with and without signed work booklets does not appear to be based upon observable characteristics, since these differences are relatively small (Table 4). For schooling, for example, aside from the average being similar, Graph 13 shows that, for the first quarter of 2015, distribution by schooling level is also very similar.

Graph 13 Schooling level according to employment relationship 1st Quarter/ 2015



Source: PNAD Continua/ IBGE

Given that observable characteristics appear to be a poor explanation for wage differentials between workers with and without signed work booklets, part of the explanation could be linked with issues relating to regional labour markets. Table 5 below shows that in places where the percentage of employees with signed work booklets is lower (North and Northeast), the wage difference is greater. In the Northeast, for example, the average wage during the period, for workers with signed work booklets was double that for workers without. This stands in contrast to the difference in average schooling: for a domestic worker with signed work booklets it is only 12 per cent higher than for one without.

Table 5 Real wages, schooling, and percentage of workers with booklets, by region (average 2012-2015)

	North	Northeast	Southeast	South	Central-West
% with booklet	19.2	18.5	38.0	35.8	35.1
wage - with booklet	797	775	955	939	898
wage - without booklet	487	387	671	650	605
wage difference (ratio)	1.64	2.00	1.42	1.44	1.49
schooling - with booklet	7.1	6.6	6.6	6.5	6.6
schooling - without booklet	6.5	5.9	6.2	6.1	6.1
schooling difference (ratio)	1.09	1.12	1.05	1.07	1.08

Source: PNAD Contínua/ IBGE

The results in this section underscore the role of labour legislation. The wages of domestic workers may be lower if there were no regulations.

3.2.4. Longitudinal data

PNAD-Contínua enables obtaining of information on an individual from surveys conducted at different points in time, i.e., it is possible to obtain a longitudinal database, similar to the Monthly Employment Survey (PME). It is thus possible to verify if an individual remained in the same position in the occupation from one quarter to another, for example. This is of particular interest when assessing the impact of CA 72 since, in principle, it enables verification of the effect of the amendment for each individual in the sample. It is worth stressing, however, that attrition from one quarter to another is relatively high, i.e., a fair percentage of individuals in a given quarter may not be found in the following quarter. This occurs, basically, for three reasons: geographic mobility, refusal to be interviewed and imprecision of information declared. The average attrition rate from one quarter to the next is 35 per cent. It must thus be born in mind that all results in this section are valid only for those individuals that did not leave the sample during the specified time interval¹⁹.

¹⁹ See Annex I for more details on the panel in Pnad-Contínua.

Considering only individuals that remained in the sample, Table 6 shows the transition of domestic workers, using intervals of one and two quarters. In other words, for each domestic worker in quarter t , the position in the occupation was checked in quarters $t + 1$ and $t + 2$. The table below reports the average of these transitions.

A majority of domestic workers remains in the same position in the subsequent quarters. However, it can be stated that turnover is relatively high, since 25 per cent move on to another occupation and/or type of activity in a mere three months. Also in accordance with the table, half of the domestic workers that leave their position do so to become inactive (more than 12 per cent). For the six-month interval, turnover and withdrawal from the labour market increased.

Table 6 Transition of domestic workers for one and two quarters ahead (%) (average 2012-2015)

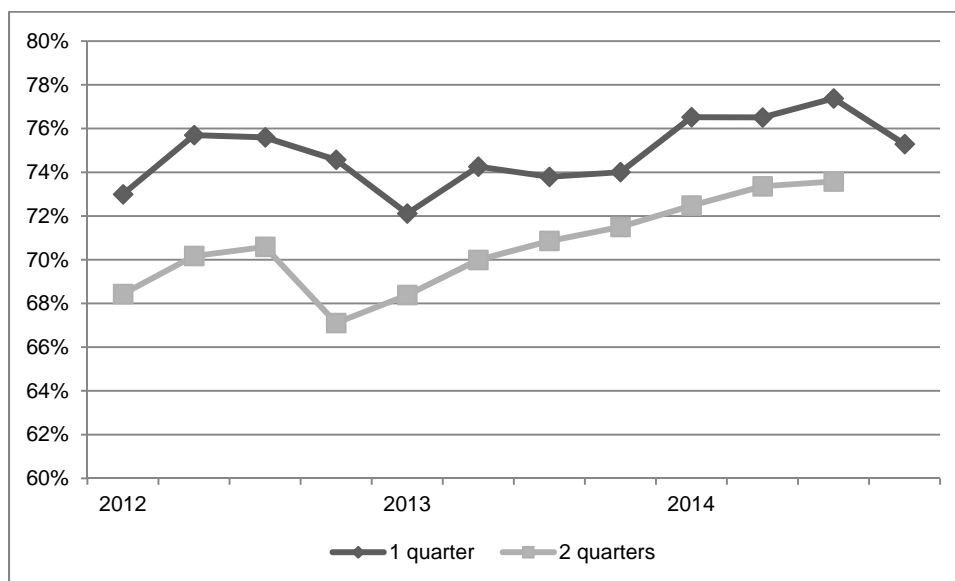
Position in the occupation	Time interval	
	1 quarter	2 quarters
Private-sector employee	5.6	6.9
Domestic worker	74.9	70.6
Public-sector employee	0.4	0.6
Employer	0.1	0.1
Self employed	3.2	3.6
Family worker	0.3	0.3
Unemployed	3.1	3.3
Inactive	12.4	14.6

Source: PNAD Contínua/ IBGE

The trend to remain in domestic work was high during the period examined. Each point on Graph 14 indicates the percentage of domestic workers in t that remained in the same position one and two quarters later. Note a convergence between rates of remaining, in view of the constant growth of this rate during the interval of two quarters as of 2012, which might indicate reduced turnover. However, it is worth remembering that only those workers identified during the two periods were considered in this statistic. Thus, if a worker that left the sample is the same as the one that left domestic work, the rate for the two quarters would be an overestimate.

CA 72 was published on 2nd April 2013; thus, the majority of interviews in the second quarter of 2013 took place under the new regulations. Graph 14 shows that CA 72 may have had some bearing upon the rate of remaining. Considering the interval of one quarter, for those who were domestic workers in the last quarter of 2012 or in the second quarter of 2013, the rate of remaining was above 74 per cent. However, for those that were domestic workers in the first quarter of 2013, the rate of remaining was roughly 2 percentage points lower. The same situation occurs for the interval of two quarters.

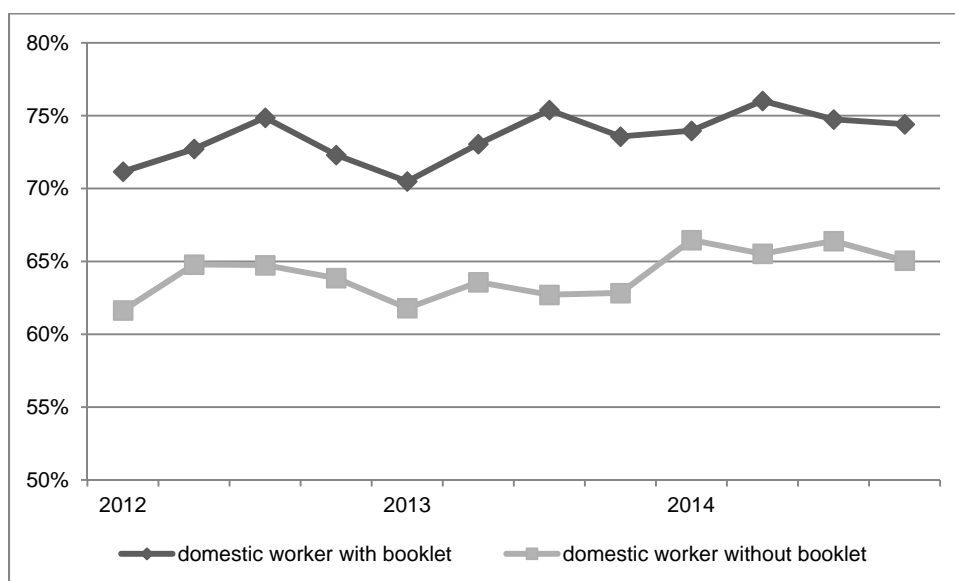
Graph 14 Remained in position, for domestic workers, by time interval



Source: PNAD Contínua/ IBGE

So as better to examine the relationship between CA 72 and the rate of remaining, the latter was calculated for domestic workers with and without work booklets (Graph 15). As expected, the rate of remaining was higher for registered domestic workers. However, for those in a regular situation, one would not expect changes immediately following publication of the amendment, since only workday and overtime conditions changed. Since the behaviour of the rate of remaining for workers with booklets is similar to that for those without booklets, the reduced rate of remaining precisely during the period of publication could be merely a coincidence. Moreover, the level of the rate of remaining for employees without booklets rose in 2014 relative to earlier years. This could be related to slowing of the economy during the same period.

Graph 15 Rate of remaining for domestic workers, by employment relationship, Time interval: 1 quarter



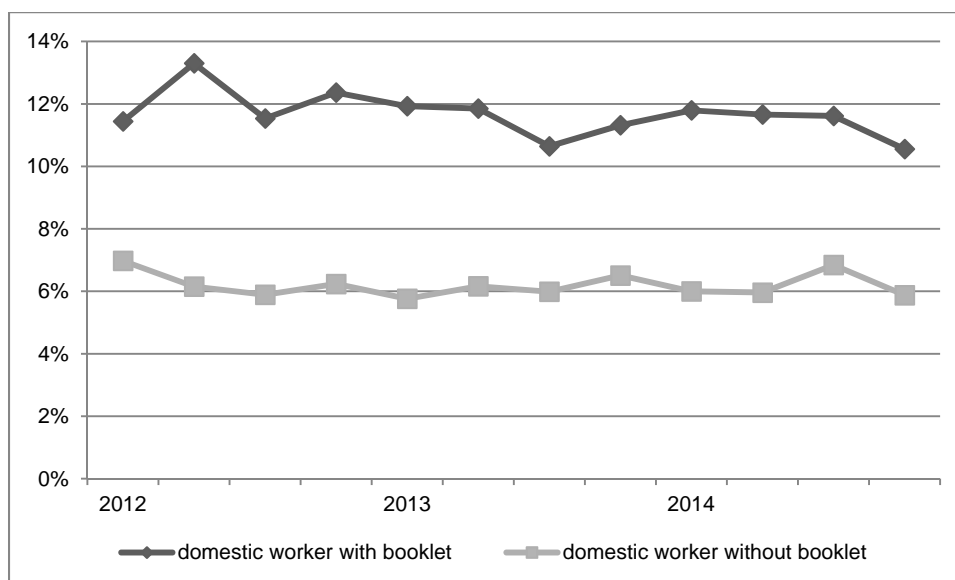
Source: PNAD Continua/ IBGE

Graph 16 also suggests that there was no major change in the mobility of domestic workers as a result of CA 72. The graph shows the rate of transition of domestic workers with work booklets to the same position without work booklets one quarter later; and also the transition of informal domestic workers to positions with signed work booklets.

For duly registered workers, it is possible that the transition to informality occurred in the event that the employer chose to dismiss (in view of the prospect of increased costs) and then rehire her/his employee informally (for example, as a *diarista*). This does not seem to have occurred during the quarters closest to publication of the CA; rather, the trend was toward a slight reduction in the transition to informality.

For workers without a signed work booklet, it might be expected that there would be a transition toward formalisation if the employer felt he might suffer some penalty owing to the irregularity. However, what the graph shows is that the transition of informal domestic workers to positions with signed work booklets remained quite stable throughout the period examined including, therefore, the period of publication of CA 72.

Graph 16 Rate of transition of registered domestic workers to positions without signed work booklets and of irregular domestic workers to positions with signed work booklets, Time interval: 1 quarter



Source: PNAD Continua/ IBGE

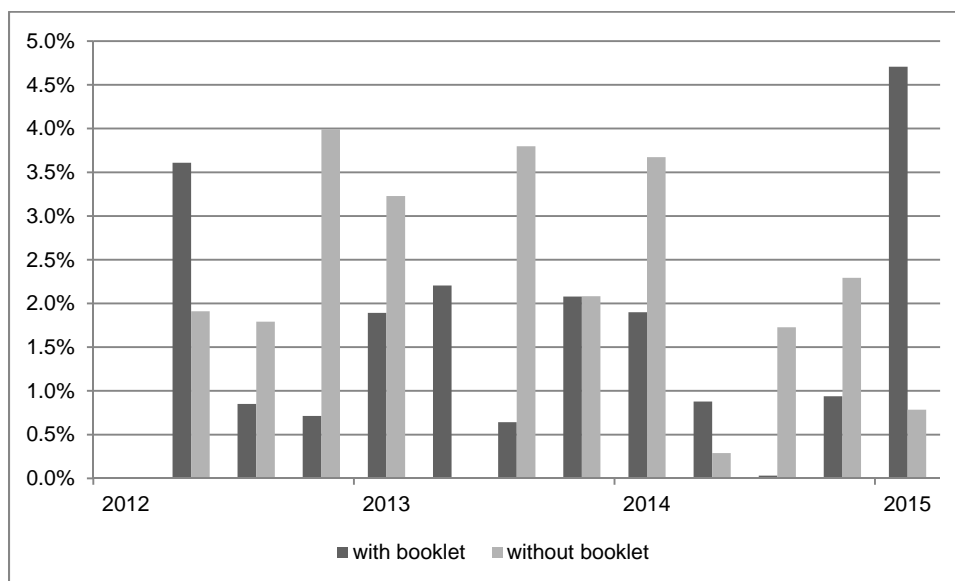
As mentioned earlier, there was no information on the workday in the set of microdata used in this study. It was thus not possible to verify the impact of CA 72 on hours worked, or to calculate the hourly rate paid for workers’ services. Graph 17 presents the variation of the average nominal monthly wage for workers that remained in the same position from one quarter to the next²⁰, separated by employment relationship.

In general, the average variation is greater for workers without work booklets. This was to be expected in view of the rigidity of wages of workers with signed work booklets (it should be remembered that *diaristas* [daily workers] do not have signed work booklets)²¹. Moreover, there seems to be some seasonal pattern in wage growth for workers with work booklet: there is a reduction between the second and third quarters (to a greater or lesser degree) in all years.

²⁰ This does not mean that the worker remained in the same job throughout the entire period, i.e., there may have been a change of employer.

²¹ *Diaristas* are paid on a daily basis for their work, unlike *mensalistas* [monthly workers] who receive monthly wages. *Diaristas* have to contribute as individual taxpayers to have access to rights and benefits, for example, maternity leave.

Graph 17 **Variation of the average nominal monthly wage, by employment relationship**

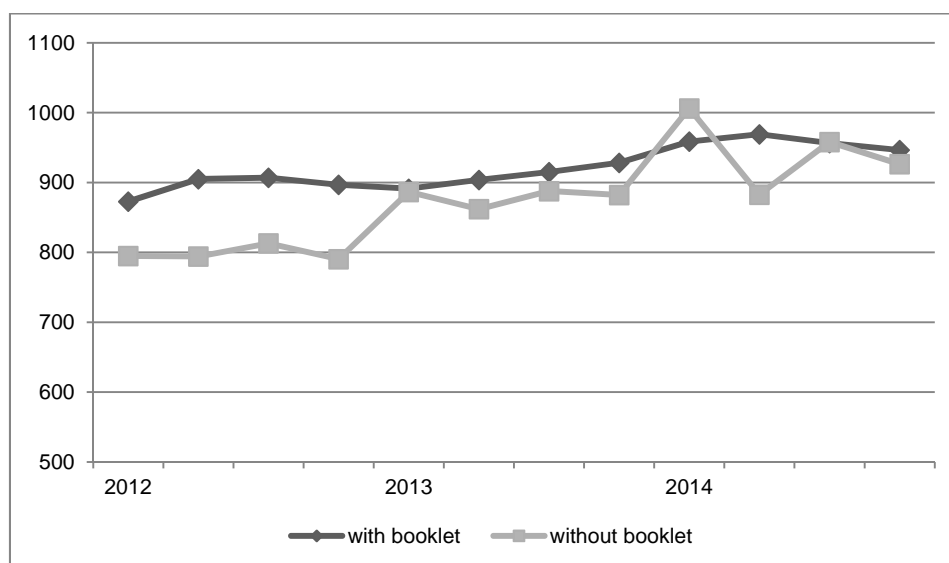


Source: PNAD Contínua/ IBGE

Labour market mobility is caused by various factors related to supply and demand for labour. What will be examined next is whether the characteristics of domestic workers with work booklet that remain in their position over a quarterly interval are different from those observed for workers that migrate to informality. In other words, for each quarter, domestic workers with signed work booklets are split into two groups: those that continue to have signed work booklets; and those that no longer have signed work booklets in the following quarter.

Graph 18 presents changes in average real wages for the two aforementioned groups. By the end of 2012, formal workers that had passed into informality in the following quarter, on average, received lower wages than those that continued to have signed work booklets. The difference can be explained by overtime payments. Workers who did not receive them would feel encouraged to pass into informality. On this point, however, it would be necessary to know the hourly wage of these workers, in order to verify whether such gains were effectively achieved upon making the change.

Graph 18 Average real wages for formal domestic workers, by employment relationship in the following quarter



Source: PNAD Continua/ IBGE

Table 7 complements this analysis by reporting on the characteristics of formal workers in t by employment relationship in $t + 1$. In general, there are no great differences between those that remained with signed work booklets and those that migrated to informality. If we assume that the great majority of informal workers (women) are *diaristas*, it is interesting to note that the choice between formal or informal appears to bear little relationship to observable characteristics.

Although there are few differences, two movements draw attention. The first is the reduction, over time, in the proportion of women who remain without signed work booklets, and the consequent increase, in the same proportion, of those that become workers without signed work booklets. The second point is the increase in the proportion of heads of households that leave formal jobs to go into informality. Given that they are the family breadwinners, the option for work without a signed work booklet seems strange, in view of the loss of labour rights. These two movements may be related to the option for domestic work as a *diarista*, which allows for more flexible working hours, a shorter workday and higher wages²². Regrettably, using PNAD-Continua, it is not possible to make a breakdown of informal workers to identify *diaristas*.

²² Costa et al. (2015) showed that the workday of *diaristas* is shorter and wages higher than those of *mensalistas*.

Table 7 **Characteristics of formalised domestic workers, by employment relationship in the following quarter**

	Age		Women		Schooling		Head/household	
	with booklet	without booklet	with booklet	without booklet	with booklet.	without booklet.	with booklet.	without booklet
1 st Q/2012	43.2	44.1	0.915	0.922	6.3	6.2	0.443	0.413
2 nd Q/2012	42.9	43.2	0.912	0.967	6.5	5.9	0.445	0.386
3 rd Q/2012	43.0	43.6	0.911	0.948	6.4	6.0	0.459	0.497
4 th Q/2012	42.9	43.3	0.922	0.932	6.4	6.2	0.430	0.488
1 st Q/2013	42.9	43.6	0.919	0.938	6.4	6.6	0.435	0.418
2 nd Q/2013	42.6	44.0	0.912	0.931	6.5	6.1	0.429	0.421
3 rd Q/2013	42.5	43.6	0.929	0.955	6.6	6.4	0.436	0.406
4 th Q/2013	43.0	43.3	0.920	0.940	6.5	6.4	0.413	0.423
1 st Q/2014	43.3	45.0	0.903	0.942	6.7	6.2	0.417	0.485
2 nd Q/2014	43.2	43.6	0.900	0.949	6.8	6.5	0.433	0.464
3 rd Q/2014	43.3	44.4	0.893	0.958	6.6	6.7	0.444	0.496
4 th Q/2014	43.5	45.0	0.887	0.952	6.6	6.5	0.465	0.472

Source: PNAD Contínua/ IBGE

This section showed that turnover is high among domestic workers, as had been observed indirectly by cross-section data. There is also a fairly high rate of transition between formal and informal jobs within the domestic-worker category: when quarterly statistics are projected linearly, roughly one third of domestic workers make this transition in a given year. Apparently, this transition is not strongly related to socio-demographic characteristics.

It should be stressed that all analyses referent to the effects of CA 72 conducted hitherto are merely conjectural, and should not be interpreted as causal effects. For this, a more rigorous statistical analysis would be necessary.

4. ECONOMETRIC ANALYSIS

Up until the closing of this study, IBGE had not disclosed a variable that would allow identification of an individual throughout the PNAD-Contínua surveys (though it has promised to do so shortly). Nonetheless, this information is essential for application of the methods proposed and explained in this section, since such methods rely on existence of a database in panel format. To conduct this analysis, the problem was corrected using an adaptation of the advanced methodology proposed by Ribas and Soares (2008) for the Monthly Employment Survey.

Before introducing the methodology, three aspects should be highlighted. Firstly, it should be remembered that attrition²³ is high in PNAD-Contínua and grows during the interval between quarters. To get an idea of the scope, roughly 30 per cent of women engaged in domestic work, age 18 years or older, in the first quarter of 2013 were not in the sample for the second quarter of the same year. If we consider the interval of one quarter, i.e., between the first and third quarters of 2013, only 48 per cent remained in the sample. For this reason, our analysis will only consider adjacent quarters or an interval of one quarter.

Aside from this characteristic of the survey, it should be stressed that high turnover is a marked feature of the Brazilian labour market. Table 8 shows the transition of domestic workers over the age of 18 years in the labour market. The first column considers the adjacent quarters (first and second of 2013) whereas the second shows the final and third quarter of 2013. Roughly 26 per cent of domestic workers leave this occupation from one quarter to the next, with the percentage rising to over 30 per cent in two quarters. These numbers are relevant because, as will be explained, the impact of CA 72 is estimated only for the sample of women that remained in a job as domestic workers in the two periods under analysis. Thus, aside from attrition, mobility also reduces the sample size.

Table 8 **Transition of (women) domestic workers**

Position in t+1	1 st -2 nd Q/2013	1 st - 3 rd Q/2013
Domestic	73.97%	69.22%
Private Sector Employee	5.29%	6.15%
Public Sector Employee	0.59%	0.88%
Employer	0.02%	0.04%
Self employed	3.33%	3.74%
Family Worker	0.25%	0.31%
Unemployed	3.54%	4.10%
Inactive	12.99%	15.56%

²³ Attrition is the term used to describe an individual leaving the survey.

Finally, a third aspect relates to limitations of the PNAD-Contínua in relation to information gathered. The workday is one of the main variables affected by CA 72 but, unfortunately, it is not included in the microdata survey. Moreover, for lack of this variable, it is not possible to construct an hourly-wage variable. Furthermore, unlike PNAD, PNAD-Contínua contains information on the domestic workers and on the number of households in which he/she performs service each week. It is thus not possible to apply the methodology used by Costa et al. (2015) to identify domestic workers receiving monthly wages [*mensalistas*] and to separate them from *diaristas*. Thus, the effects of CA 72 are assessed only for *mensalistas* with signed work booklets. These are the main dependant variables of this study.

4.1. Methodology

Initially, to obtain an idea of what happened to the wages of domestic workers with signed work booklets during the period under examination, a before-and-after method was deployed, which consists simply of a comparison of these variables before and after promulgation of CA 72 for domestic workers. In formal terms, the following equation is estimated:

$$y_{it} = \alpha + \delta D_{it} + X_{it}\gamma + c_i + \epsilon_{it} \quad (1)$$

In which y_{it} is the variable of interest to individual i in period t , D_{it} and a dummy that assumes a value of 1 if quarter t is prior to regulation, X_{it} are control variables (age, schooling) and c_i is the fixed effect of each individual, i.e., represents all the constant factors over time that affect the dependent variable, whether or not they are observable²⁴. By using a fixed effect, the equation (1) automatically controls for observable and non-observable factors, provided these factors remain constant over time. Such control is possible only in cases where we observe the same individual at two points in time, as is the case with PNAD-Contínua. Coefficient δ represents average variation occurring with a dependant variable, i.e., the parameter of interest, in the period analysed.²⁵

The before-and-after estimator is sometimes called a “naïve” estimator as it only considers the group that underwent intervention. This may lead to mistaken conclusions, since it is possible that the parameter estimated is actually capturing effects other than introduction of the regulations. To perceive this, let us suppose that there has been a wage increase for domestic workers. To attribute this increase to CA 72 would be precipitate, because it is necessary to assess whether this increase would not have occurred anyway, regardless of its publication. In other words, it is necessary to know what would have happened to the wages of domestic workers if CA 72 had not been promulgated: this is what is known as a counterfactual. However, it is not possible to observe the same individual in the two above situations

²⁴ For example, race, place of residence and preferences.

²⁵ In practice, the equation estimated for fixed effect is $y_{it} - y_{im} = \beta(D_{it} - D_{im}) + (X_{it} - X_{im})'\gamma + (\epsilon_{it} - \epsilon_{im})$, in which index m indicates the average, for the two periods, of the respective variable for individual i . Thus, as the average of c_i in time is its own variable, the fixed effect disappears from the equation estimate.

(with and without CA 72). The counterfactual is built using a control group that is sufficiently similar to the group that underwent intervention.

This said, in order to assess the effect of CA 72 more closely, a difference-in-differences model is estimated with a fixed effect, as shown in the equation below:

$$y_{it} = \alpha + \beta T_{it} + X_{it}\gamma + c_i + \epsilon_{it} \quad (2)$$

where T_{it} is a dummy variable indicating whether the individual “received the treatment” in period t , and the other variables are the same as those in equation (1) (in equation (2), variable D_{it} is part of vector X_{it}).

Note that, in the period prior to CA 72, no individual is “treated”, since the intervention had not yet occurred. Thus, $T_{it=0} = 0$ for all. In the period after the Amendment, $T_{it=1} = 1$ for domestic workers, and $T_{it=1} = 0$ for the control group. Equation (2) recovers the parameter of interest β after having controlled for observable and non-observable characteristics of each individual that are fixed in time. This parameter is the causal effect of CA 72 on working conditions of domestic workers. With use of this method, even if there are differences among the treatment and control groups prior to the intervention, provided that these differences remain constant in time, there will be no interference in the final result.

CA 72 dates from 2nd April 2013. It is thus possible that data referent to the second quarter of 2013 already capture some effect of the new regulations. Thus, the first quarter of 2013 is considered the main period prior to enactment of CA 72, and the second quarter of the same year the main period after its publication. Nonetheless, other quarters will be used as starting and end points throughout this analysis and will be mentioned shortly.

The principal limitation of this approach relates to the supposition that the control group represents the counterfactual of domestic workers, i.e., that this group was not affected by the regulations introduced by CA 72. A federal law such as CA 72, even if targeted at a specific category of workers, could affect decisions for participation in the labour market of all individuals. This being the case, it would not be possible to construct control group for domestic workers, since they would all belong to the group that underwent intervention. Nonetheless, whereas the law would affect the category in question almost immediately, especially because the focus of the regulations would be on the workday and on overtime payments, it would certainly take some time for other workers to become aware of the new information and decide to use it when making decisions.

Owing to this limitation, three control groups were set up, based on IBGE’s Classification of Occupations for Household Surveys (COD). The purpose of using three groups was to verify the robustness of findings. The first group included occupations similar to those of domestic workers in terms

of day-to-day activities performed, more directly associated with domestic work and personal care²⁶. The second control group included workers occupied in the services sector (excepting security-related services) the same sector as domestic workers, such as waiters and cooks²⁷. Lastly, the third group included elementary occupations, meaning an occupation that does not require specific qualifications, such as laundry and kitchen assistants.²⁸

On the one hand, the first control group is potentially the more similar to domestic workers. Precisely for this reason, workers in this group were the ones most likely to take CA 72 into consideration, and this would contaminate the control group. On the other hand, the other control groups tend to be different to domestic workers; but there would be less likelihood of CA 72 affecting their decision making. It is worth remembering that these differences do not threaten the success of the empirical strategy, provided they remain constant in time. Lastly, with respect to the sample, in view of the predominance of women among domestic workers, the effects of CA 72 are estimated only for women. Moreover, in view of the legal specificities relating to underage workers, only women age 18 years or over are included in the sample.

4.2. Results

This section presents the results of estimates for the two methods discussed above. For each dependent variable, real monthly wages and having signed work booklets, the coefficients and respective standard-error rates, t statistics, and number of observations are reported.

4.2.1. *Before-and-after method*

Table 9 presents the results of the before-and-after model (coefficient δ of equation 1). Columns (1) and (3) consider a period with adjacent quarters, taking the first quarter of 2013 as the starting point. Note that the coefficients for wages and having signed work booklets are not statistically significant at 5 per cent. Moreover, this point estimate, though positive, has a considerably lower magnitude for both variables. Thus, there do not appear to have been significant changes for domestic workers in the period around the date of promulgation of CA 72.

²⁶ Specifically, all workers with the following codes COD: 2221, 2222, 5120, 5152, 5162, 5311, 5322, 9111, 9112, 9121, 9411, 9412.

²⁷ Codes 5111 a 5329.

²⁸ All workers whose one digit COD code is 9.

Table 9 Effect of CA 72 on wages and signed work booklets, Before-and-after model with Fixed Effect

	Domestic workers				Domestic workers booklets	
	Wages		With signed booklets		Wages	
	Adjacent quarters	One quarter interval	Adjacent quarters	One quarter interval	Adjacent quarters	One quarter interval
	Jan-Jun	Jan-Sep	Jan-Jun	Jan-Sep	Jan-Jun	Jan-Sep
	(1)	(2)	(3)	(4)	(5)	(6)
Coef.	0.004	0.023	0.005	0.011	0.005	0.022
(e.p.)	0.006	0.009	0.005	0.008	0.005	0.007
Stat. t	0.61	2.51	0.92	1.31	0.98	3.02
Obs.	14420	9004	14426	9012	3916	2416

Columns (2) and (4) show results considering a period with an interval of one quarter, with the starting point still in the first quarter of 2013 and, consequently, an end point in the third quarter of the same year²⁹. For this period, note that there was an increase in real wages of a little over 2 per cent, with a statistically significant effect of 5 per cent. On the other hand, although there was an increase in the magnitude of the coefficient for having signed work booklets, the coefficient remained without statistical significance. The results for this specification may be associated with the time employers need to implement the necessary changes to comply with the new regulations. Adjusting wages (overtime) would be less costly than registration of an employee, which would explain the difference of impact between the two variables.

Table 9 also shows results for domestic workers with signed work booklets. In this case, as they are all formal workers, only the impact on wages was estimated. Columns (5) and (6) present the same pattern discussed earlier, i.e., a wage increase considering a longer period, with almost no effect for adjacent quarters.

In summary, considering only persons who were domestic workers at the starting point of the analysis, there were no significant changes after publication of CA 72 in terms of having signed work booklets; however, after a supposed period of adaptation, there was an increase in average real wages for this category. Despite these conclusions, as mentioned earlier, the before-and-after estimator is a naive estimator that, although presenting the scenario experienced by the category in question, fails to take into account that the same trajectory might have occurred even without CA 72.

²⁹ In this case, the sample includes individuals located in each of the two (initial and final) quarters. This means that individuals that may leave the sample in the intermediate quarter belong in the sample.

4.2.2. *Difference-in-differences method*

Table 10 presents the results of the difference-in-differences estimator with a fixed effect. The coefficients reported refer to coefficient β of equation (2). In this study, the control group is comprised of women employed in occupations in which activities are similar to those performed by domestic workers. Columns (1) and (3) report the results for adjacent quarters, where the first quarter of 2013 is the initial period. Contrary to the before-and-after analysis, the point estimates show reductions both for real monthly wages (1.2 per cent) and for having signed work booklets (0.8 percentage points). Under the supposition that the control group provides a good counterfactual, the conclusion would be that both wages and having signed work booklets would have increased even if there had been no CA 72. But neither of these coefficients is statistically significant at 5 per cent. Therefore, the hypothesis that CA 72 caused no changes in the working conditions of domestic workers cannot be discarded.

Table 10 **Effects of CA 72 on wages and on having signed work booklets**
Dif-Dif Method with Fixed Effect

	Domestic workers				Domestic workers with booklets	
	Wages		With signed booklets		Wages	
	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)
	(1)	(2)	(3)	(4)	(5)	(6)
Coef	-0.012	0.007	-0.008	-0.016	-0.003	-0.007
(e.p.)	(0.008)	(0.012)	(0.008)	(0.010)	(0.007)	(0.010)
Stat. t	-1.50	0.58	-1.00	-1.60	-0.43	-0.70
Obs.	20,382	12,646	20,392	12,656	8,224	5,192
R2	0.002	0.005	0.001	0.002	0.005	0.003

Standard error in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

To test the hypothesis that CA 72 took more than one quarter to cause any effect, columns (2) and (4) present the results using a one-quarter interval between the initial and final periods, with the first quarter of 2013 as starting point. According to the results, even considering a period of maturation for CA 72 to take effect, there do not appear to be any major consequences. Both the coefficients of interest remain statistically insignificant at 5 per cent. It should be remembered that use of a one-quarter interval increases attrition of individuals, causing a reduction of around 40 per cent in sample size.

As mentioned earlier, the cost of formalising an employee is higher than regularising her earnings. In this respect, it is possible that the effect may have occurred only for the group of domestic workers (women) with signed work booklets. Columns (5) and (6) present results referent to this sample of workers, for the two time periods examined earlier. In the two specifications tested, the coefficients are negative, of low magnitude, and statistically insignificant at 5 per cent. In other words, despite underscoring a wage loss of between 0.3 and 0.7 per cent in the wages of domestic workers due to CA 72, this value cannot be taken as statistical evidence, since the hypothesis that the estimates are equal to zero cannot be dismissed.

It can be argued that the discussion on the labour rights of domestic workers was satisfactorily covered by the media. It is thus possible that some employers may have pre-empted the effects of CA 72, and regularized the situation of their employee prior to the date of its publication. Therefore, the lack of effect in the earlier specifications may, in part, have been determined by such pre-emptive moves. This hypothesis is tested considering the fourth quarter of 2012 as the initial period and using an interval of one quarter. Table 11 presents the results. Once again, the estimated impacts on wages and having signed work booklets were examined for all domestic workers, and on wages for domestic workers with signed work booklets.

The results are practically identical to those observed in table 2 for adjacent quarters, i.e., the point estimates are negative, but statistically insignificant. Thus, if there was pre-emption in the period in question, the number of employers did so was not high enough to have any impact on the average behaviour of employers. However, in view of the similarity of results with those in table 2, it can be concluded that the data did not capture any pre-emptive trend.

Table 11 Pre-emption of CA 72, Period: 4th Quarter/2012 to 2nd Quarter/2103

	Domestic workers		Domestic workers with booklet
	Wages (1)	With signed booklet (2)	Wages (3)
Coef.	-0.015	-0.007	-0.005
(e.p.)	(0.012)	(0.010)	(0.011)
Stat. t	1.25	0.70	0.45
Obs.	12,624	12,630	5,062
R2	0.004	0.001	0.014

Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

The evaluation carried out up to this point has not detected any effects of CA 72 on the working conditions of domestic workers in Brazil. More specifically, there was no effect on monthly wages nor on having signed work booklets. Moreover, although the estimated coefficients are statistically insignificant, the results point to a reduction of wages and of having signed work booklets.

In principle, aside from the simple fact that CA 72 had no effect, one explanation for the situation encountered could be inadequacy of the control group. It is possible that the group used may also have experienced the impact of CA 72 which would make the trajectories of both groups (treated and controls) similar. This would violate the main supposition of the methodology and annul the validity of the results. To verify this hypothesis, two additional control groups were also considered in the study.

4.2.3. Other control groups

The main quality of the control group used in the previous analysis (i.e., its similarity to the treatment group) represents, at the same time, a potential weakness. This is because CA 72, though specifically targeted at domestic workers, may have an influence on decisions of occupational choice.

Table 12 presents results of the Dif-Dif model using women occupied in the services sector (excluding security) as the control group. Considering all domestic workers (with or without a signed work booklet), no statistically-significant effects on wages and having signed work booklets were observed. Point estimates, however, remain negative, suggesting reductions both of wages and of the proportion of workers with signed work booklets found earlier for the first control group.

With respect to domestic workers with signed work booklets, the effect for adjacent quarters is practically the same as that found for all domestic workers. However, a negative and statistically-significant effect at 5 per cent was found on the monthly wage after the one-quarter interval. This reduction of the monthly wage may have been caused by adjustment of the workday, with a consequent reduction in overtime payments. Another explanation is related to high turnover in the Brazilian labour market. It is possible that part of the domestic workers left one job and moved to another (with lower wages) during the period under analysis owing to market adjustments caused by CA 72. Unfortunately, since there is no information on job tenure, it is not possible to control for this.

Table 12 **Effects of CA 72 on wages and on having signed work booklets**
Dif-Dif Method with Fixed Effect
Control group: Services

	With or without signed booklets				Signed booklets only	
	Wages		With signed booklets		Wages	
	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)
	(1)	(2)	(3)	(4)	(5)	(6)
Coef	-0.021	-0.012	-0.015	-0.028	-0.023	-0.032**
(e.p.)	(0.013)	(0.015)	(0.012)	(0.017)	(0.017)	(0.013)
Stat. t	-1.62	0.80	-1.25	-1.64	-1.35	-2.46
Obs.	17384	10728	17392	10736	5618	3462
R2	0.002	0.007	0.001	0.002	0.009	0.014

Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 13 uses women employed in elementary occupations, not necessarily in the services sector, as the control group. The idea is that these occupations would be immediate options for domestic workers, in view of low productivity and lack of any requirement of specific qualification to perform the work. The results, once again, indicate no effect of CA 72.

Table 13 **Effects of CA 72 on wages and having signed work booklets**
Dif-Dif Method with Fixed Effect
Control group: Elementary occupations

	Domestic workers				Domestic workers with booklets	
	Wages		With signed booklets		Wages	
	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)	Adjacent quarters (Jan-Jun)	One quarter interval (Jan-Sep)
	(1)	(2)	(3)	(4)	(5)	(6)
Coef	-0.009	0.003	-0.007	-0.004	0.003	-0.009
(e.p.)	(0.009)	(0.012)	(0.008)	(0.010)	(0.007)	(0.010)
Stat. t	-1.00	0.25	-0.87	-0.40	0.43	-0.90
NB.	19392	11958	19350	11968	7678	4728
R2	0.002	0.005	0.001	0.001	0.004	0.003

Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

In general, the evidence indicates that CA 72 did not affect monthly wages or having a signed work booklet for domestic workers. With respect to the monthly wage, the absence of such an effect suggests that, if there was unpaid overtime, the adjustment could have been made by reducing the length of the workday, without altering wages. Moreover, it is possible that the portion of workers that should have received overtime payments was small. In this case, the effect of the CA on this segment would not have been sufficient to result in a significant effect on the average.

With respect to having a signed work booklet, CA 72 reduced incentives for formalisation by making the cost higher. The results suggest that an employer considering whether or not to formalize a contract would choose not to do so.

The similar results for the three control groups indicate that the absence of effects of the CA appear not to be related to limitations of the methodology used. Indeed, in view of the nature of the intervention assessed, there was a concern with the supposition as to whether the control group represented a good counterfactual. The next two subsections will seek to get around the limitations of information collected by PNAD-Contínua, using other databases also prepared by IBGE.

4.2.4. Using the Monthly Employment Survey

This section presents results using microdata from the 2013 Monthly Employment Survey (PME) also prepared by IBGE. This survey contains information on weekly working hours. However, although the PME also has considerable turnover, each household is interviewed in four consecutive months, leaves the sample for eight months, and is then interviewed for an additional four consecutive months³⁰. Furthermore, the scope of the PME is limited to Brazil's six largest metropolitan regions³¹. In view of these differences, the results in this section are not directly comparable to those obtained using PNAD-Contínua. The methodology used is the same as that introduced in section 1 of the econometric analysis. In view of differences in the registration of workers' occupations, the control group in the PME, comprised of occupations similar to those of domestic workers (code 56 of the occupation variable) is slightly different to the first control group used in the PNAD-Contínua analysis.

Table 14 presents the results of the Dif-Dif model with Fixed Effect. Each column refers to a given time interval, indicated at the top of the table. Column (1) for example, considers March 2013 as the starting point, and April as the end point.

The focus of this section is upon the workday which, so far, has not been examined. Considering that workday regulations came into effect immediately after promulgation of CA 72, it was expected that this variable would produce significant results. However, Panel A indicates that CA 72 did not affect the

³⁰ The same problems of identification of an individual throughout the surveys and of attrition, mentioned in Pnad-Contínua are also encountered in PME.

³¹ Belo Horizonte, Porto Alegre, Recife, Rio de Janeiro, Salvador and São Paulo.

number of hours domestic workers work per week. Besides being statistically insignificant, the coefficients were of low magnitude, regardless of the period examined. Even considering a three-month interval for CA 72 to take effect (column 3) the (insignificant) coefficient indicates a reduction of less than 30 minutes per week, on average. Moreover, in column (4) that considers individuals one month prior and one month after enactment of CA 72, the coefficient presents a positive and highly imprecise signal, with standard error reaching a value sixteen times higher than that of the statistical point.

Table 14 **Effects of CA 72 on wages and having signed work booklets**
Dif-Dif Method with Fixed Effect
PME 2013

	(1)	(2)	(3)	(4)
	Mar-Apr	Mar-May	Mar-Jun	Feb-May
Panel A – Workday				
Coefficient	-0.185	-0.144	-0.423	0.047
(e.p.)	(0.308)	(0.417)	(0.502)	(0.754)
Observations	5,404	3,320	1,530	1,545
R2	0.004	0.004	0.018	0.004
Panel B – Monthly wage				
Coefficient	-0.012	-0.011	-0.012	0.013
(e.p.)	(0.008)	(0.012)	(0.016)	(0.020)
Observations	5,404	3,320	1,530	1,545
R2	0.003	0.010	0.021	0.007
Panel C – With signed booklets				
Coefficient	0.004	-0.001	0.007	-0.001
(e.p.)	(0.010)	(0.014)	(0.020)	(0.022)
Observations	5,404	3,320	1,530	1,545
R2	0.001	0.004	0.015	0.011

Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Owing to methodological differences between PME and PNAD-Contínua, the results for working hours might not have been obtained in PNAD-Contínua (if this variable had existed in the latest survey). Thus, it is worth estimating the effects on wages and having signed work booklets, in order to have an idea as to differences between the surveys.

The results for monthly wages are presented in panel B. In qualitative terms, the results are no different to those obtained from PNAD-Contínua. Aside from the effects not being statistically significant, there is a trend toward reduced wages, captured by negative point estimates. The effects on having signed work booklets (panel C) are null, with magnitudes very close to zero. This situation is similar to that shown earlier. Thus, although they are separate surveys, the results are consistent with

those found in PNAD-Contínua. In this respect, it can be conjectured that, if there were information, no effects of CA 72 would be revealed as to the workday, by using data from PNAD-Contínua.

4.2.5. *Using the PNAD*³²

An explanation for the results found so far could be related to the composition of the group of domestic workers, which can be broken down into monthly workers and *diaristas*. In this analysis, what separates the two types of domestic worker is: the number of households where, and of days when, she provide services in a week. If it is only one household and three or more days a week, she is considered a monthly worker; otherwise, it is assumed that she is a *diarista*. Under this definition, roughly 40 per cent of domestic workers are *diaristas*.

This separation is potentially important because, in general, there is no employment relationship if the domestic worker provides services up to twice per week in the same household. This means that enforcement of the legislation is lower for this group. Thus, as it is not possible to distinguish between monthly and *diaristas* in PNAD-Contínua, even if CA 72 had had an effect on monthly workers, it is possible that this effect is not observed, on average, owing to its lack of effect on *diaristas*.

To implement this separation and conduct an analysis of domestic workers who are monthly workers, PNAD microdata were used. These have the advantage of being more detailed than earlier surveys and of allowing (indirect) identification of domestic workers who are monthly workers and those who are *diaristas*. On the other hand, PNAD is not a panel, which impeded the use of the fixed effect to control for non-observable factors that could influence dependent variables.

Table 15 below presents descriptive statistics for 2013 for the two groups of domestic workers. On average, monthly workers have a higher rate of formalisation, but work more hours per week and receive lower hourly wages.

³² This section presents the main results of the article by Costa *et al* (2015).

Table 15 Descriptive statistics – PNAD 2013
Domestic workers - monthly workers and *diaristas*

	Total	<i>Diaristas</i>	Monthly workers
% with signed booklets	0.34 (0.47)	0.14 (0.34)	0.48 (0.50)
Weekly working hours	34.34 (14.49)	27.55 (14.68)	38.96 (12.39)
Hourly wage (R\$)	6.53 (14.22)	7.38 (12.23)	5.95 (15.40)
Age	41.99 (11.36)	43.16 (10.85)	41.19 (11.63)
% Finished primary schooling	0.23 (0.42)	0.21 (0.40)	0.24 (0.43)
Obs.	9423	3785	5638

To assess the effect of CA 72, the Dif-Dif Method with stacked data is used. The method is appropriate under the supposition that the control group would present the expected trajectory for the treatment group in the absence of an intervention during the period analysed. The microdata used are for 2011 to 2013. Since the month of reference for PNAD is September of each year, the information used refers to six and eighteen months prior to publication of CA 72, and six months thereafter.

Since the individuals are not the same ones over the years, a propensity score³³ method is also used to make the control group “more comparable” to the treatment group. Two control groups are used. The first includes women working in services (CBO 510-519) who are employees (excluding self-employed, public servants and employers). The second is a sub-sample of the first and includes workers classified as general domestic works workers (code 512), hotel and catering services workers (513) and beauty and personal-care services workers (516). It is in these three sub-categories that the majority of domestic workers are classified.

The Difference-in-differences model is estimated by means of the following equation:

$$y_{it} = \alpha + \beta_1 D_{1,it} + \beta_2 D_{2,it} + \beta_3 T_{it} + \beta_4 D_{1,it} T_{it} + \beta_5 D_{2,it} T_{it} + X_{it} \gamma + \epsilon_{it} \quad (3)$$

in which y_{it} is the variable of interest to individual i in period t ; $D_{1,it}$ is a dummy that assumes the value 1 if $t = 2012$ (i.e., prior to the regulations); $D_{2,it}$ is a dummy for $t = 2013$ (i.e., after the regulations); and X_{it} are control variables (age, schooling, dummies of states and dummy of the metropolitan region). The variable $T_{it} = 1$ indicates whether individual i is a domestic worker in period t (the treatment group) and $T_{it} = 0$, if otherwise. Parameters β_4 and β_5 are the difference-in-differences estimators. The main

³³ Annex II presents details on the propensity score.

point of interest is parameter β_5 , that represents the impact of the regulations, after their introduction, on the affected category.

Table 16 reports the results for having signed work booklets. It can be seen that there is no significant difference between the trajectories for formalisation of domestic workers and of workers in services (column 1). The difference for PNAD-Continua is the signal of the estimate, which this time is positive, pointing to an increase in formalisation.

Columns (2) and (3) illustrate the results separately for *diaristas* and monthly workers, respectively. When only *diaristas* are considered as the group that underwent intervention, the coefficient is not statistically significant. However, by restricting the analysis to monthly workers, an increase of roughly 4 percentage points is found in the probability of having signed work booklets. Note that the point estimate for *diaristas* is negative, and that this contributes toward the effect on all domestic workers of not being statistically significant (column 1).

Table 16 DIF-DIF analysis: Effect of CA 72 on the probability of having signed work booklets

	Domestic workers	<i>Diaristas</i>	Monthly workers	Monthly workers
	X	X	X	X
	Other services workers	Other services workers	Other services workers	CBO
	(1)	(2)	(3)	(4)
				512,513 and 516
2013 × (T = 1)	0.016 (0.011)	-0.012 (0.013)	0.039*** (0.013)	0.030** (0.015)
2012 × (T = 1)	-0.005 (0.011)	-0.008 (0.013)	-0.007 (0.013)	-0.003 (0.015)
(T = 1)	-0.464*** (0.008)	-0.656*** (0.009)	-0.338*** (0.009)	-0.240*** (0.010)
2012	-0.009 (0.008)	-0.006 (0.009)	-0.010 (0.009)	-0.014 (0.010)
2013	0.005 (0.008)	0.004 (0.009)	0.006 (0.009)	0.015 (0.010)
Observations	48386	30595	37071	28449
R2	0.212	0.358	0.167	0.130

Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1. The treatment dummy T refers to the group specified at the top of each column.

Column (4) which uses the control group that is most restricted and more similar to that of domestic workers, also reports a positive impact of 3 percentage points on formalisation of domestic workers that are monthly workers. This strengthens the interpretation that the group of domestic workers is heterogeneous, such that CA 72 tends to affect them differently in this dimension. Concern as to increased inspection and possible punishment of employers could explain this result.

Table 17 presents results for the workweek at the main job. The results suggest that the legislative change reduced the number of hours worked by domestic workers who are monthly workers, and that it had no effect on *diaristas*, when the comparison group is all services workers. Unlike what happened for having signed work booklets, the effect in all these cases is negative. It is worth remembering that PNAD has a more comprehensive sample than the PME. In this respect, the result suggests that the effect did not stem from the large cities, though this was not verified. In quantitative terms, on average, the reduction in working hours is estimated at just over 30 minutes per week.

When the second control group is used, however, the result for monthly workers not only does not remain statistically significant, but also has a changed signal. Therefore, in view of this lack of robustness, the effect on working hours should be viewed with caution. Even though it is the variable for which the most immediate results were expected, it cannot be categorically stated that this actually occurred, and further analyses are needed on this aspect.

Table 17 DIF-DIF analysis: Effect of CA 72 on the work week

	Domestic workers	<i>Diaristas</i>	Monthly workers	Monthly workers
	X	X	X	X
	Other services workers	Other services workers	Other services workers	CBO
	(1)	(2)	(3)	512,513, 516
	(1)	(2)	(3)	(4)
2013 × (<i>T</i> = 1)	-0.644** (0.289)	-0.229 (0.361)	-0.692** (0.305)	0.260 (0.354)
2012 × (<i>T</i> = 1)	0.241 (0.287)	0.453 (0.361)	0.001 (0.303)	0.060 (0.352)
(<i>T</i> = 1)	-5.081*** (0.204)	-12.319*** (0.256)	-0.391* (0.216)	-1.978*** (0.249)
2012	-0.190 (0.199)	-0.241 (0.250)	-0.198 (0.210)	-0.270 (0.246)
2013	-0.527*** (0.201)	-0.630** (0.253)	-0.487** (0.212)	-1.420*** (0.247)
Observations	48386	30595	37071	28449
R2	0.050	0.198	0.014	0.014

Standard error in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. The treatment dummy refers to the group specified at the top of each column.

With respect to the monthly wage, it can also be concluded that there was no change in its trajectory attributable to introduction of the new rules. Table 18 reports not-statistically-significant coefficients in all its analyses. The results for hourly wages are very similar and, thus, not reported. However, once again the difference in signal of estimates for *diaristas* and monthly workers is worth underscoring.

Table 18 DIF-DIF analysis: Effect of CA 72 on hourly wages

	Domestic workers X Other services workers (1)	<i>Diaristas</i> X Other services workers (2)	Monthly workers X Other services workers (3)	Monthly workers X CBO 512,513 and 516 (5)
2013 × (<i>T</i> = 1)	0.096 (0.330)	-0.093 (0.412)	0.172 (0.379)	0.469 (0.456)
2012 × (<i>T</i> = 1)	0.655** (0.328)	0.607 (0.412)	0.685* (0.376)	1.332*** (0.454)
(<i>T</i> = 1)	-0.440* (0.234)	0.613** (0.293)	-1.101*** (0.268)	-1.570*** (0.322)
2012	-0.055 (0.227)	0.077 (0.285)	-0.124 (0.260)	-0.742** (0.318)
2013	0.771*** (0.230)	0.742** (0.289)	0.804*** (0.263)	0.497 (0.318)
Observations	47394	29971	36302	27827
R2	0.012	0.012	0.013	0.014

Standard error in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. The treatment dummy refers to the group specified at the top of each column.

The result for wages can be interpreted as a synthesis of movements that occurred after CA 72. If there was a downward adjustment for the workday, a lack of effect on wages is to be expected. On the other hand, with increases of formalisation, the absence of an effect on wages suggests that only those who were already earning at least the minimum wage had their situation regularised. This is because, by formalising the employee, the employer (theoretically) would have to record the minimum wage on her work booklet.

5. FINAL CONSIDERATIONS: CHALLENGES FOR BRINGING THE NEW LEGISLATION INTO EFFECT

As a category, domestic workers are characterised by low schooling and poor remuneration, with average wages below the minimum wage. Another defining characteristic is the high incidence of informality,³⁴ which affects two thirds of such workers. Although the occupation is considered a cushion for a portion of the population in times of economic crisis, the high average age (41 years) suggests that domestic work does not appear to be a transitional occupation for a major portion of such workers, and especially not for women, who comprise the vast majority of this category. In view of this situation, CA 72, which aims to improve the working conditions of this category of workers, takes on greater importance.

Generally speaking, the econometric assessment carried out for this study did not detect any effects of CA 72 on the working conditions of domestic workers in Brazil. More specifically, no effects have as yet been verified on the workday, monthly wages, working hours, or having signed work booklets.

However, when domestic workers are separated into *diaristas* and monthly workers, there is evidence that CA 72 affected the two groups differently. In particular, there seems to have been an increase in having signed work booklets for domestic workers that are monthly workers and some movement toward reduction of their workday.

In view of this, it can be concluded that, up until the present time, CA 72 has had only a moderate effect on the working conditions of domestic workers. It is possible that this is due to shortness of the period during which the new rules have been in effect, and that it has not yet been possible to assess the most recent regulations, implemented in 2015. Nonetheless, it is worth stressing that, notwithstanding their aim of improving working conditions, the new regulations increase costs for employers. In view of this, the final result will depend upon how the market comes into balance in the medium and long term, on how enforcement of the new standards is conducted, how effective workers organize themselves to claim rights, among other complex elements relating to this occupation and that are so engrained in Brazil's culture.

After more than a hundred years of facing prejudice and systematic social exclusion, domestic workers have obtained a significant legal acknowledgment. However, both from the symbolic standpoint and in terms of securing effective rights for this important occupational segment of the productive and reproductive chains of Brazilian society, much remains to be done.

³⁴ Informality in this paper is used to describe the situation of workers who do not have a signed work booklet.

A recent film directed by Anna Muylaert³⁵ sought to display the perverse incongruence of social relations between the families of employers and domestic workers in what she called a *game*, composed of perversity, violence, but also of affection. The title of the film “The Second Mother” [*Que horas ela volta?*] refers to the hole caused by the absence of the mother of two characters: Fabinho, son of the woman who has an intense professional life and employs a domestic worker, and Jéssica, daughter of the domestic worker who has not seen her mother in ten years. According to Christian Dunker³⁶ (2015) the film clearly elucidates the contradictions of contemporary life which had been deemed to constitute a civilisation...

...in which practical problems with domestic workers are resolved: back entrances, uniforms, impersonal management and a minimum of non-controlled coexistence. Thus, the ancient and *machadian* [reference to Machado de Assis] figure of the minion is clarified; this mix of employee and kin, present in all our affective memories, and that descends both from the sexual dominance over the slave quarters by the masters (Gilberto Freire) and the Iberian blend of cordiality between public and private spheres (Sérgio Buarque de Holanda) (2015).

However, what we observe in the plot is a persistent resistance on the part of Brazilian families to acknowledge another equal, worthy of dignified, formalized, well-paid working conditions, no longer mediated by moralities or favours, but by the formalities of law; enjoying holidays, rest, healthy food, transport, legitimate associative activities and, especially, day-to-day relations devoid of any form of exploitation, subservience or intimidation.

The process of implementation of the new law will, to a great extent, be of a civilising nature for interpersonal relations between domestic workers and their employers. The delay in bringing CA 72 into effect stems partly from resistance of employers to certain provisions that raise their costs. However, in a contemporary society, employer’s families cannot not be fully exempted from paying for the privilege of having, in their homes, a professional responsible for providing care for their property and children, while proprietors and parents pursue more productive, higher-prestige and better-paid work elsewhere.

Indeed, formalisation of labour contracts implies a certain degree of red tape [*burocratização*] in domestic relations, given that the guarantee of rights relating to the workday, overtime and additional night bonus, for example, require greater control and explicit agreement on the work regime. However, the relevant legislation foresees unification of records on a single platform and a simplified system for payment, using a unified form, for taxes and social-security charges.

This platform, known as *eSocial*, instituted little over a year ago to ensure convergence of tax, social-security and labour charges, was adopted to facilitate submission of information also for employers

³⁵ http://brasil.elpais.com/brasil/2015/09/17/cultura/1442523298_404392.html

³⁶ <http://blogdaboitempo.com.br/2015/09/28/que-horas-ela-volta-por-cima/>

of domestic workers. However, it still lacks adequate user-friendly and functional tools to enable employers of domestic workers to effect monthly records on the work regime of their employees. The system came into effect in October 2015 and a series of problems with the tools ensued. Nonetheless, over 1.8 million domestic workers were registered in the first month.

Although formalisation of domestic work has increased progressively over the past two decades, only 1/3 of such workers (roughly 2 million women) had signed work booklets in 2013. With the expansion of rights and increase of contracting costs, it is possible that this proportion will not continue growing, and that domestic workers will cease to work in a single household and opt to work in more than one as *diaristas*. Under the terms of the law as it was approved, for domestic workers that work less than three days per week in a single household, employers have no labour obligations, and all costs referent to social protection are the responsibility of the employee. It is thus necessary to remain vigilant to ensure that another round of weakening of the labour rights of domestic workers does not come about.

The new legislative measures represented an extremely important gain for the category, but the path toward securing rights and dignified work remains long for this segment that suffers strong discrimination and stigmatisation. It would appear that domestic work is where the clearest evidence exists of the perverse repercussions of decades of slavery that blemish Brazil's history and scar the country's social, political and economic organisation. Domestic work is of interest because it employs a significant contingent of black and poor women whose value and work need to be acknowledged, and also because it represents an important synthesis of the gender, race and class prejudices that permeate our society.

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ANNEX I

The PNAD-Contínua is the most recent household survey carried out by IBGE. Microdata of the survey are disclosed quarterly and refer to the period starting in the first quarter of 2012. At the time of closing of this report, the latest information disclosed referred to the first quarter of 2015.

The intention of PNAD-Contínua is to comprise a sample with each selected household interviewed five times. This means that each household remains in the sample for 16 months or five quarters. The PNAD-Contínua sample turns over, meaning that, in each wave, a group of households leaves the sample (i.e., is having its fifth and final interview), while another group is coming into the sample (i.e., having its first interview). Thus, statistics taken from each wave of PNAD-Contínua are based on different samples; only a percentage of households interviewed are the same in the two consecutive “waves”.

It is possible to identify the same household in different waves of PNAD-Contínua; in other words, a database can be built in a Panel (or longitudinal) format for the households. However, up until the time of closing of this report, IBGE had not disclosed the necessary information for identification of a single individual throughout the survey (as is also the case for the PME).

To identify the same individuals in different waves and, consequently, construct a panel of individuals, an adaptation of the basic algorithm proposed by Ribas and Soares (2008) for the PME was deployed. This algorithm consists of a comparison of the individual characteristics of those interviewed, with a view to detecting inconsistencies. Whenever an inconsistency is found (date of birth, for example) the algorithm considers that the individual is not the same as in the earlier wave.

Following the above procedure, the average attrition rate observed from one quarter to the next, i.e., the percentage of individuals in a given quarter that were not found in the following quarter, was 36 per cent (as a comparison, the month-to-month attrition rate of the PME is 13 per cent, and growing during this interval). The attrition rate for two quarters ahead was 56 per cent. In other words, more than half of the individuals interviewed in a given quarter are not found six months later. Because of this high rate of attrition, descriptive statistics were not calculated for intervals greater than two quarters.

The rate of attrition is caused by refusal to be interviewed and by mobility of individuals. However, Ribas and Soares (2008) argued that imprecision in the declaration of information during conduct of interviews may generate “false attrition”, i.e., it may be considered that an individual has left the sample when, in fact, there are merely small inconsistencies in the information gathered. For the PME, the authors propose use of an advanced algorithm that enables recovery of a portion of these individuals, thereby reducing false attrition and, consequently, the attrition rate. This algorithm is to be adapted for the next PNAD-Contínua report.

ANNEX II

The analysis carried out using PNAD data combine the Dif-Dif Method with the Inverse Probability Weighting (IPW) strategy, which consists of using a propensity score to reweight the control group, with a view to making it more comparable to the treatment group (domestic workers).

By propensity score (ps_i) we mean the estimated probability of an individual's belonging to the treatment group. Formally, this probability is estimated by means of a *Probit* model, provided by:

$$ps_i(Z_i) = Prob(T_i = 1|Z_i) = \Phi(Z_i\delta) \quad (A.1)$$

in which Φ is the accumulated function of Normal distribution and Z_i are the observable characteristics of the workers.³⁷ The propensity score is estimated using the sample for the first period of the analysis.

Based on the parameters estimated, it is possible to calculate ps_i for the other periods. With the IPW procedure, equation (3) is weighted by w , as follows:

$$w_{it} = T_{it} + (1 - T_{it}) \times ps_{it} \times (1 - ps_{it})^{-1}. \quad (A.2)$$

In other words, for the control group ($T_{it} = 0$) the larger the propensity score, the greater its weight. For domestic workers ($T_{it} = 1$) the weight is always equal to one.³⁸ By using this reweighting, estimation of equation (2) enables recovery of the effect of CA 72 on domestic workers. This technique is directly associated with the so-called Average Treatment Effect on the Treated (ATT).³⁹

For this method to be successful, it is important that the observable characteristics be balanced, i.e., that the following condition be fulfilled:

$$E[Z|ps, T = 1] = E[Z|ps, T = 0]. \quad (A.3)$$

In other words, conditional to the propensity score, it is supposed that, on average, there are no differences in observable characteristics between the domestic-worker and the control group.

As was mentioned earlier, the propensity score is estimated for the first period of the analysis (2011). This avoids the probability that being a domestic worker depends upon characteristics defined after introduction of regulations. Owing to separation of the analysis for each type of domestic worker and in

³⁷ In this article, vectors X and Z are different. When estimating the propensity score, so as to achieve a better balance (as explained later in the text) between the treatment and control groups, we included different functional forms of the variables included in X .

³⁸ Strictly speaking, as we are also using the sample weight of PNAD, the final weight of each observation is the sample weight multiplied by w .

³⁹ See: Hirano and Imbens (2001).

view of the use of sub-samples, a propensity score is estimated for each specification, a reweighting factor (w) is calculated, and the (A.3) condition is tested.

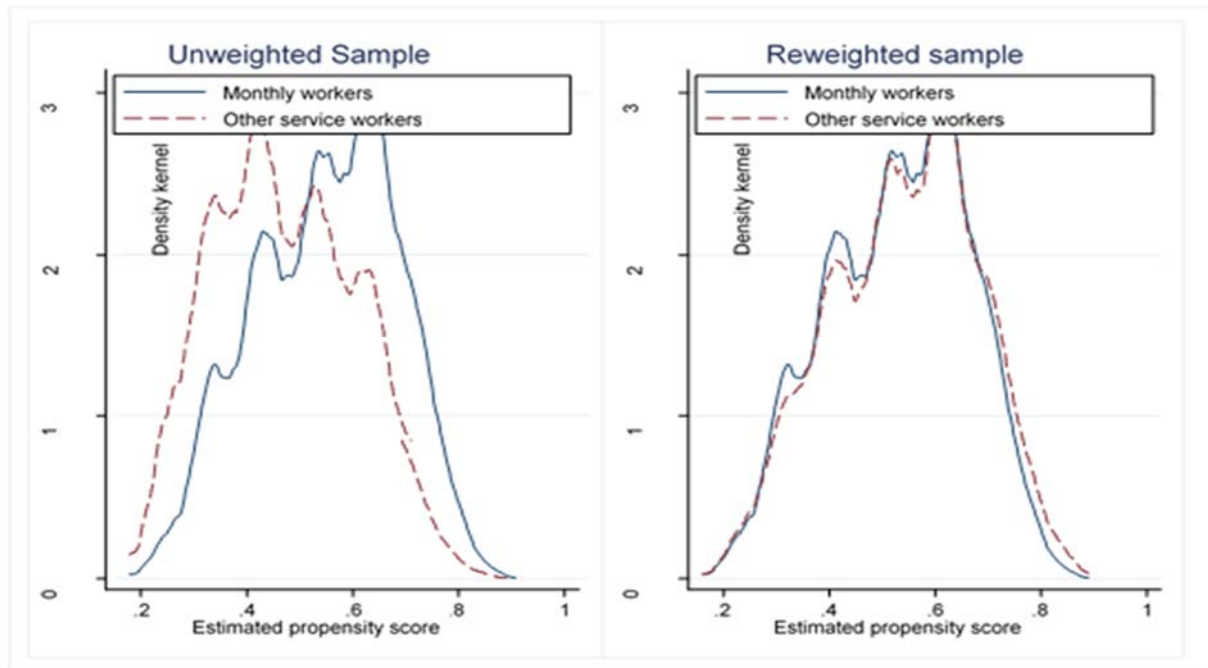
To test the (A.3) condition, averaging tests are conducted among the groups for variables used in estimating the propensity score. Table A.1 reports the p-value of these tests when the treatment group is comprised of domestic workers who are monthly workers. Note that, regardless of the control group used, the average of the majority of variables is not statistically different between the groups.⁴⁰ Another form of observing this result is by means of visualising the density of the propensity score of domestic workers and of the comparison groups, before and after reweighting the sample. Figure 1 shows an approximation of the densities of the propensity score between the group affected by the law (monthly workers) and the comparison group of employed services workers after reweighting. It was thus concluded that reweighting leaves the comparison groups quite similar to those of domestic workers who are monthly workers, in terms of observable characteristics.

⁴⁰ The tests were carried out for the common support of distributions: $0,1 < ps < 0,9$ (see Crump *et al.*, 2008).

Table A.1 p-value of the averaging tests for variables included in estimating the propensity score, by control group.

	Monthly workers X other services workers		Monthly workers X other services workers (512,513 and 516)	
	Unweighted	Weighted	Unweighted	Weighted
age	0.0000	0.2761	0.0000	0.4853
% age 18 and 30	0.0000	0.1464	0.0000	0.1710
% age 30 and 40	0.1116	0.8163	0.6592	0.8837
% age 40 and 50	0.0000	0.6974	0.0000	0.6628
% age 50 and 60	0.0000	0.3592	0.0000	0.4622
% age 60 or over	0.0000	0.5181	0.0000	0.5808
years of schooling	0.0000	0.9640	0.0000	0.6172
% no schooling	0.0000	0.8696	0.0000	0.4389
% with 1 st cycle of Primary	0.0000	0.5752	0.0000	0.5176
% with 2 nd cycle Incomplete Primary	0.0000	0.9251	0.0000	0.4960
% with complete Primary.	0.0018	0.5817	0.0070	0.5997
% with complete Primary. or more	0.0000	0.8121	0.0000	0.8563
% colour - black	0.0191	0.6045	0.1489	0.5649
% colour - brown	0.0000	0.7753	0.0000	0.3907
AC	0.7152	0.9320	0.0895	0.4639
AM	0.4991	0.6807	0.8113	0.6892
RR	0.9651	0.9210	0.8868	0.9109
PA	0.0015	0.5342	0.0041	0.4750
AP	0.9268	0.9303	0.9775	0.9125
TO	0.1438	0.6030	0.1045	0.7664
MA	0.0000	0.3024	0.0000	0.3596
PI	0.8315	0.8286	0.8226	0.9450
CE	0.0009	0.7367	0.0066	0.4215
RN	0.0022	0.7667	0.0172	0.8822
PB	0.0013	0.7044	0.0056	0.7834
PE	0.0351	0.7961	0.7597	0.3632
AL	0.0353	0.4339	0.1339	0.2776
SE	0.9677	0.9870	0.9651	0.9064
BA	0.0000	0.9890	0.0001	0.4562
MG	0.7705	0.7014	0.4497	0.5201
ES	0.0030	0.9700	0.2548	0.9952
RJ	0.0000	0.4272	0.0013	0.6242
SP	0.0000	0.4454	0.0000	0.4435
PR	0.0000	0.8235	0.0058	0.7757
SC	0.0000	0.9755	0.0000	0.9394
RS	0.0582	0.7893	0.5057	0.5710
MT	0.0737	0.8269	0.1130	0.6452
MS	0.9824	0.8031	0.7877	0.4813
GO	0.1470	0.9369	0.3390	0.7763
DF	0.0087	0.9400	0.0323	0.8186
% metropolitan region	0.0000	0.1948	0.0000	0.1439

Figure A.1 Propensity score density for treatment and control groups



CONDITIONS OF WORK AND EMPLOYMENT SERIES

- No. 1 Quality of working life: A review on changes in work organization, conditions of employment and work-life arrangements (2003), by Howard Gospel
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