

INCOME AND MULTIDIMENSIONAL POVERTY INDEXES IN BRAZIL: IMPROVED ESTIMATES TO ANALYZE ROLE OF SOCIAL POLICIES FROM 1992 TO 2014¹

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Introduction

Several reports of international agencies, publications from the Brazilian Institute of Geography and Statistics (IBGE), the Institute for Applied Economic Research (IPEA), and studies conducted by different researchers in the country offer evidence that Brazil has undergone significant social changes during last twenty five years, and particularly in the period going from 2004 to 2014. During this interval, there has been a systematic and sustained poverty and food insecurity reduction, together with a decrease of social inequality, even in times of less favorable economic conditions, in some way being new facts in Brazilian social history. Nevertheless it is very true that these changes are still some way off in the historical perspective to identify its intensity and still too “burning” to be taken by present political passions from one side in a very drawing attention, or in the other with a highly critical eye, and thus denying their concrete effects. However, there is no way to avoid trusting in what many multilateral organizations – and this quoting supposedly less “Brazilian development movement” committed sources - have appointed regarding recent Brazilian experience in the field of social policies, even by those with which the government has a permanent critical dialogue⁴.

Such developments, a long way away from being the natural outcome of market forces or of international trade *commodity booms* during the years 2000, were consequence of deliberate efforts of public policies designed and adjusted throughout several years to achieve this target. The establishment of a mechanism of redistribution of benefits of GDP growth in real appreciation of minimum wage, stimulation of job creation and labor formalization,

¹ This discussion paper is based in Jannuzzi and Sousa (2016a), with attached additional bibliography and updates of income and multidimensional poverty indexes, and inequalities subsequently submitted.

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⁴ Such as for example the UNDP, by disclosing its Human Development Index. However this figure does not reflect effects of large part of social policies implemented in the last 12 years (JANNUZZI e SOUZA 2016b).

strengthening of universal social policies, creation and fast expansion of redistributive, compensatory and affirmative policies, and lastly, improvements in terms of management, inter-sectoral articulation and federal coordination federal of public policies were main driving forces that boosted social changes in many dimensions in the period.

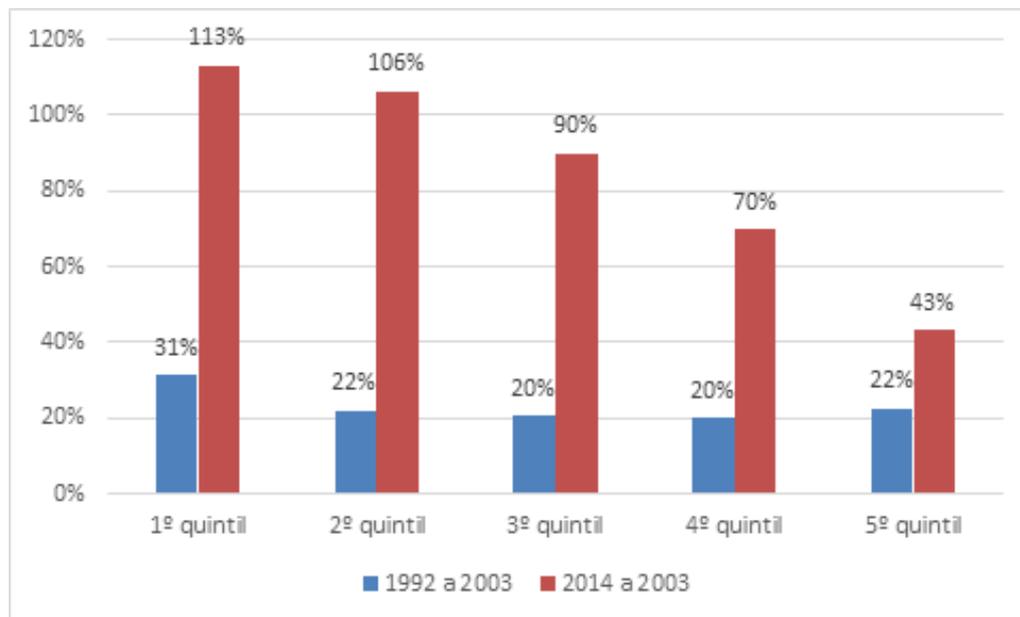
The purpose of this text is to bring empirical evidences of aspects of social change in Brazil between 1992 and 2014, and interpreting them as joint effects of a virtuous combination of political decisions in economic, social and institutional areas. The text is structured in three sections, besides Introduction and Final Considerations. In successive sections we will introduce: income poverty, inequalities and multidimensional poverty trends throughout already mentioned period. At the end, a statistics annex will introduce estimates set out in the graphs.

Evolution of Poverty and Extreme Poverty

As a result of economic decisions favoring investment and Brazilian domestic market after 2004, the strengthening of universal policies, the creation and expansion of social policies of redistributive nature and affirmative action policies, and lastly of the improvement of governance capacity and social program management, income of poorest population more than doubled between 2003 and 2014 (Chart 1). While during period between 1992 and 2003 per capita household income of 20pct poorest had a real increase of 31pct, in following eleven years expansion accounted for 113pct. As a matter of fact, during this last period, all groups of populations had a more significant increase than one verified in previous period. However, real increases were so much larger as smaller the income levels. In fact, the 20pct richest had a real increase of 43pct between 2003 and 2014; less than half of what households being in the group of 40pct poorest (1st and 2nd quintiles).

The substantial household yield rise among poorest population in last years had a natural impact in reducing Brazilian extreme poverty and poverty as from 2003, as already mentioned in Campello and Falcão (2014) when analyzing historical data series from 2001 to 2013 in the country. Taking as reference monitoring lines adopted to check effects of the Brazil without extreme poverty Plan of R\$ 70 *per capita* in June 2011, Brazilian extreme poverty population went from 13.5pct in 1992 to 8.2pct in 2003, reaching a 2.5pct level in 2014 (Chart 2). Poverty, measured as a share of population with *per capita* household income of up to R\$ 140, had a similar pattern of behavior: went from a high level of 31pct in 1992 to 23.6pct in 2003, and at end of period reached 7pct. It is worth mentioning that over time between 2004 to 2014, annual variations in interest rates almost always exceeded sampling errors that are subject to⁵.

Chart 1 – Real percentage change of per capita household income according to income quintiles per periods - Brazil, 1992 to 2014



1st quintile /2nd quintile/3rd quintile/4th quintile/5th quintile - 1992 to 2003 /2014 to 2003

Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: SAGI/MDS. Remarks: pensioners, household employees and their sons are not included. *Per capita* household income of households with no income or without income statement was considered according to methodologies of reclassification and allocation described in Technical Studies SAGI n. 5 and 6 of 2016. Incidence rate of PNAD samples from 1992 to 1999 have been aligned with the review of 2013 IBGE population projections, as described in Technical Study SAGI n. 4/2016. Income is related to data of September 2014, deflated by National Index for Consumer Prices (INPC).

Use of different data related with extreme poverty or poverty reveals similar trends, however with such levels as shown by Cepal (2015) or in IPEA databanks (Ipeadata) and the World Bank (Povcal project)⁶. Size of these figures are consistent with results of indicators of food security disclosed in a specific supplement of the 2013 PNAD, same as 2014 FAO indicators of prevalence of malnutrition and severe food insecurity of 2016 FAO project *Voices of Hungry*. As stated by Pinto et al. (2016), Brazilian severe food insecurity rates have been decreasing since they began being verified in 2004. They have reached a minimum level of 3.2pct in private homes in 2013. In case moderate food insecurity figures would be added, just to have an idea of total number of people that in last three months informed than in their homes there was some food restriction, then this level would rise to 7.8pct of households.

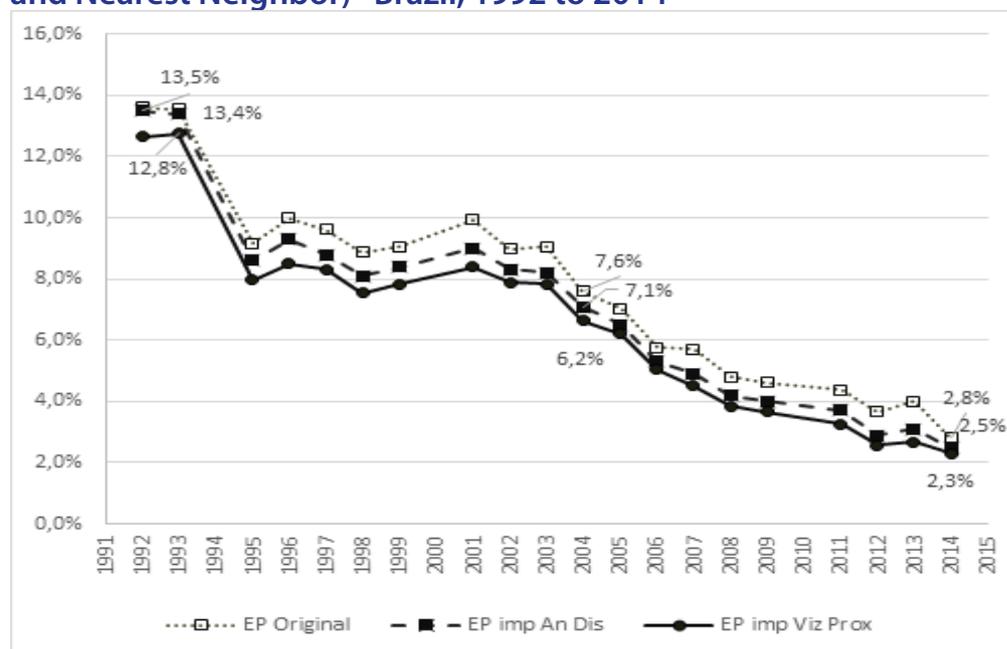
In case of adopting most improved estimates of these indicators for 2014, arising from a process of allocation of income of people with zero income and not declared in the PNAD, then extreme poverty would have reached 2.3pct and poverty 6.7pct of population. The household income allocation procedures (Discriminant Analysis or Nearest Neighbor techniques), described in Fonseca *et al* (2016) and Fonseca and Gonçalves (2016), are justified by large amount of people living in households with zero income or not declared

⁶ In this respect, see Brazilian poverty historical series at www.ipeadata.gov.br and <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>. For discussions about issues defining and updating several poverty lines, see Technical Study SAGI 08/2014, summarized in Jannuzzi et al (2014).

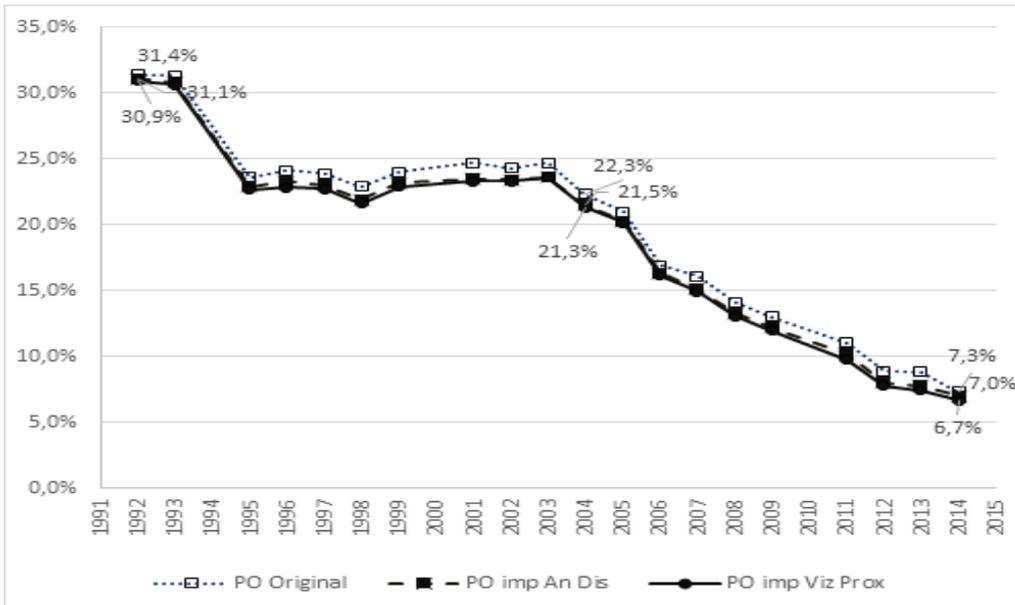
in PNAD – approximately 2.4 million and 10.8 million people in 2013 PNAD, respectively. As discussed in Jannuzzi *et al* (2014) when considering quantitative dimension and typical socio-economic profile of these segments, there will be an overestimation of extreme poverty and poverty rates, in case it will not be carried out methodological procedures to manage household income (by adding, in the numerator, people with zero income without profile or low income, and in the denominator, not considering households without declared income, whose average profile is likewise not a low income one)⁷.

In absolute figures, poverty and extreme poverty evolution seems even more amazing when compared to those of relative figures. After all, in twenty two years, extreme poverty population was reduced from 22 million to only 5 million; poor population went from 45 million to 15 million, at a faster pace from 2003 (Chart 3). Both in the period of 2004 to 2009 and 2009 to 2014, reduction in poor population reached around 40pct. Regarding extreme poverty population, reduction was also significant in both two sub-periods: 40pct and 33pct respectively. Such behavior cannot be explained only by the economic scenario, since due to employment growth slowing after 2008-2009 global crises, we could expect to see a less intense reduction of poverty and extreme poverty. However this is not what happened as we can see through evidences here shown.

Chart 2 – Percentage of extreme poverty and poverty evolution, according to different household income methodologies (original income and two methods of allocation: By Discriminant Analysis and Nearest Neighbor) – Brazil, 1992 to 2014



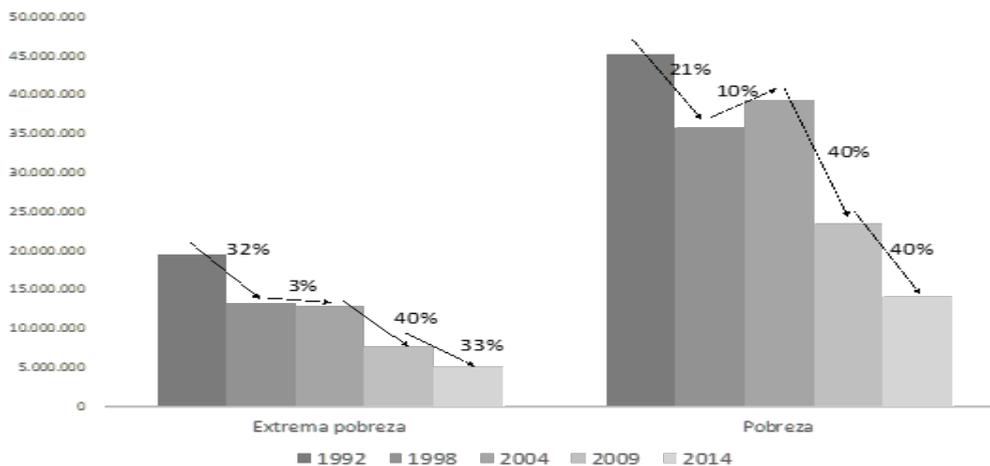
⁷ It is worth mentioning that in Chart 2 both poverty and extreme poverty rates have been recalculated from methodologies regarding households with zero income (Discriminant Analysis and Nearest Neighbor) and they show more consistent paths when indicator levels decrease. Please pay special attention to movements between 2013 and 2014 PNAD's, when income field data was particularly accurate. The SAGI 17/2014, 05/2016 and 06/2016 Technical Studies provide details on allocation methodologies used to mitigate the effects of households with zero income and no declaration in the research, affecting both poverty rates numerator and denominator. A brief summary can be found in Jannuzzi *et al* (2014).



Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: SAGI/MDS.

Poverty and extreme poverty were systematically reduced after 2004, and thus may be explained through a set of factors (Chart 1). In first place, we cannot avoid mentioning roles played by minimum wage, retirements, pensions and Continuous Cash Benefit Program (BPC) to expand average poorest population's household income, consequently leading to reduce poverty indexes. Furthermore, drop in unemployment rate and increase of formal labor are other two facts boosting higher average income.

Chart 3 – Variation in the number of extreme poverty and poverty people and relative variation in some selected years – Brazil, 1992 to 2014



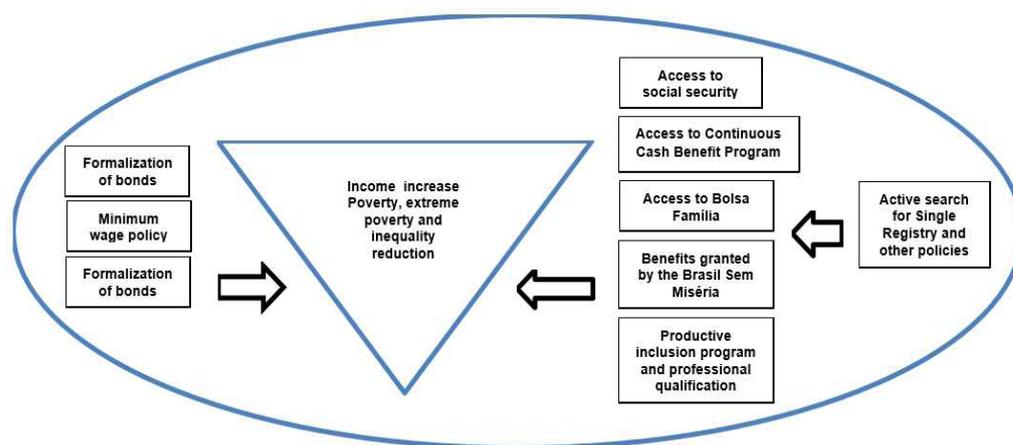
Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: SAGI/MDS.

While in other countries labor market performance was one of main factors driving to a reduction of poverty, in Brazil social programs - due to its design and focus, represented a significant contribution, as suggested in the study of Azevedo et al. (2013). Active search and increase of people benefited

by the Bolsa Família allowed withdrawing large number of people from poverty and extreme poverty conditions. At first, active search efforts to find population in more vulnerable situation on most remote locations of the country and outskirts of large cities helped identifying families for registration in the Single Registry (Cadastro Único) and therefore being eligible for the Bolsa Família program. In a second step, once registered as covered by the program, these families became entitled to receive expected benefits of the program. Last but not least, these families - like all other ones, got the right to collect a high average benefit, due to changes in the structure of benefits and creation of the Benefit to overcome extreme poverty (Benefício para superação da extrema pobreza), complementing income up to the line of extreme poverty (PAES-SOUSA and JANNUZZI, 2016).

However, if we cannot downplay importance of Bolsa Família program and minimum wage real increase policy due to its direct and indirect effects in the income of poorest segments of population in last thirteen years, we also cannot avoid mentioning access to other services and public programs such as encouraging agricultural production and National Program for Access to technical Education. This program allowed offering in more than four thousand municipalities, to more than 2.4 million people, the opportunity to do – for the majority of them for the first time – professional qualification courses which had a significant impact in their chances of getting onto formal labor market (SOUSA *et al.*, 2015).

Figure 1 – Proximate determinants of poverty and extreme poverty reduction in Brazil of 2003 to 2014



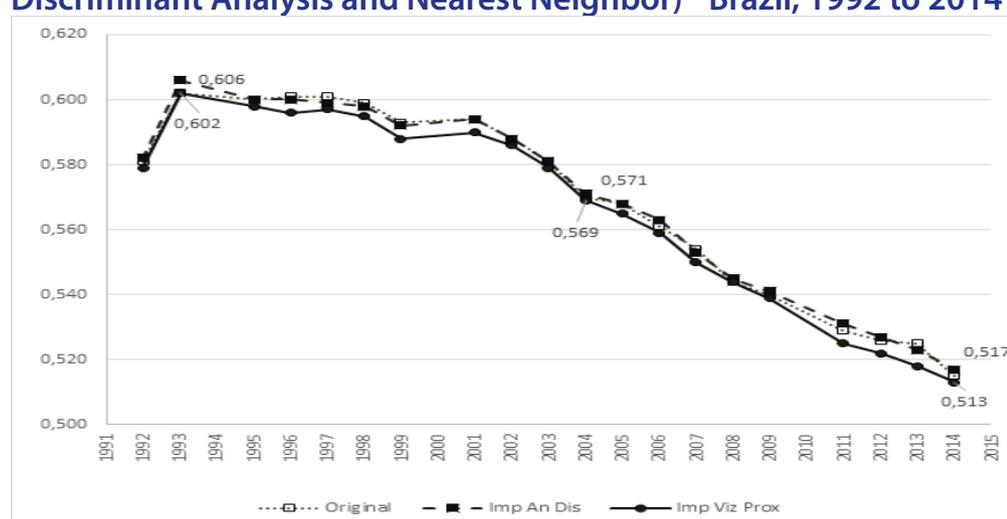
Income inequality development

These same factors and mechanisms which reduced poverty, also acted in reducing income inequality in general within the country and among poorest population (Chart 4). As expected, most expressive and systematic real income in poorest households led to an income distribution profile improvement, particularly from 2001. This behavior can be confirmed adopting a less

sensitive indicator to income transfers in the extremes of the socio-economic structure, such as Gini coefficient, going from 0.61 in 1993 to 0.59 in 2001 and 0.52 in 2014.

A more sensitive indicator to those changes, the Household income ratio between the 5pct richest and 5pct poorest, shows a most expressive drop: in 1992, *per capita* household income of 5pct richest was 141 times greater than the 5pct poorest; in 2004 this ratio was 25pct less (106 times); in 2014, due to persistent income upward trend among the poorest, the ratio fell even more, almost 30pct reaching 76 times.

Chart 4 –Per capita household income Gini Coefficient evolution, according to different household income methodologies (original income without any modification and two allocation methods: Discriminant Analysis and Nearest Neighbor)⁸ - Brazil, 1992 to 2014



Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: SAGI/MDS. Remarks: see notes of Chart 1.

Historically, this recent behavior of a systematic drop of inequality indicators is unprecedented, since from the 1960 Census, income data began being collected in household research by the Brazilian Institute of Geography and Statistics (IBGE), distribution profile only got worse. By international comparison, whichever indicator has been used, Brazilian distribution chart is still very worrying. Because it reflects, besides schooling and quality differentials of insertion in labor market between poorest and richest, inequality of assets, an issue not treated in this text.

Nevertheless these empirical evidences may influence improvement of household income distribution framework and also functional income distribution (MARQUETTI et al 2016) some researchers have questioned cited distribution progresses (LAVINAS 2013). It is the case of the paper Medeiros et al (2015) showing income concentration among the 10pct richest, based in data from Brazilian Federal Revenue, result that own authors suggest should be in-

⁸ It is worth stating that for the Gini Index, the historical series of household income attributed to rectify zero income problems and lack of declaration, seem to make more consistent the path of the indicator.

terpreted with caution. This simply because we cannot analyze inequality by just watching what was verified through payment of Income tax. After all, total number of income tax returns from individuals was 26.5 million in 2014, and 15.2 million of those had some tax due payable, a biased sample of total 105 million of economically active population.

Furthermore, progress in tax revenue management, supervision and control in Brazil definitely had an impact in expansion of contributor's base and reliability in payer's income tax return. Federal Revenue data states that in 2002, from 15 million of registrants, 5.5 million had tax due (nearly one third). In 2007 we see a high increase in number of registrants, going to 24 million - and tax payable individuals - 8.5 million. In 2014, as already mentioned, from a total of 26.5 million of registrants, 15.2 million had tax due (57pct of registrants). Even if one might argue that increase in number of income tax payers could be the result of correcting exemption ranges below average wages correction for the period, it can no longer be ignored that there was an increase of registrants, suggesting the possibility of an improvement of distribution profile. Indeed, number of women registrants went from 9.6 million to 11 million between 2007 and 2013, an increase of 15pct (while men accounted for 7pct). In the state of Piauí, number of registrants went from 158,000 to 206,000 in the period (30pct increase); in the state of São Paulo it went from 8.3 to 8.5 million (less than 3pct increase). Then, such a substantial higher number of women and individuals registrants of poorer regions would not be showing an improvement in income distribution profile?

We also must consider that Medeiros paper does not include an analysis of poorest population income evolution. Low income population began having real wage increases from strengthening of minimum wage, pension benefits and Bolsa Família, however this didn't make them eligible to become income tax payers. Also, this population gained access to a series of other goods and services which monetized, showed an even higher distribution progress. If monetary values would be allocated into goods and services which in other countries are not provided or subsidized, coverage improvement in Technical and Higher Education, Professional Qualification, household through the program Minha Casa Minha Vida (My home mi life), Social Tariff of electrical energy, would then certainly have had a strong repercussion in the distribution profile.

In fact, redistribution effects of these public goods and services are, in large extent, mentioned in Silveira *et al* (2011) paper, achieved with data from 2002/2003 and 2008/09 Household Expenditure Survey (POF). The authors analyze distribution effects - in Gini coefficient - of incorporating into household income government transfers (retirements, pensions, Continuous Cash Benefit, Bolsa Família), direct and indirect taxes, health and education public services, by allocating values to household income. In this analysis, redistribution effects of allocating indirect income provided by health and education public services are more intense than government transfers and direct taxes. As a matter of fact, when analyzing 2002/2003 Household Expenditure Survey

data, if it weren't for redistribution contribution of these services, progressive effects of transfers and direct taxes would almost be annulated by regressive indirect taxes. Due to the expansion of Bolsa Família, retirements and Continuous Cash Benefit coverage as stated in 2008/2009 Household Expenditure Survey (POF), government transfers have a more significant impact (than one mentioned in previous POF) on the distribution profile, which are not annulated by regressive indirect taxes in the country. We also are able to perceive that public services redistribution effects become even more intense than in the previous moment.

The provision of some data of this paper may clarify the dimension and direction of public services redistribution effects: the analysis with data from 2008/2008 POF shows that Gini index of original household income (work + rents + interest rate) drops from 0.634 to 0.586 when adding government transfers increases; to 0.571 when deducting direct taxes (showing some redistribution effect, however lower than one from transfers); increases to 0.598 when considering regressive effects of indirect taxes; and finally drops to 0.498 when allocating education and health public services average values to household income. In other words, most expressive part of distribution effects arising from well-being do not come from pension benefits, Bolsa Família or income tax relative progressivity, or from ownership of real estate and vehicles, but from access to universal public services. Therefore, the analysis of distribution profile only based in information on income arising from household research significantly underestimates (in almost 20pct considering Gini index) more general well-being inequality, where it is added access to public services and policies.

Evolution of Multidimensional Poverty

Social changes arising from enlargement of scope and scale of social policies, increase of minimum wage, the positive momentum of labor market and improvement of public policies management instruments, go much beyond income poverty and inequality, as we may see in studies compiled in Jannuzzi et al (2016); Campello, Silva and Costa (2014); Neri and Campello (2013) and in the set of evaluation research made by the Secretary for Evaluation and Information Management between 2013 and 2016⁹. Enlargement of the access to secondary, technical and superior education, improvement in primary education attainment, improvement in children's anthropometric indicators, fall in child mortality, decline in child labor, significant decrease of food insecurity food and lastly, improvement in poorest population well-being can be verified in several studies included in these publications.

This simultaneous "progress" in several social dimensions – or well-being improvement – among the poorest may be illustrated for assessment summa-

⁹ See Social development studies in debate Journal and books number 16 and 27, at www.mds.gov.br/sagi

ry by a poverty multidimensional poverty indicator (MPI): the MPI Cepal-Sagi¹⁰ seeming to be an indicator able to synthesize and exploit differences when diagnosing typical poverty situations still present in the country, in rural and urban areas, and also to check effects – and lack of them – of policies and social development strategies of overcoming poverty implemented in Brazil, and how economic situation and labor market reflect on most vulnerable population living standards. This indicator is a combination of focusing poverty as insufficient income and deprivation of basic social rights, using dimensions, criteria and weighting defined by Cepal, with small adjustment in implementation by National Household Sample Surveys (PNADs). Privations taken into account refer to adequate housing, access to basic infrastructure public services, to work and social protection and education (VAZ and JANNUZZI 2014).

Within this type we see four groups of multidimensional poor individuals (Figure 2) The Chronically poor (individuals with *per capita* household income under 140 reais per month and weighted average level of privation over 33pct) would account for 3.9 million people, according to 2014 PNAD data. The needy group – also with income under 140 reais per month, but with privation under 33pct – would account for 9.2 million people; the vulnerable – not poor regarding income, but highly vulnerable – would be 8.9 million people. The Transitory, with little economic return, but without any basic privation, would be less than 200,000 people. The not poor with some privation or limited access to goods, services or social programs are the wider number of people, with 120 million, followed by the non-poor, with 59 million.

Figure 2: Cepal-Sagi Multidimensional Poverty Indicator Proposal, its categories and estimated contingents in 2014, according to methodology by Jannuzzi and Sousa (206b)

Privation of access and income poverty		More than 33pct of privations of access to social rights, goods and/or services	Up to 33pct privations of access to rights, goods and/or services	Without privation of access to rights, goods and/or services
No income poor (with income over the line of poverty)		Vulnerable (8.9 million of people)	Not poor with some limitation (120 million)	Not Poor (59 million)
Income poor (with income under or in the line of poverty)		Chronically poor (3.9 million of people)	Needy (9.2 million of people)	Transitory (180,000 individuals)

Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: DM/SAGI/MDS Remarks: Exclusively residents – being pensioners - of permanent private homes, domestic workers and/or their children. The per capita household income of households without income or not declaring income was allocated according to hotdeck methodology described in Technical Study SAGI # 6 of 2016.

10 See Technical Study SAGI 13/2016 for discussion on uses (and abuses!) of Multidimensional Poverty Indicators (MPI) and its methodological aspects of construction.

The several types of multidimensional poverty pictured by indicator show significant higher drop along the years 2000 than in years 1990 (Chart 5). Chronically poor families with children in rural areas and small municipalities, with very low income and housing conditions and very precarious infrastructure, were 22pct in 1992, but this rate dropped to 2pct in 2014. The needy, a group of families with also low income, due to a vulnerable work insertion, but with higher access to urban services, since they live in middle size cities and metropolitan outskirts, had a level of almost 10pct in years 1990 and only began to decrease from 2004, reaching 4.6pct in 2014. The transitory are comparatively the smaller group. They live in better conditions and low income is a temporary situation, therefore not structural.

To conclude, vulnerable families in advanced life cycle stage, most of them collecting retirement pensions or Continuous Cash Benefit (and therefore, considered not poor regarding income), living in homes with poor clean water supply and sewage services, are becoming smaller since 1992 when accounted for 14pct of population. And in 2014 it was only 4pct.

We can also verify that even less dynamics economic situation from 2009 did not reduce falling trend of four types of multidimensional poverty. Only way of understanding such evolution is when considering minimum wage real appreciation policy synergic effects, labor market dynamics and social policies (granting income, access to education and urban infrastructure). After all, it was not only income what allowed significant number of people exceeding line of income poverty, but the access to programs, services and goods which brought them out from being trapped in long-term chronic multidimensional poverty.

A reasonable explanation offered by range of ways to reduce the four types of multidimensional poor people is shown below (Figure 3). Along the period from 1992 to 2014, poor families with children in rural areas and small municipalities had increasing access to education, and afterwards to Bolsa Família Program, access to drinking water through Cisterns and electricity through Luz para Todos Program. Without however overcome their needy condition, no longer they were chronically poor, due to low income and precarious status in labor market. Post 2004 economic recovery, job vacancies increase, formal labor and micro-credit, besides a higher urban infrastructure services offer and opportunities of accessing high school and universities (due to increase of vacancies in federal technical schools, public universities, the University to all program and the National Program of Access to Technical Education and Employment), switched a significant part of Needy to the condition of "Non-Poor with limitations".

The rural-urban migration also contributed to such movement, by allowing access to better conditions of infrastructure of public services, education, work and housing programs (such as Minha Casa Minha Vida). The ageing population is another demographic factor which may have helped to reduce chronically poverty population, since allowed low income elder people (and

without social security) beneficiaries of Bolsa Família, to claim being included in the Continuous Cash Benefit program or retirement plans. By including these families in these programs and because of real updating minimum wage in years 2000, they switched from the condition of Vulnerability into “Non-Poor with limitations”.

Of course this is one among several possible explanations, and ways of getting out of chronically poverty are not always as linear and one-way as suggested. There is therefore a vast field of qualitative and quantitative studies to be performed to know better social mobility mechanisms and the role of social policies and demographic processes.

Figure 3: A possible way out to chronically poverty, the role of social programs and labor Market dynamics

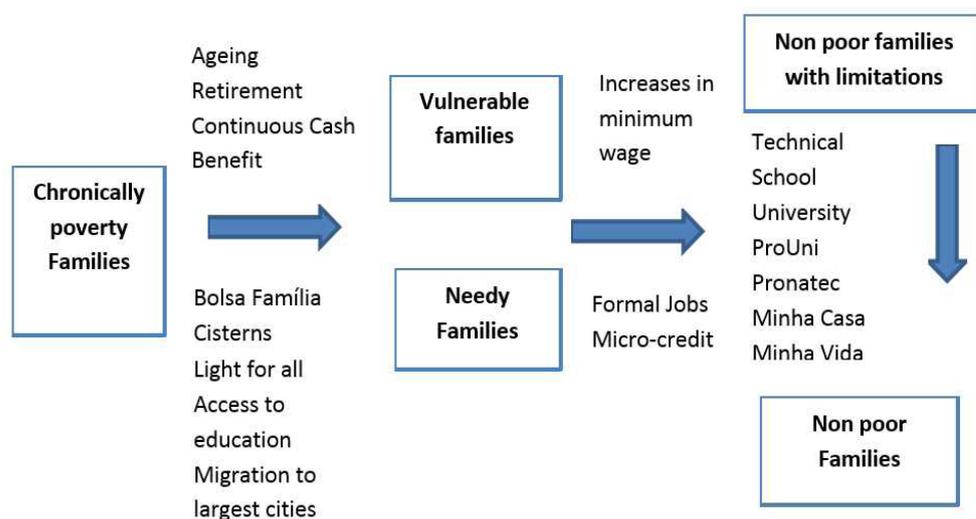
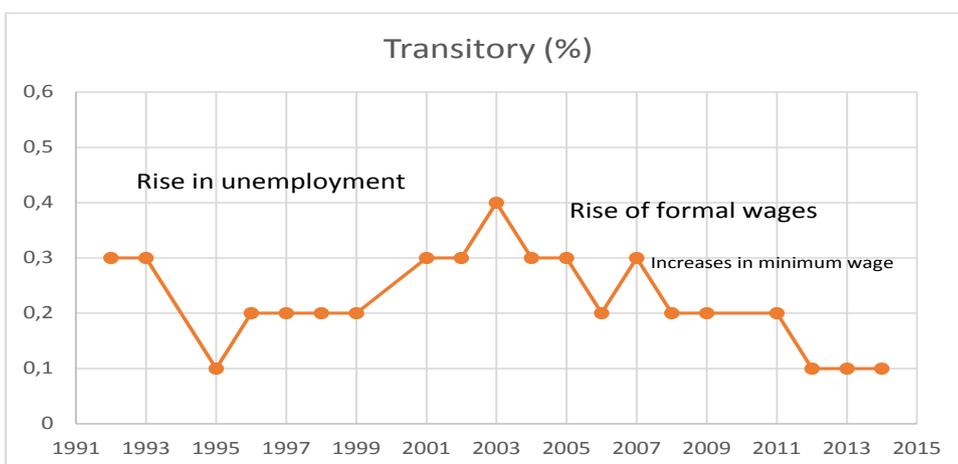
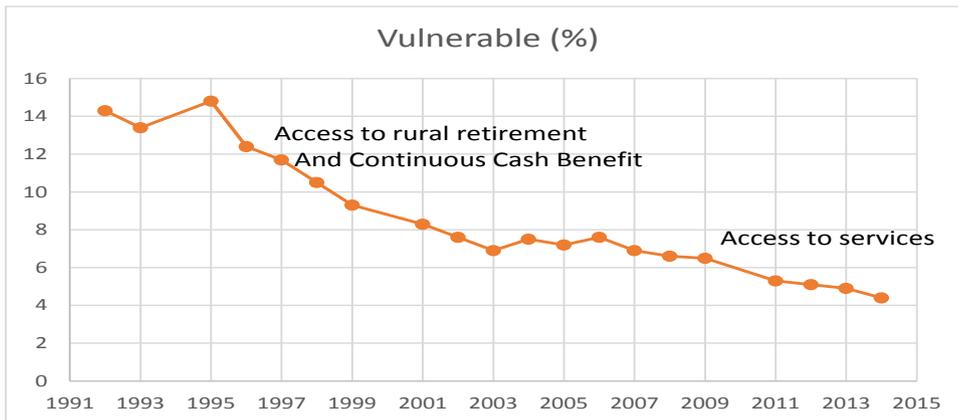
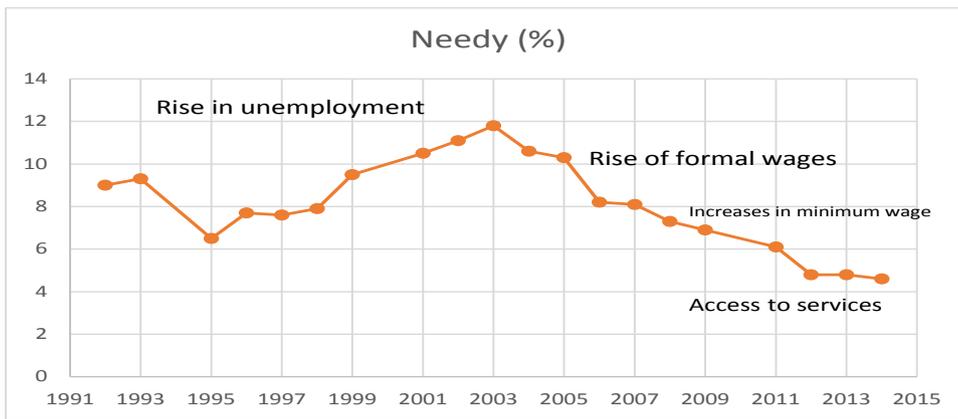
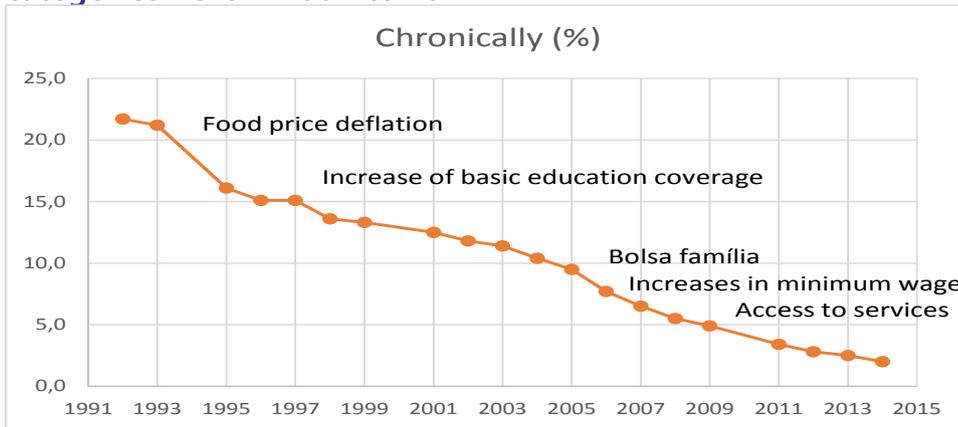


Chart 5: Multidimensional Poverty Evolution, according to its categories – Brazil 1992 to 2014

INCOME AND MULTIDIMENSIONAL POVERTY INDEXES IN BRAZIL: IMPROVED ESTIMATES TO ANALYZE ROLE OF SOCIAL POLICIES FROM 1992 TO 2014



Source: IBGE, National Household Sample Survey (PNAD). Based on micro-data: DM/SAGI/MDS.

In conclusion: Further research is needed to see the role of social policies.

The social indicators introduced in previous sections illustrate particularly attractive trends to build a more inclusive society, such as one proposed by 1988 Federal Constitution, strongly related to social policies implemented during last two decades. Even though the role social policies need to be more carefully investigated, it seems to be no doubts that it is quite evident their connection with social advances. This can be verified by using indicators which are more sensitive to implemented social policies, with adequate use of income collected in field research, records of poverty and extreme poverty indexes, and inclusion of well-being specific rates, such as a Gini Index simulation with values of public services or by checking multidimensional poverty indicators. This paper shows that development of new indicators is needed to understand social changes and effects of public policies in Brazil.

It was indeed the concern to deliver qualitative information and more specific quantitative indicators to monitoring and assess national efforts to reduce hunger, poverty and social inequality, what oriented the work of the Secretariat of Evaluation and Information Management (SAGI) since its creation in 2004, together with the Ministry of Social Development. Several researches were done, such as some registered in some issues of the series Folders of Studies of Social Development in Debate¹¹. To this end it is worth stating some works to be consulted to elaborate other studies on social changes in the country and social development policies role. For example, researches undertaken in partnership with the Brazilian Institute of Geography and Statistics (IBGE). These field researches, together with others made, are part of what is configured as Systemic Assessment of Policies to fight hunger and poverty (Table 1) dealing with different aspects about diagnose, implementation and results of social development policies (JANNUZZI 2016c).

Among researches made with the IBGE, the SAGI hired themed supplements in many structural researches between 2012 and 2015. In 2012, the Secretariat supported making the first Basic State Information Research of (Estadic) which studied aspects of the administrative structure of Social Assistance and Food Security in the 27 Brazilian Federation states. The following year, several aspects regarding implementation of the Unique System of Social Assistance (SUAS) were again verified in the states and in 5,570 Brazilian municipalities. The Basic Municipal Information Research (Munic) updated data from 2005 and 2009. In 2014, Estadic and Munic inserted supplements detailing Food Security Policies and institutional administrative structure, and also reported for first time actions and Urban and Rural Productive Inclusion programs in states and municipalities. This is an unprecedented diagnose to design more integrated public interventions in this programming area.

¹¹ See in particular issues 5, 14, 16 and 27, with fact-sheets about more than 170 researches done between 2004 and 2016, available at the site of the Secretariat (www.mds.gov.br/sagi), channel ISSUU (https://issuu.com/sagi_mds) or by e-mail to (paulo.jannuzzi@ibge.gov.br)

The partnership with IBGE extended for last three years to develop several inserts of subjects and supplements in annual issues of the National Household Sample Survey (PNAD). In 2013 another information gathering was made on Food Security such as previous made in 2004 and 2009. In 2014 tests and specific thematic questionnaires were applied to update effects of scale-up and scope of actions to improve professional qualification in the country and productive inclusion, in joint cooperation with the Ministry of Education (MEC). In the same year, another two supplements were collected: one unpublished, assessing coverage and focus of the Single Registry of Social Programs of the Federal Government (Single Registry) and another one on Social Mobility, to collect information about children, besides heads of households and spouses. Finally, the SAGI proposed for last issue of PNAD a more detailed collect of information on access and permanence of children in crèches and other childcare facilities, through the supplement on "Early childhood".

These researches, as well as others related in Table 1, enable deepening research on social advances and arising and consolidation of social development policies in the three government spheres. The commitment of this paper is to prove that social changes shown by several indicators and concretely lived by millions of Brazilian citizens would certainly have been different if there had not been a clear bet and political determination to grant real increase of the minimum wage; to allocate an increasing amount of funds to boost social policies coverage; to create and rapidly expand programs focused to overcome hunger and poverty situations in the country; and to rescue planning, management and public policies assessment capacities in the country. But these are hypotheses which may be studied with much greater analytical depth than the essay approach shown here.

Table 1: Main researches on systemic assessment focusing Brazilian Strategy to Combat Hunger and Poverty

Research or assessment study	Methodological Characteristics of the research	Systemic dimension investigated
National Household Sample Survey PNAD – Several years between 2003 to 2015	Sample survey in over 130,000 households in the whole country, made from Oct. to Nov. each year, with a multi-subject questionnaire and supplements.	Annual assessment of labor market dynamics conjugated effects, minimum wage and income transfers (Retirement, BPC and Bolsa Família) on poverty and extreme poverty, income and other social indicators for the 20pct poorest.
Supplement to access Social Programs from 2004 to 2006	Questions regarding government transfers, made preferentially to the responsible person of household.	Diagnose to rank low income target audience and social-demographic and regional characterization of target audience served by Program Bolsa Família, besides its coverage level.
Knowledge Supplement and Registration in 2014 Single Registry	Idem	Active search assessment strategy regarding vulnerable segments coverage, and target audience assisted by the Program Bolsa Família.
Productive Inclusion Subjects and 2014 Professional Qualification Supplement	Idem	Offer assessment strategy regarding Productive Inclusion Programs and Pronatec for Single Registry audience
Supplement 2014 Social Mobility	A 15-year-old person from the domicile chosen by draw, answered the questionnaire	Assessment of social effectiveness of Bolsa Família and other social programs (ProUni, quotas in public universities, Pronatec, etc.) in insertion and occupational mobility
Supplement 2004, 2009 and 2013 Insecurity Food	Questions regarding Insecurity Food Brazilian Scale, made preferentially to the responsible person of household.	Diagnose to rank population segments with moderate and severe insecurity food and social policies combined effects.
Assessment of the Impact of 2005 and 2009 Bolsa Família	Quasi-Experimental design survey, with a sample of 12,000 low income households in the country, being beneficiaries (or not) of Bolsa Família or registered (or not) in the Single Registry	Assessment of impacts arising to Bolsa Família in terms of food consumption, school education of children, vaccination coverage, care for pregnant women, labor market participation, female empowerment, etc.
2015 Single Registry Quality Research	Research of Qualitative sample of state and municipal agents involved in the Single Registry management and sample of households of registered persons with recent registration update	Management structure diagnose of state and municipal teams involved in Registry operation, and assessment of consistency of its variables, through comparison of registered administrative data and data collected during household survey.

Unluckily, we cannot end this paper without mentioning our concern regarding the effects of dismantling and disarticulating set of policies and institutionalities developed in last years, began during management of minister Joaquim Levy and deepened by Henrique Meirelles in the Temer Government, within a context of political instability due to its political opponents Aécio Neves-Aluísio Nunes, which were defeated in 2014 elections. After more than ten years of systematic drops rates of income or multidimensional poverty, of hunger and insecurity food and inequality – of income or access to goods and services- it is very likely that this framework could start reversing, due to breakdown of economic policy decisions virtuous arrangement, labor market evolution and social policies which were behind social advances during this period.

Setback risks in several dimensions of the well-being are very concrete. For sure, year 2016 will be remembered in Brazilian history as a time frame for studies regarding social, economic and policies facts to be performed in next decades. Breaks in the political-institutional and political-social environment are so expressive, that added to downturns in the economic situation, will only bring significant setbacks in several aspects of Brazilian social reality, particularly those regarding poverty and inequality.

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INCOME AND MULTIDIMENSIONAL
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