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1. Introduction

In contrast to the "lost decade" of the 1980s and the sluggish 1990s, the Brazilian economy achieved sizable GDP growth rates during the first decade of the 21st century. Although far from Chinese or Indian performances, Brazilian growth, at a yearly 4 percent rate, was nonetheless meaningful: the recent growth path was inclusive or "redistributive" (Kerstenetzky 2014). In the wake of new labor market and social policies, economic growth boosted by favorable external conditions was finally reconciled with poverty reduction *and* decline in economic inequality. The former dropped to 13% of the population in 2014, down from 36% in 1995; the latter, from a Gini index of .60 in 1995, to .52 in 2014.[2]

The new growth path was accompanied by a sustained expansion of employment, especially formal employment. In fact, the elasticity of formal employment in relation to growth exceeded one while the reduction of the share of informality in employment from 2002 to 2014 amounted to 16.5 percentage points[3].

To assess the significance of this achievement, it is useful to have in mind that the Brazilian labor market traditionally featured elevated degrees of informality, and, thus, sizable shares of the workforce in insecure, low paying and socially unprotected jobs, in rural and urban areas alike (Baltar 2015; Cacciamali, 2000; Barbosa Filho, Ulyssea, Veloso 2016). Moreover, the debt crises and (mostly) the trade liberalization eras pushed informality rates to very high levels, reaching over 50% of total employment in the 1990s. And while the 1970s, the zenith of the so-called Import Substitution Industrialization experience, might be hailed for displaying lower levels of informality thanks to impressive growth rates, the poor record in terms of other related aspects of job quality, such as the level of minimum pay and wage inequality, had nothing to commend itself.

In fact, in the recent period, associated with the significant creation of formal jobs, there was an increase in labor incomes, particularly of earnings at the bottom, and a consistent decline in wage inequality. The contrast with other members of the BRICS group suggests different growth models at work, as slower employment growth (India's "jobless growth", Ghate 2014), high incidence of low pay (India and South Africa, OECD 2015) and/or inequality hikes mark the experiences (China and India, OECD 2015).

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[2] Data from IPEADATA.

[3] Informality is here calculated as the proportion of workers who do not contribute to social security. But also when measured as the proportion of workers without a formal contract and self-employed, the other usual definition, it shrank substantially in the period.

In the face of it, Brazilian "formal jobs-rich growth" seems relevant. A critical element of this equality-enhancing formalization process was the largely complied with policy of valorization of the minimum wage, which raised the wage floor and shrank wage inequality while defying predictions of negative employment effects (Brito, Foguel & Kerstenetzky 2016)[4].

It should be pointed out that much of the mentioned favorable changes happened concomitantly in other countries in Latin America. It is however the peculiar intensity of reduction of informality in Brazil, reaching a level of 36%, while the regional average still hovers around 55% (Amarante & Arim, 2015), that awakens interest in the experience.

In less developed economies, informality hardly represents an autonomous choice of individual workers facing an array of attractive options before them (OECD 2015, Tokman 2011). Informality is often associated with working poverty and inequality (e.g. the formality premium) and it is more common in labor-intensive sectors and among poorly educated and trained workers, vulnerable groups such as women and young workers, and ethnic minorities and backward areas in the country (Alejo et al. 2015). Brazil is no different, with more prevalence among women, non-whites, less schooled and skilled workers, those living in rural or the poorer regions of the North and the Northeast of the country, and agriculture, construction and service sectors. Despite being still more common among those groups, the recent formalization relieved these situations.

This chapter, after presenting general facts about the evolution of the labor market in Brazil, first documents the formalization process and its main consequences in terms of enhancing job quality and well-being, and then systematizes what is known about the main driving forces behind it. The chapter also explores the connection with structural change towards a service-driven economy in Brazil, as it looks into the growth of service sector employment where most job creation has been happening. As this has been a global phenomenon, it is relevant to sort out specific traits of the "Brazilian way", such as an alleged bias towards the distributive services subsector. Here lies a natural contrast to India, in which job creation is mostly being driven by the technologically-superior productive services subsector (Eichengreen and Gupta 2011). Ultimately, the chapter sets out to assess the sustainability of the positive changes that have occurred through the identification of challenges and opportunities opened up by this process. The concluding section notes that the socially progressive scenario is about to change substantially in the wake of the deepest recession the country has suffered in a century, starting in 2015. In a sense, the country is doomed to "long for the future"[5], or so it seems.

1. Recent changes in Brazil's labor market

In recent times the Brazilian labor market has undergone a favorable transformation. The role of labor market and social policies in this process -- in tandem with the commodity boom and subsequent export-led growth -- cannot be overestimated. Those policies helped to

[4] Over the 1995-2014 period, the minimum wage has more than doubled in real terms following a policy of recuperation of its past value. As we explain in Section 1, the valorization impacts not only labor income but also non labor income such as basic pensions.

[5] The expression in Portuguese ("saudades do futuro") is from Clarice Lispector's poem "Saudades". It was recollected by Gilberto Hochman in private conversation with one of the authors.

socially spread the new bonanza and generate demand-driven growth impetuses of their own. From the ostensive minimum wage valorization policy, which having started in the mid 1990s, underwent a substantial acceleration in the 2000s, to incentives to - and increasing oversight of - formalization, and expansion of social security provisions, all of these initiatives helped boost labor market performance.

To begin with, after a decade of soaring unemployment rates there came a period of relatively low rates, particularly in metropolitan areas, to the point that many analysts started sensing a situation of full employment and feared work scarcity (Barbosa Filho 2015). In fact, rural and urban unemployment rates climbed from 6.4% to 9.7%, during the 1990s and up to 2003, only to undergo the inverse trajectory back to 6.2% in 2012 (own compilation from PNAD's data, IBGE). Although markedly larger for young workers, it dropped to 14.6% in 2012 after having peaked, at 19.3%, in 2005. Also, employment levels rose 24% from 2002 to 2014 -- 20% among men and 30% among women.

Overall, the participation rate climbed during some of the initial years of the first decade of the new century (in 2004 and 2005) before starting to contract in 2006, in the end declining from 65.7% to 64.2% between 2002 and 2014. But the decline was rather due to men withdrawing from the labor market (from 78.3% to 75.0%), as women were slightly increasing their participation (from 53.9 % to 54.3%).

The combination of a slow pace of growth of the working age population, following demographic transition, with reduction of economic participation has provoked some anxiety among analysts in the country, who conjectured that the latter event might be reflecting the former (Barbosa Filho 2015). In fact, however, while diminution of unemployment was mainly associated with employment growth (Baltar 2015) and not so much with a shrinking labor force, the diminished economic participation may alternatively be associated with enhanced family income.

In fact, while in the 1995-2002 period, real labor income had shrunk more than 10%, it grew 60% in the following decade, thus allowing young family members to leave the labor market and turn to education. Participation rates of youngsters decreased 7 pp (from 44% to 37%, deriving both from less employment and unemployment). As with the other part of the story, the expansion of governmental transfers – pensions and an array of social benefits – increased household disposable income, thus helping avoid premature entrance, especially of teens, into the labor market.

Beyond average earnings, low earnings as well as wage compression accompanied the positive changes. Over the recent period, low earnings approached the statutory minimum wage, which in turn underwent substantial valorization, in excess of 100%, reaching the value of 70% of median earnings (in the group of ten key emerging economies[6], only Colombia surpassed Brazil on that count, cf. OECD 2015). As the valorization of the minimum wage outpaced that of average earnings, there followed a process of considerable wage compression. Thus, wage inequality declined year after year up to 2014: from 2002 to 2014, the Gini index of labor earnings shrank from .55 to .48 (see Table 1).

[6] This includes Brazil, Chile, China, Colombia, India, Indonesia, Mexico, The Russian Federation, South Africa and Turkey.

Together with the minimum wage valorization policy, the contraction of education premia at all levels assisted this process (Lustig, Ortiz-Juarez and Lopez-Calva 2013), as the schooling of the labor force had been increasing overtime (52% had reached 11 years or more of schooling in 2014, compared to only 32.4% back in 2002). In fact, however feared, there is no robust evidence of scarcity of high-skilled workers, except for specific sectors (Ulyssea 2015), though the slow advancement of labor productivity suggests that years of schooling may be a misleading indicator in this respect.

The relative importance of both factors, minimum wage and education, for the decline of wage inequality in Brazil has been well documented (Barros et al., 2007, Cunha e Vasconcelos, 2012, Ferreira et al., 2006, Brito, 2015, Saboia, 2007) – but, somewhat counterintuitively, the preeminence of the minimum wage to explain the decline in *household* income inequality in Brazil over the last two decades has turned up in recent research (Brito, Foguel, Kerstenetzky 2016)[7]. This is so because, as in other countries in the region such as Colombia and Mexico, the minimum wage, in addition to being the official wage floor in the labor market also indexes basic pensions and constitutionally-defined social benefits in Brazil. It is mainly through these non-labor market channels that the minimum wage affects the incomes of around 40% of the Brazilian population, most of whom live in households with per capita income below the median income (Foguel, Ulyssea and Corseuil 2014; Brito, Foguel and Kerstenetzky 2016).

An additional inequality-reducing factor that has received some attention lately is the formalization process and institutional innovation associated with it, as we shall discuss in the next section.

Labor market socio-demography has also improved in recent times, with shrinking gender and racial gaps, in terms of rates of participation and/or earnings. That women are participating a bit more, while men less, may be associated with a substantially smaller gender pay gap, whose magnitude (38% in 1995, now down to 28%) has traditionally been a factor underscoring (especially, though not exclusively) poor women's decision to stay at home as housekeepers and/or caregivers. As for non-whites, the expansion of schooling and resulting contraction of educational inequalities may be a factor behind the diminished, though still huge pay gap (non-whites earned 49% of whites' earnings in 2002 and 57% in 2014), as this factor traditionally dominated others to explain wage inequality between whites and blacks in Brazil (See Table 1). Although these wage gaps had already been shrinking in the 1990s, there is some evidence that formalization in recent times has accelerated this process (IBGE, 2015).

A sectoral analysis of this evolution would further show the absolute and relative diminution of agricultural and domestic employment, so that 'bad jobs' contracted substantially. These became costly for employers and unattractive for the now better schooled and socially protected workers, who enjoyed better options in and out of the labor market. In addition, even in those jobs, general conditions improved, especially in terms of labor insertion in the formal economy and pay. True, industrial employment underwent a relative diminution, but not in absolute numbers, and formalization increased therein. The sectoral analysis will be dealt with in detail in Section 4.

[7] Saboia (2007) had already found this result for the period 1995-2005.

In any case, a factor cross-cutting all of the positive developments is the formalization process that took place in Brazil during the last decade. This process conferred stability on the observed positive changes in the labor market mentioned thus far, in that work relations have been mediated by increasingly effective regulation.

Table 1: Selected labor market indicators - Brazil 1995 to 2014

Indicators 1995, 2002, 2012 and 2014	1995	2002	2012	2014
Participation rate (%) **	68.28	65.71	63.65	64.21
Women	53.61	53.93	53.12	54.26
Men	84.05	78.35	74.97	74.97
Black People	69.47	68.77	66.32	67.11
Non black people	67.36	67.04	65.46	65.81
Youngsters (15 to 24)	65.19	63.01	59.08	59.03
Unemployment rate (%)*	5.96	9.12	6.18	6.87
Women	7.20	11.56	8.22	8.84
Men	5.11	7.30	4.61	5.33
Youngsters (15 to 24)	11.45	18.04	14.62	17.03
Black People	6.54	10.33	7.08	7.76
Non black people	5.51	8.11	5.17	5.86
Employment level***	66.20	75.31	90.60	93.40
Women	26.50	31.34	38.84	40.75
Men	39.50	43.88	51.82	52.62
White People	36.90	41.39	44.05	43.91
Non white People	29.30	33.92	46.72	49.45
Average Labor Income [2] (R$ 2014)	1,135.69	1,056.80	1,432.58	1,684.00
Women ****	1,033.19	1,034.71	1,355.80	1,430.00
Men ****	1,654.26	1,470.27	1,865.92	1,923.00
Black People	769.39	736.49	1,117.37	1,189.65
Non black people	1,637.31	1,495.55	1,979.72	2,064.94
Gini Index (household income)	0.60	0.59	0.52	0.52
Gini index (labor income)	-	0.55	0.48	0.48
Poverty (P0) [1]	35.07	34.38	15.93	13.29
Extreme poverty[1]	15.19	13.98	5.29	4.20

*Unemployment rate - Population aged 15+ (including rural North). Source: IETS. **Participation rate - Population aged 15+ (including Rural North). Source: IETS (1995); IBGE (2002; 2012; 2014). IETS (youngsters)***Employment level in millions - Population aged 15+ (including Rural North). Source: Own elaboration from PNAD/IBGE. ****Average real monthly income in Reais, deflated by INPC/IBGE - principal job for employed aged 10+. Source: IBGE. [1] IPEADATA. Poverty and extreme poverty lines based on caloric needs. [2]Average real income in Reais - principal job - R$ October 2014 - IBGE. Note: all data regarding black and non black people was compiled from IETS.

2. Formalization: driving forces and beyond

As previously mentioned, in less developed countries, informality flourishes as a result of lack of better options to make a living. Informality thus overlaps with poverty and underemployment, and more intensely affects vulnerable groups. Economic growth per se has not been able to eliminate or drastically reduce it (Tokman 2011).

In Brazil during the 1970s, rapid industrialization and urbanization did not generate enough regular jobs in urban areas, so that in the absence of unemployment insurance (created only in 1986) excess workforce would turn to low paying informal activities, mainly self-employment and work without a contract (Cacciamali 2000, Baltar 2015, Krein 2010).

Famously, this was a period of elevated employment, average earnings, and wage inequality. During the debt crises in the 1980s, recession and structural adjustment delivered open unemployment and fuelled informality. But somewhat surprisingly the big hike in the level of informality happened in the 1990s, which witnessed an unprecedented increase thereof even with the positive economic growth rates between 1993 and 1997 – it outweighed that of the recession years of the beginning of the 1980s (Ulyssea 2006), challenging the cyclical explanation (Amadeo et al. 1994, apud Ulyssea 2006).

Similarly, in Latin America, during the ISI period with burgeoning growth rates, an informal sector would co-habit with a formal one and absorb excess workforce, so much so that open unemployment used to be relatively low. But informality expanded considerably over the 1980s and 1990s (Tokman 2014). With trade liberalization, a peculiar dynamic emerged: in the face of international competition employment would become an adjustment variable for big employers implying employment instability, and thus, substantial open unemployment and the spread of informal work relations. These mushroomed in the shadow of labor market reforms or outright unlawful practices.

In the trade liberalization period, Brazilian industry was severely affected and the informality-intensive tertiary sector flourished (Cacciamali 2000, Baltar 2015, Ramos apud Uyssea 2006), leading the way in employment generation. The latter's participation in employment climbed to 59% in 2000 from 53% in 1989 (it would take 14 years for this proportion to increase another 6 pp; WDI 2016). But informality also increased in the manufacturing sector itself, challenging the structural change explanation (Ulyssea 2006).

Demand for informal workers increased across the whole spectrum of sectors and firms, from big to small. The interaction that was initiated among firms of different sizes illuminates changes in the composition of work demand. To begin with, employment grew in small ones while decreasing in big companies (Krein 2010, Baltar 2015). Moreover, big employers adapted to trade opening by strongly reducing formal employment, so that all new employment was either self-employment or unregistered contracts (Baltar 2015). Overall, big companies partially cut jobs, by directly reducing the number of their lines of operation to face competition and importing parts and components, but also displaced jobs to an array of smaller providers of industrial services who entertained unregistered work relations (Baltar 2015). Informality and the services sector grew in tandem.

In a way, the 2000s (2003-2014) were the mirror image of the 1990s as far as informality goes. Formalization colonized informal work relations at the firm level and presided over the creation of new job posts in the aggregate (Corseuil and Foguel 2016)[8]. This was assisted by an array of institutional initiatives in a time of sustained, though moderate economic growth (Baltar 2015, Alejo et al. 2015, Sojo 2015). The background conditions of an open economy, structural change towards a service-driven economy, and absence of major labor legislation reform, were much the same.

A mark of the new period is that formalization cut across economic sectors, businesses, and many different groups, so that the "level effect" generally was more important than the "composition" one. Thus, though more present among women

[8] This happened in spite of allegedly elevated labor costs in Brazil (Pastore, 1996). The issue has sparked methodological controversy in the country (see Pastore,1996 and Pochman, 1994).

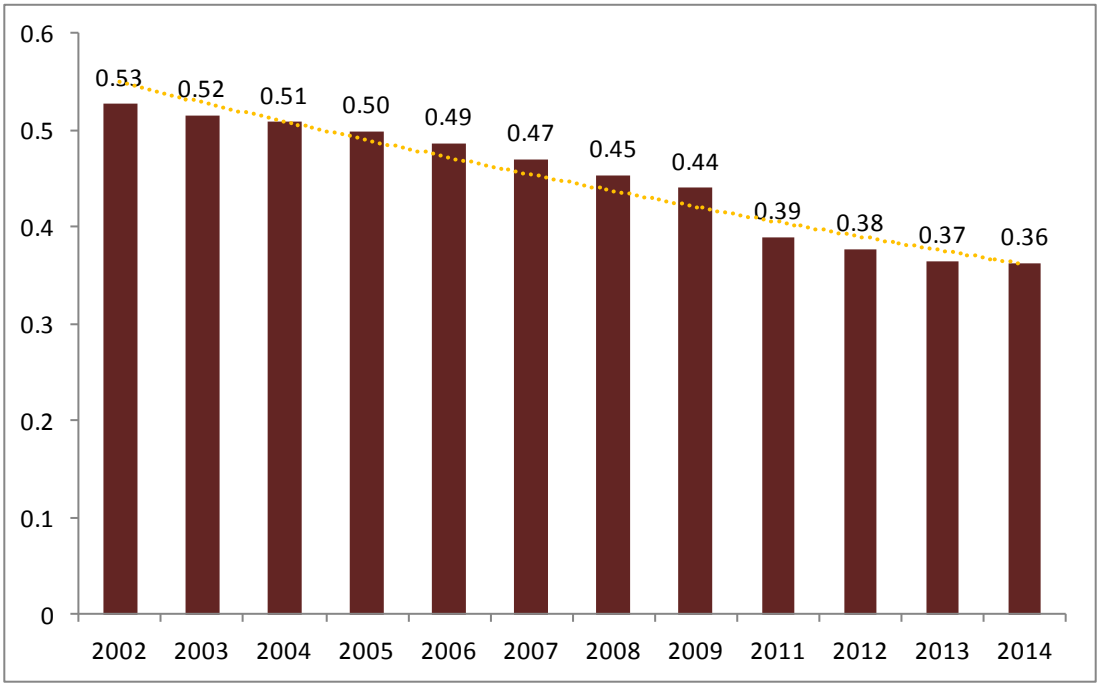
(unregistered domestic work, mostly), blacks, youngsters and older workers, low-schooling workers (up to 10 years of schooling), those living in non-metropolitan areas, those in the poorer Northeastern and Northern regions of the country, in the lower productivity economic activities (agriculture, construction and some service sectors) (Barbosa Filho and Veloso 2016) and largely workers in the private sector as opposed to the public one (Alejo et al., 2015), informality (workers without a contract plus the self-employed) substantially declined in all of these different groups. But high schooling gave an advantage to some workers, adding a composition effect to the level one (Ulyssea et al. 2016).

Henceforth in this chapter, unless otherwise noted, informality will refer to workers without social security coverage. Under this definition, informality dropped over the last decade from 52.7% to 36.3%, between 2002 and 2014 (See Graph 1). Although in absolute terms every sector but construction underwent a reduction in the number of informally employed workers with industry taking the lead, in relative terms it declined in all of them. In Agriculture, from 88.5% to 76,9%, in Construction from 70.7% to 55.5%, in the Services sector from 43,4% to 28,9%, and in Industry from 35.6% to 21.9% (Graph 2).

Still, it is the Services sector that concentrates informality (and inside it, distributive and personal services concentrate the bulk of it) to the extent that it is the employment leader (65% in 2014): in 2014, 52% of all informal jobs were in that sector (distributive and personal account for 83% of this share). And since employment has increased in it over the last decade, from 59% to 65%, its share in informal jobs has increased as well, from 49% to 52%. The same happened, though to a smaller extent, with employment in Construction, which increased its participation in overall employment (from 7.4% to 9.4%) and informal employment (from 10% to 14%). Industry and Agriculture witnessed the inverse trend: lesser participation in employment and informal employment.

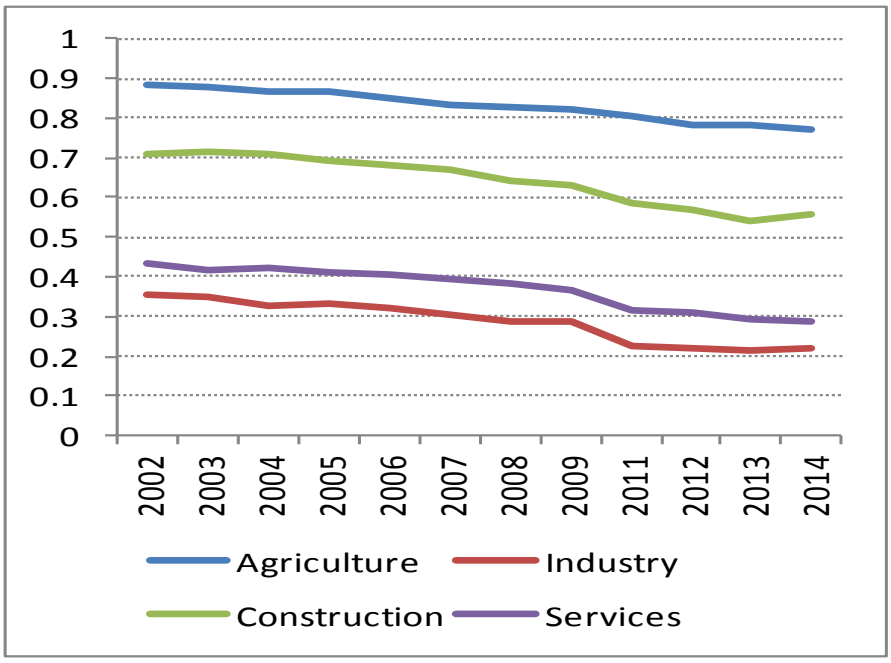
Between 2002 and 2014, formalization was characterized by a hike in the situations of self-employment (a variation of 138%) and workers without a contract (a variation of 135%), both with social security, but also in jobs with a contract (a variation of 66%). Domestic workers, a category traditionally deprived of legal contracts, saw a 28% increase in the numbers of those now with contracts and social protection.

Graph 1: Informal Employment Participation in Total Employment (%): Brazil - 2002 to 2014



Source: Microdata PNAD 2002 to 2014, IBGE.

Graph 2: Informality in each sector



Source: Microdata PNAD 2002 to 2014, IBGE.

It turns out that, over the last decade, social protection coverage has been dissociated from legal contracts thanks to legislation innovation that facilitated the contribution of individual workers to social insurance, even in informal units of production or inside households in the case of domestic workers. Thus, these workers were guaranteed access to usual items of social protection, e.g. old-age pensions, maternity leave, work accident and health insurance.[9] The lack of a legal contract, however, still deprives them from access to full-blown labor rights under Brazilian labor law (including legal work hours, paid vacations, a 13th monthly wage (akin to a Christmas bonus), overtime, access to the resolutions of collective agreements and the unemployment insurance system).

Thus, to get a better grasp of the quality of the recent formalization process, it might be useful to decompose the reduction of informality into two different dynamics: the expansion of legal contracts, which include access to social insurance *and* labor rights (or "full-blown formalization"), and the expansion of access to social security, albeit without a legal contract (or "second-best formalization"). In fact, both dynamics were important but the larger variation was in the direction of full-blown formalization. This was true of every economic sector, except Agriculture, whose reduction of informality relied more on second-best formalization. In the services sector, whose level of informality declined from 43% to 29%, full-blown formalization increased from 47% to 56%, and the second-best one from 10% to 15%.

The systematic investigation of the causes of recent formalization in Brazil records the positive impact of economic activity (Corseuil and Foguel 2016), the average size of firms (Corseuil et al. 2015), the expansion of export firms (Moura et al. 2016), but, above all, an array of institutional measures. These include fiscal simplification (the SuperSimples and the Micro-entrepreneur program, the "MEI"; Alejo et al. 2015, Corseuil et al. 2016, Sojo 2016), access to credit of public banks (Machado e Parreira 2016), expansion of credit for workers and small enterprises (Alejo et al. op.cit.), the law of domestic servants (idem), stricter regulation of tertiarization (idem), larger social spending (Saboia 2015), increasingly effective oversight and labor justice (Corseuil et al. 2016, Alejo et al. 2015), and new jobs in the public sector to discharge the new state functions (Alejo et al. op.cit.). Also, increases in the bargaining power of workers and changes in work supply are mentioned, such as the reduction of economic activity and expansion of school enrollment of youngsters (some governmental programs such as the Bolsa Familia Program may have helped as well), and decrease in the population growth rate (Alejo et al. 2015).

The impact of formalization on other social and economic achievements is noteworthy. The most outstanding is on wage inequality. A decomposition exercise has estimated this effect to be greater than those of other cleavages, such as localization, sector segmentation, or schooling, between 1999-2012 (Alejo et a. 2015). The total effect of -3.2 pp of Gini was decomposed into the "formalization" (change in the share of those occupied who contribute to the social insurance) and "formalization premium" effects (change in wage differentials between informal and formal workers), both contributing to de-concentration of wage income but the formalization effect dominating (-3.0 pp). In the case of education,

[9] Individual contributions to social security were also allowed for unpaid domestic work, work for self-consumption and young students.

reduction of education premia was not of a sufficient magnitude to compensate for the concentration effect of increased years of schooling.

Also in the wake of formalization, working poverty, here defined as those earning less than the statutory minimum wage, reduced substantially, from 26% to 20% between 2002 and 2014, even with the valorization of the minimum. Finally, formalization has been associated with greater productivity (Barbosa Filho e Veloso 2016b): 87% of the increase in aggregate work-productivity between 2000 and 2009 was estimated to be due to workforce displacement from low productivity informal sectors to formal, more productive ones.

3. The connection with structural change: service sector employment

Globally, the service sector has been the main generator of new jobs (OECD 2015). While manufacturing has been losing positions in the shares of both value added and, more so, of employment, the shift to services that had begun in the 1960s in the advanced economies started to spread to less developed ones in the 1980s. This, however, happened at a lower manufacturing share of the GDP and per capita GDP than in the advanced economies. Nowadays, the sector accounts for three quarters of all employment in the developed world and already two thirds in the emerging economies of the G20 group. And rising.

The service economy soared partially as a consequence of businesses and families deciding to not self-serve anymore (Esping-Andersen 1999). Thus, externalization of industrial services, in the wake of decentralization of firms, increasing specialization and international competition, in the 1970s and 1980s, and household services, following increasing female economic participation starting in the 1970s (Elfring 1989, Esping-Andersen 1999), stimulated an array of heterogeneous activities that would initially employ low-skilled female and youth work and later incorporate prime-age workers as well.

But also, the sector developed rapidly as a result of new needs coming with increasing per capita incomes and income elasticities of the demand (e.g., for arts, entertainment, recreation). Mass consumption, mass education, mass transportation in the 1960s and 1970s, globalization in the 1980s, but also an ageing population with new demands in terms of health and social care were additional forces shaping developments of the sector in directions such as distribution of commodities, people and information, and social services. On the supply side, differential productivity levels between the service and the industrial sectors would complement the demand-side explanation for the increasing share of services employment, implying that at least some services seem not amenable to standardization and "industrialization". There is even a question as to whether they should be so, for, as Jean Fourastié remarked (apud Elfring 1989), low productivity in the service sector plus the shift in demand towards services may be one of the greatest hopes for employment in the contemporary era.

This highly heterogeneous sector is usually subdivided into four subsectors (and an array of activities within each of them) -- productive, distributive, social and personal – where the social concentrates up to 40% of the sectorial employment, followed mainly by the distributive and the productive. The productive is the fastest growing in terms of both value added and employment generation. Together with the social, it absorbs the highly skilled workers, so that the shift to services has increased the premium to formal education (OECD 2000).

The sectoral mix varies among developed countries suggesting also that other factors are at play, such as institutional settings (the size of the welfare state, employment protection legislation, union density, collective bargaining coverage, statutory minimum wages) in addition to the distribution of workers' characteristics in each country, such as age, gender and skills (OECD 2001).

In advanced economies, three clusters are easily identifiable: Anglo-Saxon countries, with a greater emphasis on the productive but larger share of the personal; the Nordic countries, with a greater share of social and smaller of the personal; and the Continental European countries, which follow close behind the Nordic, but with lesser emphasis on social services. These reflect cluster-specific welfare systems in terms of the mix of provision by states, markets and families, the Anglo-Saxons are characterized by stress on market services, whereas the Nordic, by leaning on large welfare states (see Table 2).

The sectoral mix is different for emerging economies and countries in the LAC area, where distributive services jobs predominate largely, and personal services are much more important than productive ones in terms of employment opportunities. The outstanding exception seems to be urban China, where productive services already absorb16% of the services employment while social services have the bulk of it, with over 55%.

A question haunting this jobs engine refers to quality. However, according to an OECD report (OECD 2001), in comparison with the goods-producing sector, the services sector pays higher average earnings, has no worse working conditions or level of job satisfaction (actually, job satisfaction seems to be low across the board, OECD 2001), displays a skill mix similar to the manufacturing sector (also Eichengreen and Gupta op.cit.) and, perhaps more surprisingly, has generated more jobs in the high-end than in the low-end of it as employment has risen faster in the well-paying productive and social services segments. So, the remaining problem seems to be dualism: the services sector concentrates the "lion's share of low-paid and high-paid jobs", leaving the middle quite empty (OECD 2001).

Table 2: Employment by service subsectors and country clusters (%)

Country	Productive	Distributive	Social	Personal
The Anglo-Saxons				
Australia	19.3%	31.9%	35.7%	13.0%
Ireland	19.9%	31.5%	35.4%	13.2%
New Zealand	21.2%	33.5%	34.3%	10.9%
United Kingdom	21.7%	28.7%	39.0%	10.6%
United States	23.2%	28.3%	36.8%	11.8%
Mean	22.7%	28.6%	37.0%	11.7%
The Nordic				
Denmark	16.6%	30.2%	44.7%	8.5%
Finland	19.7%	30.9%	40.2%	9.3%
Norway	17.1%	30.1%	46.0%	6.8%
Sweden	21.4%	27.7%	43.2%	7.7%
Mean	19.1%	29.3%	43.6%	8.0%
Continental Europe				
Austria	19.7%	33.7%	35.2%	11.4%
France	19.5%	28.8%	42.8%	8.8%
Germany	20.5%	32.3%	38.8%	8.4%
Netherlands	22.0%	30.6%	39.2%	8.1%
Switzerland	25.4%	28.7%	37.1%	8.8%
Mean	20.6%	30.8%	39.9%	8.7%
The LAC				
Argentina	13.8%	36.2%	31.9%	18.1%
Costa Rica	17.9%	38.7%	23.8%	19.5%
Cuba	5.1%	24.9%	55.6%	14.4%
Mexico	11.1%	45.3%	22.5%	21.1%
Peru	10.1%	49.1%	21.8%	18.9%
Uruguay	13.5%	36.7%	28.6%	21.3%
Mean	11.2%	43.0%	25.9%	19.8%
Emerging Economies				
China	15.5%	22.5%	55.5%	6.5%
South Africa	5.9%	37.0%	33.6%	23.5%
Brazil	13.8%	37.3%	25.4%	23.5%
Mean	14.2%	29.9%	40.8%	15.1%

Source: Own elaboration from ILO data 2015 and microdata from PNAD/IBGE, for Brazil. Data regarding 2013 for Australia, New Zealand, Costa Rica, Mexico, Peru, Uruguay and Korea. Data regarding 2011 for China. Data regarding 2010 for Cuba and the United States. Data regarding 2014 for the other countries.

When we turn to Brazil, the improvement of labor market indicators, including formalization, was concomitant with the growing economic importance of services. In line with the international trend, the services sector has consistently been the Brazilian economy jobs engine, and second only to construction in terms of job variation (36% versus 59%). Overall, the sector accounts for 65% of all jobs, up from 59% in 2002. Also following international trends, agricultural and industrial jobs have steadily been declining, the former from 18% to 12% and the latter from 15% to 13%, so that services are not only the gateway

for newcomers to the work world but also a destination for those who left less job-dynamic areas (see Table 3).

Of course the question is to what extent the new jobs offered quality employment . Although construction was the other significant source of new jobs, the absolute numbers of those that are informal increased by 25% (even if formalization increased in the sector as a whole, as the growth in the numbers of formal workers outweighed that of the informal ones) (see Graph 2). In any case, services contribution was much more relevant, creating 16 million jobs, four times those generated by the growth in construction.

It turns out that the level of formalization of services sector employment was impressive, above that of all the other sectors in absolute numbers; inside the sector, bad occupations such as domestic work underwent substantial declines (from 13% to 9.3% of the services sector jobs); social and distributive services underwent substantial reductions of informality.

Out of the four subsectors, it was the more recent high-value added but smaller productive subsector, usually identified as high-end services, that witnessed the biggest increase in employment (62% and 77% specifically in business and professional services), a feat that replicates international records. But in absolute terms, the greatest contribution came from the huge distributive sector (and from the wholesale and retail activities mostly), which in 2014 had 6 million more job posts than in 2002, though social services, coming second as the services sector jobs generator, had, in 2014, 4 million more (see Table 3).

When it comes to income, the average earnings of the services sector overcame that of all the others, except industry, whose average level was similar. Its variation over the decade (30%) however was somewhat below the average (38%), which was influenced by the better performances of both agriculture (62%) and construction (45%) (see Table 3). It was personal services that witnessed the largest positive variation, 50%, probably as a consequence of being the activity most sensitive to the variation of minimum wage (see Table 3).

Generally speaking, services jobs are more affected by the minimum wage than the others as the incidence of workers earning it is the highest (11.7% versus 9% in manufacturing, 7.5% in construction and 7.4% in agriculture). However, after manufacturing, services have the lowest level of working poverty (i.e. those earning less than the statutory minimum wage), around 15% (against 65% in agriculture, 16% in construction and 12% in industry). Overall, more than 73% of the workers in the services sector earn above the minimum wage (79% in industry, 76.5% in construction but 27.6% in agriculture) – ranging from 86% in the productive subsector to 63.6% in the personal one. It is nonetheless remarkable that though working poverty is concentrated in agriculture, the largest amount of the working poor is still in the services sector – 9 million people, half of whom work in personal services.

The personal, despite displaying the largest degree of informality (52%, in 2014) and the lowest average income, has witnessed substantial favorable changes on both counts. Productive and social services, on the other hand, had milder earnings improvements but still boast much higher average wages (twice the personal services average) and low informality levels (respectively, 17.6% and 9.8%).

An additional income measure of job quality is income dispersion. Traditional services sector dualism has been mitigated somewhat. Along with every other sector, the Gini

coefficient and the 90/10 ratio have declined consistently over the last decade, while P10 more than doubled in real terms from 2002 to 2014, especially in the low end services of the distributive and personal subsectors. Although services have the second biggest Gini (.48), after agriculture (.52), it underwent the second deepest decline (0.07 point), after industry (0.08 point), where the distributive subsector was responsible for most of the reduction and personal services followed suit. Industry and distributive services led the decline in the ratio 90/10, whereas personal still displayed the highest level (see Table 3).

Inside the services sector, distributive and personal, besides having lowest average earnings are the less unequal in Gini indices, but also have the lowest value of low (P10) and high (P90) pays, so that less inequality reflects levelling at low levels. Productive and social, on the other hand, are the more unequal but have the highest average earnings, P10 and P90 remunerations. In a comparison with manufacturing, social and productive services pay higher remunerations to workers at the low end.

Table 3: Several Indicators of Labor Market by Sectors: 2002 and 2014

	2002										2014									
	Total employment		Average Labor Income*	P90 Labor Income	P10 Labor Income	Gini	% Women in Employment	College Degree	%Youth Employment	Union Density	Total employment		Average Labor Income*	P90 Labor Income	P10 Labor Income	Gini	% Women in Employment	College Degree	%Youth Employment	Union Density
	N	%									N	%								
Total Distributive	**16.73**	**37%**	**1,319.49**	**2,739.27**	**210.71**	**0.51**	**31.65**	**4.47**	**29.91**	**13.75**	**22.63**	**37%**	**1,598.9**	**3,000.00**	**500.00**	**0.43**	**35.35**	**7.72**	**24.14**	**13.17**
Retail and Wholesale Trade	13.10	78%	1,232.00	1,200.00	80.00	0.52	37.37	4.45	32.05	10.56	17.34	77%	1,514.8	3,000.00	400.00	0.43	41.91	7.81	27.25	10.98
Transport	3.17	19%	1,585.40	1,500.00	200.00	0.45	7.83	3.14	20.15	25.04	4.68	21%	1,831.7	3,000.00	724.00	0.38	11.21	5.32	12.51	20.01
Communications	0.46	3%	1,985.20	1,900.00	280.00	0.48	32.88	14.44	36.33	26.58	0.61	3%	2,206.0	5,000.00	724.00	0.44	34.01	23.43	24.84	23.13
Total Productive	**5.19**	**12%**	**2,238.82**	**5,267.82**	**421.43**	**0.55**	**36.45**	**22.27**	**26.16**	**23.75**	**8.40**	**14%**	**2,562.8**	**5,000.00**	**724.00**	**0.50**	**43.51**	**31.41**	**22.26**	**19.64**
business professional services	3.41	66%	2,115.30	2,500.00	200.00	0.55	35.49	22.49	27.90	19.55	6.03	72%	2,432.0	5,000.00	724.00	0.50	43.27	30.75	23.35	17.28
financial services	0.75	14%	3,479.00	3,500.00	300.00	0.49	46.65	36.54	26.65	44.81	1.06	13%	3,757.3	8,000.00	815.00	0.48	51.33	50.32	24.52	35.75
insurance services	0.23	4%	2,457.80	2,500.00	250.00	0.47	48.37	24.02	23.29	27.18	0.23	3%	3,155.1	8,000.00	800.00	0.48	57.62	32.14	19.75	23.17
real estate services	0.80	15%	1,557.20	1,500.00	200.00	0.52	27.50	7.4	19.10	20.91	1.08	13%	1,997.4	4,000.00	724.00	0.44	34.17	16.40	14.50	16.25
Total Personal	**11.25**	**25%**	**706.52**	**1,264.27**	**126.43**	**0.48**	**74.69**	**1.88**	**27.0**	**4.96**	**14.27**	**23%**	**1,058.4**	**2,000.00**	**250.00**	**0.42**	**75.05**	**4.93**	**17.54**	**5.80**
hotels, restaurants and bars	2.80	25%	909.20	800.00	30.00	0.46	49.81	2.2	26.78	8.33	4.44	31%	1,186.6	2,000.00	300.00	0.39	57.70	4.29	23.98	8.95
Dom services, repair, barber, beauty, cleaning	7.34	65%	513.70	400.00	60.00	0.39	89.63	0.38	25.93	2.34	8.47	59%	830.5	1,500.00	200.00	0.36	89.56	2.16	12.80	3.32
recreation amusement	1.01	9%	1,532.10	1,800.00	100.00	0.55	37.87	11.78	34.45	14.52	1.17	8%	2,190.8	4,300.00	500.00	0.51	40.69	27.21	26.07	11.82
miscellanous personal services	0.11	1%	1,084.90	1,200.00	80.00	0.52	45.66	2.9	36.13	6.02	0.20	1%	1,400.9	3,000.00	400.00	0.41	45.58	5.42	26.08	5.32
Total Social	**11.47**	**26%**	**1,776.31**	**3,792.84**	**421.43**	**0.52**	**62.54**	**25.20**	**19.08**	**27.09**	**15.43**	**25%**	**2,373.0**	**5,000.00**	**724.00**	**0.48**	**64.72**	**39.85**	**13.69**	**24.88**
government proper - civil and military	3.86	34%	2,167.90	2,200.00	200.00	0.52	35.61	19.92	16.63	26.17	5.04	33%	2,923.2	6,300.00	724.00	0.50	42.34	31.95	13.48	23.26
health services	2.29	20%	2,111.30	2,100.00	200.00	0.55	74.94	28.41	20.45	29.54	3.85	25%	2,494.4	5,000.00	724.00	0.50	76.34	36.58	14.90	23.08
education services	4.30	37%	1,458.60	1,428.00	200.00	0.47	78.77	31.47	18.98	29.70	5.73	37%	1,967.8	4,000.00	724.00	0.41	76.28	51.50	12.91	28.99
miscellanous social services	1.02	9%	894.90	900.00	20.00	0.52	68.10	9.74	25.64	14.15	0.82	5%	1,251.2	2,500.00	200.00	0.40	67.04	22.23	14.69	14.51
Total Services	**44.65**	**100%**	**1,387.55**	**3,160.70**	**210.71**	**0.54**	**50.99**	**11.22**	**25.95**	**16.12**	**60.73**	**100%**	**1,800.1**	**3,500.00**	**450.00**	**0.48**	**53.27**	**18.51**	**19.67**	**15.31**
Agriculture	**13.91**	**18%**	**398.67**	**1,053.56**	**126.43**	**0.54**	**33.33**	**0.53**	**27.22**	**20.92**	**11.28**	**12%**	**646.7**	**2,000.00**	**160.00**	**0.51**	**31.81**	**1.85**	**16.70**	**27.62**
Industry	**11.03**	**15%**	**1,353.62**	**2,739.27**	**252.86**	**0.52**	**35.18**	**5.74**	**27.97**	**20.70**	**12.48**	**13%**	**1,735.0**	**3,000.00**	**600.00**	**0.44**	**36.12**	**9.75**	**21.91**	**20.35**
Construction	**5.54**	**7%**	**1,018.38**	**1,685.70**	**284.46**	**0.44**	**2.65**	**2.37**	**21.65**	**6.70**	**8.82**	**9%**	**1,478.0**	**2,500.00**	**500.00**	**0.37**	**3.28**	**3.47**	**18.75**	**7.60**

* R$ 2014, deflated by INPC/IBGE. 'N' in millions. Source: Microdata PNADs. ** other activities are not present in the table, but in 2002 they represent less than 0.3% in 2002 and 0.1% in 2014.

Table 4 below summarizes relative positions in terms of low pay and wage inequality of all the sectors, taking into account the noted strong heterogeneity inside the services sector. The first value in the parentheses refers to the income level at the first decile (i.e. of the monthly income in Brazilian "reais" of the person occupying this position in the distribution) and the second value refers to the Gini index of the sector/subsector, both in 2014. Distribution, personal and construction form a cluster of low inequality of low P10 income levels, while industry and the social make a group of low inequality with rather high levels of P10 income. This suggests that income dualism in the services sector is somehow mitigated by the presence of social services.

Table 4. Low pay (P10) and Gini indices of economic sectors: Brazil, 2014

	High inequality (Gini)	Low inequality (Gini)
High low-pay (R$)	Productive (724, .507)	Industry (600, .441) Social (724, .482)
Low low-pay (R$)	Agriculture (160, .517)	Distributive (500, .431) Personal (250, .423) Construction (500, .378)

Source: Microdata from PNAD 2014.

In terms of workers' characteristics, the presence of women calls attention: they predominate in the services sector as a whole, but with greater emphasis inside the social and personal (where they make up three quarters of the workforce); youth are not specially prevalent and their participation has been declining substantially not only in the services sectors but in every other sector as well; labor force schooling has been on the rise in Brazil, but the services sectors is where there is the smallest representation of low schooled workers (0-10), and declining, even considering its internal variation, while it shares with industry the largest proportion of 11-14 years of schooling but outpaces industry in terms of workers with some college or a college degree (its share is two times that of industry). In the latter case, the outstanding performance comes from the social (especially) and the productive subsectors. Overall, it is the services sector that concentrates the workforce with the highest years of schooling on average. As for participation of non-whites, while it corresponds on average to their participation in the population, non-whites are overrepresented in the personal and distributive services, while whites, in the social and, especially, the productive. It is also notable that employment of non-whites increased in all of the sectors.

Other aspects that might reflect the relative strength of employment institutions are union density, average hours worked per week (AHWPW), and the incidence of long working hours (over 48 hours a week). Union density is low in Brazil and has been declining, except in agriculture (from 21% to 27.6%) and, somewhat, in construction, but in any case not enough to compensate for the near stagnation in industry and in the services sector. In the

latter, already the less unionized sector (in line with much of the rest of the world), productive and social have suffered important declines whereas the personal has seen a surge but from a meagre base (from 4.9% to 5.8%). But social services workers still make up the highest unionized group, after agriculture, 25%. The figures seem to suggest that union density has not been a credible explanatory factor with regard to the employment improvements of late.

This notwithstanding, AHWPW have been declining in Brazil, varying from 34.2 hours in agriculture to 41.5 in industry, while services display the next to last shortest one, 39.5 hours. In addition, long work hours have abruptly dropped across the board, there being small variation among the sectors, from 18.2% in industry to 22.2% in services. But the distributive subsector still records the longest AHWPW (43 hours) and the greatest proportion of workers with long work hours (31.7%), followed by the personal, at a distance though (25%). The productive has greater share of workers in these conditions (16%) than the social services (9%). It may well be that this set of employment quality dimensions, however mediated by specific features of sectors and subsectors, has responded to the advance of registered work.

All in all, it seems that the surge in employment in the services sector in Brazil in the wake of the general improvement of the labor market did not detract from job quality. The jobs that were generated were mostly formal ones, paid the highest average earnings, which had been increasing in the last decade, displayed the second lowest degree of working poverty, after having experienced substantial reduction of it, and most of these achievements happened with greater intensity at the low ends of the sector, namely, the distributive and personal services. And although the second most unequal in terms of wage dispersion, the sector has seen inequality shrinking throughout the period considered. Moreover, in terms of indicators of presence and effectiveness of employment institutions, the sector as a whole though having the lowest level of union density (by the way, a reality in every other sector as well in Brazil) does display AWHPW near the economy's average and a share of workers in long work hours not much bigger than one might have expected, only the distributive subsector being over the average (21.4%).

Having in mind the international experience summarized earlier in this section, part of the investigation of job quality in the services sector should turn to the country's relative position in terms of the sectorial mix and trends within it.

Thus, as in some emerging economies, the distributive sector predominates as the biggest employer of services (24.4%) – this clearly contrasts with the predominance of social services in every cluster and countries in the advanced economies, but also in some emerging ones, such as Argentina and Uruguay, in the LA region, and China (Table 4). Moreover, this subsector's share climbed somewhat in the recent period. In it is the largest share of young workers considering all sectors. Secondly, personal services, also in line with other emergent economies, predominate over productive in a proportion of two jobs to one, even if its share shrank a little (15.3%, in 2014). Also, while in advanced economies it is food and lodging, in Brazil, it is the domestic services that predominate inside the personal (59.3% of its employment, in 2014). So, the worst performing subsectors are still in force. When it comes to productive services, though this has been the subsector with the fastest pace of employment growth in Brazil, not only has it recorded a meagre share in employment (9%, in

2014, for comparison, the same level of advanced economies' share back in 1985), but also its growth speed is well below that in advanced economies when this subsector began to take off during similar time spans in the 1960s, 1970s and 1980s (data in Elfring 1989, for 1960-1973, and 1973-1985). As for social services, the proportion of employment in it (16.5% in 2014) dropped somewhat, though not the absolute numbers. But, again, this runs counter to the development trajectory of advanced economies in their post-war takeoff.

To give a rough idea of missed strategic opportunities, it is useful to compare Brazil and advanced economies in terms of shares of employment in productive and social services, for the year 2014 (the "share gap"), as well as the respective employment growth rates in these subsectors in two different periods (the "variation gap"). As for the latter gap, the average growth speed between 1973 and 1985 in advanced economies is compared with that in Brazil between 2002 and 2014, as in 1985 advanced economies had a similar share of service employment as Brazil in 2014[10]. It turns out that the share gap hovers around 12 pp in the productive and over 21pp in the social, while the variation gap is 0.7pp in the productive and 4.7 pp in the social.

Again, the lack of emphasis on social and productive in favor of distributive and personal signals lack of strategy: these are employment intensive sectors with prime quality jobs in terms of insertion, earnings, income dispersion, and mitigated dualism (the social services in particular). In the productive dwells the core of the knowledge economy and tradable services; in the social, much of the human resources inputs for the latter to happen, including education and health services.

Inside the social sector, particularly, the biggest employers are education and health and they expanded employment in the period considered here, especially the health sector. The segmentation between public and private provision further discloses other strategic opportunities (data not shown here)[11]. Hence, though the biggest employer in social sectors was and still is public education, education, public and private, lost relative position while health gained substantially, and the private branch was and remains a more important employer within it.

Generally speaking, all of these activities' jobs, as in every other sector, saw improvements in terms of formalization, average earnings, Gini indices (except for public health), schooling, female and non-whites participation, low-pay and working poverty. But some differences are noticeable. To begin with, employment in the public sector is substantially more formalized, both in education and health, average earnings improvements were more intensely felt in the public (the lowest level is in private education), inequality is some 5 Gini percentage points smaller in the public sector, and working poverty is small as far as working poverty (half of the proportion in the private sector). Last but not least, union density is much more important in the public than in the private sector.

As for workers' characteristics, the share of those with at least some college education is bigger in public education than in private and more intense in private health care than in public. The prevalence of female workers is more a mark of public education (almost 80% of

[10] The data for the "share gap" is from Table 4, whereas that for the "variation gap" is from Elfring (1989), where the following countries were considered: France, the UK, the US, Japan, Sweden, Germany and the Netherlands.

[11] Data available with the authors.

the workers in this activity) than of private, whereas no noticeable difference seems to exist between public and private health care on that count (both around 76%). Also, non-white workers are more common in the public sector of education and health, and their participation has been on the increase.

In spite of overall advantages of the public sector when it comes to job quality in the educational and health care activities, the last decade does not exhibit a decisive bias towards the growth of these employment opportunities. Making up over half of the social services sector jobs, they have stayed put (in the case of public education) or had a still modest expansion (in the case of public health, considering that the private sector employs 26% more workers than the public) in view of the constitutional mandate of public health care provision.

4. Concluding remarks

The Brazilian labor market started to decelerate already in 2014 only to contract substantially in the following two years when a huge recession claimed 7.7% of the GDP. Although the causes of recession may be multiple -- a combination of international crises and the end of the commodity boom, economic cycle, domestic policy mismanagement, lack of a clear growth strategy, and political strife, still to be objectively assessed – its consequences are already affecting many of last decade's achievements.

Data from quarterly surveys (the PNAD Contínua, from IBGE, see Table 5 below) shows employment contracting in the last two quarters of 2015 and first quarter of 2016, amounting to 2% less employment than in the beginning of the 2015. The participation rate climbed during most of 2015 and the first quarter of 2016, reflecting loss of family income and engagement of new (and young) family members in the labor force. In the end, the consistent trajectory of diminishing unemployment rates was reversed in the beginning of 2015, reaching peak levels of 11% (24% for youngsters) in 2016. Labor earnings that had already stopped growing in 2014 began to fall in 2015, so much so that the first 2016 quarter registers a 3% decline in relation to the two previous years. Smaller earnings reflect in part the shift to less secure forms of occupation, as self-employment rose for the first time in twelve years, even while contributions to social security are still on the rise. Even if services sector employment has shown the greatest resilience, still generating employment opportunities when all of the others have been shrinking, signs of recovery in the near future are unclear.

In any case, this uncertainty about the future should not prevent us from briefly assessing the preceding golden years of the Brazilian labor market, in which formalization led by the services sector jobs growth was the hallmark, and identifying intervenient factors and remaining challenges. The evidence seems to suggest that it was not structural change per se but the way it was mediated by labor market policies that did the trick, as the 1990s had shown this sector's employment increasing in tandem with growing informality. But this cannot be the whole story.

Generally speaking, pre-distribution interventions are very important for generating economic returns with greater social equilibrium and thus, to some extent at least, precluding the need for extensive redistribution. In this sense, the Brazilian option has leaned towards regulatory policies (and also social transfers to the working poor, not discussed here) in detriment to service provision to upgrade the labor market. These policies were no doubt important to raise the floor both in terms of better pay and working conditions but also to price out of the market 'bad jobs' like domestic services. But more seems to be needed for the flourishing of the potential of the Brazilian labor market for providing good jobs and wellbeing. Thus far, the development of the services sector labor market indicates the need for a better balance that prioritizes employment in the high quality areas of productive and social services. The latter in addition to smoothing dualism is the potential source of inputs in the areas of education and health care (and also social care, not discussed here, but important for women's economic participation) for the general development of labor market and social welfare.

Moreover, it seems in any case important to keep the gains in terms of better insertion and social protection for those workers who for one reason or another end up being employed in the personal or distributive subsectors, for many, especially the youth, still an important gateway to the urban labor market. In addition, active labor market policies might enable them to move on to more attractive occupations. These, though critical, are undeveloped in the country.

Table 5: Labor Market Indicators: 2014-2016

Quarters	Unemployment Rate (%)	Unemployment Rate (%) - Youngsters *	Average Earnings**	Formality***	Informality
1º Quarter - 2014	7.2%	15.8%	1,976.00	64.3%	35.7%
2º Quarter - 2014	6.8%	15.3%	1,939.00	64.6%	35.4%
3º Quarter - 2014	6.8%	15.3%	1,940.00	64.7%	35.3%
4º Quarter - 2014	6.5%	14.1%	1,959.00	64.7%	35.3%
1º Quarter - 2015	7.9%	17.6%	1,975.00	64.9%	35.1%
2º Quarter - 2015	8.3%	18.6%	1,963.00	64.9%	35.1%
3º Quarter - 2015	8.9%	19.7%	1,937.00	64.6%	35.4%
4º Quarter - 2015	9.0%	19.4%	1,909.00	65.7%	34.3%
1º Quarter - 2016	10.9%	24.1%	1,914.00	65.7%	34.3%

Source: Data from SIDRA/IBGE. Own elaboration. Data refers to population aged 14+. *Youngsters are defined as population aged 18-24.** Earnings are defined as the average real monthly labor income in Reais for population aged 14+, R$ for February/2016. ***Defined as the population contributing to the pension scheme.

I think this paper is in good shape and only requires a routine copy edit in order to render it suitable for inclusion. The only suggestions I have are that in-text references are more extensively deployed in relevant sections (see comments in text) and that the Excel files for tables and charts are supplied.

Agreed. I have added minor comments about the insertion of explanations of why the minimum wage appreciation was important early on in the paper, and a definition of informality, also in the early stages of the text.

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