

# New Trends for the Economic Development of the Northeast

## ABSTRACT:

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This paper compares the performance of some selected economic activities in the Northeast with the whole country and analyzes characteristics of the increasing formalization of the region's labor market. The main data source used is the PNADs (National Research by Household Sample), whose micro-data were organized and manipulated to provide the information about the desired data. Data from the IBGE industrial researches were also used. Basically, the method of analysis consists in comparing the evolution of some product and employment indicators in the Northeast region with the national average. Subsequently, we assessed the main changes in the income and occupation structures in the Northeast region for the period up to 2008. The study concludes that the grounds have been laid for the installation of sustained economic development in the region. We further warn, however, about the need to maintain this pace of development of the national economy and that the Brazilian government should continue to consider regional issues. We also warn about the uncertainties regarding the continual domestic growth rate in the face of international instability and the risk of deindustrialization. Still, our results admit the outlook for improved regional income distribution in Brazil.

## KEY WORDS:

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Regional Distribution of Income. Northeast Brazil. Employment Formalization.

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# 1– INTRODUCTION<sup>1</sup>

The process of heavy industrialization<sup>2</sup> in Brazil reinforced various aspects associated to the inequality that characterized the Brazilian society. Anibal Pinto, one of the founders of the line of thought of the Economic Commission for Latin America and the Caribbean (Cepal), defined Latin America's economic development as a movement of remarkable "structural heterogeneity"<sup>3</sup> that reflected in high sectorial, individual and regional income concentration.

The development of the Brazilian industrial structure based on sectors of capital goods and of durable consumer goods of high unit value (whose main example is the car industry) was concentrated in the Southeast of the country, especially in the state of São Paulo, where the leading process of heavy industrialization was installed.

The industrial concentration in São Paulo reaches its peak in the first half of the 1970s, reason for which one of the main goals of the II National Development Plan (II PND), implemented in Geisel's (1974-1979) period in

office, was indeed the reduction of regional inequalities in Brazil. The investment contributions generated by the development of the II PND favored the peripheral regions of the country but failed to reverse the notable individual concentration of labour income and the deterioration of the functional distribution of income<sup>4</sup>.

In the 80s and 90s the Brazilian economy showed a mediocre growth, a rupture in the growth trajectory observed in previous decades, when there had also been a significant advance in the process of structuring the national labor market<sup>5</sup>. In the 80s and 90s, the relative weight of São Paulo continued to fall, though not virtuously once the greater participation of the peripheral regions in the national income occurred in its major part through the transfer of activities in the wealthiest regions to the poorer regions. From the standpoint of individual income distribution, the 80s again experienced a period of deterioration, but now, in worst circumstances compared to the 60s and 70s<sup>6</sup> once in the 80s the average income was nearly stagnated. In the major regions of the country the work income (individual income) distribution too was even more strongly concentrated than in previous decades. In the 90s, the process of deterioration of the distribution profile maintained its course<sup>7</sup> in a context of weak economic growth and decline in industrial employment.

1 A more modest version of the present study was presented at the XV Economic Regional Meeting, promoted by the National Association of Post- graduation Studies in Economics (Anpec) and by the Banco do Nordeste do Brazil, in Fortaleza (CE), on 19 and 20 July, 2010. I would also like to thank the anonymous reviewers who suggested changes to the original version of this paper and writing tips that resulted in this improved version. As usual, I exempt them from any inconsistency that may have remained in this work.

2 We understand heavy industrialization as that initiated in the second half of the 50s, when Brazil's productive structure definitely installed the production sector of capital goods (DI, according to Kalecki's terminology), exceeding the previous industrializing period, which is acknowledged in the literature on the Brazilian economic development as restricted industrialization (1933-1955). As of 1955 the sector of machinery and equipment (DI) is installed in Brazil (Goal-setting Plan) and from then on the capitalist dynamics is solely in the hands of its own contradictions; i.e., it is dependent on calculation done by the capitalist, who seeks to compare the cost of the equipment to be bought in the domestic market with the expected revenues derived from its use – i.e., from sales of goods produced with the equipment.

3 On the various aspects that describe the concept of structural heterogeneity in Latin America, coined in the mid-50s when the first effects of the process of industrialization in progress in many countries in Latin America became visible, Pinto (1976) postulates that in Latin America industrialization occurred in the monopolist stage of the capitalist development and, therefore, required high initial capital for the installation of industrial sectors. These new sectors represented a significant advance in what regards to technical progress, opposed to what occurred in the industrialization process of central countries, which took place at a slower pace and in another historical moment.

4 On the debate on changes in the income distributive profile in the period see Langoni (1973), who defends the economic policy of the military government; see also his critics in articles gathered in a book organized by Tolipan and Tinnelli (1975).

5 The structuring of the labor market is understood as the process of transformation in labor relations marked by the increased relative weight of the formal salaried work (registered work) in the whole of occupations. The registered work guarantees that the workers enjoy social and labor rights defined by law. For illustration and analysis of the structuring of the Brazilian labor market during the country's industrialization process, see Pochmann (1999).

6 As part of the debate of cepaline tradition on the process of economic development of Latin American countries, the heterogeneity of the occupational structure (and of the distributive profile) represents one of the distinct characteristics of these countries' underdevelopment. In the countries or regions of more intense industrialization, the relative weight of informality was weaker but there was still strong heterogeneity in regard to occupational opportunities created with the industrialization process. To follow the debate, see: Bravo (1979); Pinto (1979) and Souza (1980), among others.

7 On the conditionant factors and deterioration of the income distributive profile in the 1990s, see Dedecca (2003) and Dedecca (2005).

## 2 – HISTORICAL PERSPECTIVE OF THE BRAZILIAN REGIONAL ISSUE: BRIEF COMMENTS

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In the early 21st century, specifically as from 2004, however, the labor market suffered major transformation expressed in the increased weight of registered employment on the country's occupational structure, i.e., the process of formalization of the Brazilian labor market was resumed (CARDOSO JR., 2007), reversing the trajectory of growing informalization of the national labor market that had taken place in the 1980s and 1990s. Recent data reveal that the trajectory towards greater formalization of the labor force has had more emphasis in the North and Northeast regions of the country.

Previous data also suggest improved distribution of labor income, mainly in the Northeast. The regional Gini indexes as well as the profile of income appropriation per occupational strata also suggest improved distributive profile in the Northeastern region.

Besides this brief introduction, the present paper has two sections. In the first section, we intend to bring to the surface the most general aspects of the debate on the country's regional inequality along the last decades. In the second and most important part, we intend in the first place to evaluate the recent evolution of the Northeastern income participation in the national income, highlighting some selected activity sectors. After that, we intend to gather data that shows the increased evolution of the formalization of the Northeastern labor market in the 2003-2008 period was yet higher than that observed for the national average. Following that, we intend to characterize the nature of the process of structuring the Northeastern labor market, qualifying it according to sectorial and occupational aspects as well as to income strata. In our final considerations, we seek to draw the attention to the singular historical moment the Northeastern labor market is experiencing (reflecting the region's recent economic transformation) and also warn about the challenges and needs the Brazilian State (and its elaboration of the economic policy) faces in order to enable the less wealthy regions in the country, the Northeast in particular, to indeed increase their participation in the national economy in the current scenario of economic growth of the country as a whole and of the strengthening of its domestic market.

The Brazilian regional issues date back to the colonial period, during which an integrated national market was inexistent and only a set of primary-exporting regional economies based on slave labor could be seen. The growth dynamics depended on the external market and the economic relations between regions were very tenuous (if not, in many cases, totally inexistent) (FURTADO, 1967).

It was only following the abolition of slavery and the consequent development of the truly capitalist forms of economy that the issue of "regional disparity" enters the debate on the economic development of the country. The issue, resulting from strong regional concentration of income and wealth derives from the fact that (for historical reasons widely discussed in the literature on the theme<sup>8</sup>) from the beginning the country's industrialization was concentrated in São Paulo<sup>9</sup>, leading to what Cano (1977, p. 12) called "a relationship of strong predominance of the São Paulo economic complex over the other regions of Brazil, to great extent imposing upon them a 'center-periphery' commercial relationship".

As from the 1950s, however, with the installation of the heavy industry in Brazil, the debate on the regional issue came to life and became part of the concerns of the country's public policies<sup>10</sup>. As Araújo (1995) reminds us, from that point on the accumulation of capital in the country promoted its economic

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8 See among others: Furtado (1967); Cano (1977); Cano (1985) and Cano (2008).

9 According to Cano (1977), the origins of the industrial concentration in São Paulo date back to the early 20th century, when the coffee activity in São Paulo started developing capitalists productive relations, configuring an "internal market" that thrived around the so-called coffee complex, i.e., a set of activities that extrapolated the mere plantation and harvest of the coffee fruit, including all the business that spun around it. Furtado (1967, p. 150), in chapter XXV of his classic "The Economic Formation of Brazil", highlights that "considered in its whole, the Brazilian economy seems to have reached a relatively high growth rate in the second half of the 19th century. Being foreign trade the dynamic sector in the system, and its behavior is the key to this stage's growth process". For further details see: Cano (1977) and Furtado (1967).

10 Anyhow, it is interesting to remind, as did Guimarães Neto (1986), that the Brazilian State, since as soon as the 1930s, sought to promote the integration of the national market through the elimination of trade barriers between regions.

integration, articulating the Northeastern (and other region's) economic dynamics with the dynamics of the heart of the country; i.e., the Northeast was no longer "isolated" from the nation's capitalist accumulation center. The greater integration among regions, however, failed to reverse the strong inequality between them. On the contrary, in some stages of the country's industrial development one could see increased inequality stemmed from productive differences between the activity sectors installed in each part of the national territory.

As the industrial concentration grew stronger in São Paulo, the poverty affecting a great part of the Northeastern population became increasingly evident, intensifying the debate on the issue of regional disparity in the late 1950s and early 1960s, in a context of rapid urbanization and intense inter-regional migration. The maturity of this debate originated, in 1959, the constitution of the Working Group for Development of the Northeast (GTDN), which became reference in the regional debate having been decisive for the foundation of the Northeast Development Superintendence (Sudene) (FURTADO, 1985). The GTDN proposed structural changes in the Northeastern economy seeking to integrate and develop it through the expansion of capitalist relations of production (SOUSA, 2010).

Among such changes was undoubtedly the land reform. The debate initiated by the GTDN, however, was cut short with the ascendance of the military regime, installed in 1964. Notwithstanding, as from the 1970s, specifically as of the implementation of the II PND<sup>11</sup>, in Geisel's period in office (1974-1979), the economic policy designers explicitly acknowledged the need to face the matter of regional disparity (though proposing and implementing policies and methods quite different from those projected by the GTDN).

One the major objectives of the II PND was the integration of the Brazilian industrial structure and for such strategies were defined and investments were determined, of state-owned companies also, for the

increase in production of intermediate goods and the strengthening of the capital goods production segment. The increased production of intermediate goods would become the Plan's most successful part and would become what specifically produced the most positive effects on the reduction of regional disparity. The Plan's intention to boost the production of intermediate goods depended on the abundance of natural resources that were spread across the diverse vast areas of the national territory, notably in peripheral regions. That strategy was relatively well-succeeded and the reduction of regional disparity was also boosted by the expansion of the agricultural border<sup>12</sup> and by public and private investments in the communication and transportation sectors.

The maturity of the projects executed by the II PND was felt along the 1980s, when there was increased participation of the peripheral regions in the national income, notably due to the increase of industrialized products in those regions. The promotion of industrial investments during the execution of the II PND as well as the expansion of agricultural and cattle-raising activities and mineral mining activities were responsible for the expansion of correlated activities in the trade and services sectors in the peripheral regions, fostering an important process of regional de-concentration of income in peripheral regions, perceptible in as early as the second half of the 1970s and favored by the context of growing average income in the national economy.

As from the 1980s, however, the Brazilian economy lost its dynamism and disarticulated that virtuous pattern of regional economic de-concentration. Nevertheless, data indicate a continual reduction of weight of the São Paulo participation in the national income although from that moment on justified by the economic crisis, notably impacting preferably industrial investments (generally the first to be affected in times of recession). Therefore, the increased relative weight of the income of peripheral regions along the 1980s represented, in fact, a combined-effect of the reduction of relative weight of the São Paulo income on

11 The robust economic growth during the so-called "Brazilian Miracle" (1967-1973) ended up boosting the regional income concentration in such way that it was precisely in the first half of the 1970s that the participation of São Paulo in the national industrial production reached its peak.

12 Pacheco (1998) highlights that in the 1970s the growth pattern of agriculture and cattle raising production was based much more on the expansion of the cultivated area than on consistent productivity gains, a situation that promoted the economic growth of peripheral regions across the national territory.

the national income in a context of de-acceleration of the Brazilian economy – affecting especially industrial activities, which were (and are still) concentrated in São Paulo (GUIMARÃES NETO, 1986).

Hence, we can highlight another of the harming effects of the loss of dynamism of the national economy in the Brazil of the 1980s: the reverse of the virtuous process of regional de-concentration of income that had taken place along the 1970s.

In the 1990s, when the industrial development model in effect in the country since the 30s (supported upon federal intervention in favor of industrial development) was definitely abandoned, a new locational pattern of economic activity was adopted based on processes of productive and administrative restructuring of companies in a scenario of open trade, exchange rate valorization, high interest rates and fast technological changes that entail strong reduction of labor force and rationalization of production processes. In this scenario of technological changes and new perspectives on economic policies and views of national State performance, based on processes of market liberalization, new conditionant factors were also defined for attracting investments (exiguous investments, as can be perceived from the disappointing results of the gross fixed capital formation in the decade, on average). Among the new conditionant factors, we highlight the need for new transportation systems and, mainly, communications systems based on information technologies that would enable more flexibility of industrial production and new possibilities for the organization of the production chain. Equally, the need for proximity between centers of excellence for research and new technologies determined business decisions regarding the allocation of investments – notably more and more selective due to the internal market's low dynamism in the 90s.

Within this perspective of new locational patterns of investment, we see consolidated what Diniz (1993) calls polygonal development in Brazil, which is different from both the process of regional de-concentration induced by the State, in the late 1970s, and the process of acute concentration observed in the 1950s and 1960s and, still, in the early 1970s. For Diniz (1993, p. 38), the data available in the early 1990s indicated that

the economic activities had been concentrated since at least the mid-1980s around an enormous polygons around the state of São Paulo, including a vast region encompassing “from central Minas Gerais to the Northeast of Rio Grande do Sul”.

Diniz (1993) highlights that the reduction of relative weight of the state of São Paulo in the national economy did not reduce its importance in the definition of new directions of the regional distribution of income once the São Paulo Metropolitan Region would still be directing the business community's locational decisions. Diniz (1993) draws attention to the emergence of certain agglomeration diseconomies in the São Paulo Metropolitan Region and creation of agglomeration economies in other regions where the weight of industrial and urban activities was significant and free of the problems pertinent to the São Paulo Metropolitan Region. In other words, in the 90s there was certain concentrated de-concentration of income once the participation of nearby regions increased in the national income as the state of São Paulo continued with reduced participation. Transportation and communication infrastructure as well as centers for research on new technologies typical of the so-called third industrial revolution was decisive for the allocation of new investments in the 1990s.

It is thus important to note that based on the Regional Counting by IBGE, the participation of the state of São Paulo in the national income was 37.8% in 1989, falling to 30.9% in 2004. The (1989-2004) period was marked by such insignificant economic growth that the increased relative weight of the peripheral states on the national income was attributed much more to the fact that the economic scenario of that period affected the São Paulo economic activity in a more deleterious manner than that of other states; i.e., the de-concentration, manifested by the regional distribution indicators, in national income did not result from the virtuous movement of great investments in those regions of minor participation in the national income.

One must bear in mind that during this period important structural changes were made in the State's performance in regard to economic policies, notably in the sense of promoting commercial and financial opening that, besides not leading to the

recuperation of the investment rates in the economy, caused the disarticulation of the industrial activity, the most affected by the liberal measures adopted and thus reflected especially in the state in which the industrial activity was mostly concentrated. It suffices to highlight that when compared the effects on the labor market of the (ephemeral) economic recovery of the 1994-1995 biennium to the recession of the early 1990s (1990-1992), affected by the also brief recovery of the 1985-1986 period (in relation to the previous recession of the Brazilian economy, i.e., 1981-1983) it becomes evident that the ascendant trajectory of the activity level resumed in the mid-90s failed to recuperate the industrial jobs that had been lost in the recession period of the Collor Plan (1990-1992), contrasting with what had occurred shortly prior to and in the year of implementation of the Cruzado Plan, when the recovery of the economy recuperated and surpassed the industrial employment level that had been eliminated in the recession that initiated the 1980s, as reminds Baltar (1996).

The trade opening in the early 1990s and the lack of an effective industrial policy coupled with exchange rate valorization, notably following the adoption of the Real Plan, had a significant impact on the industrial productive chain, generating discontinuity in various sectors in the face of increased weight of intermediate goods on the import agenda (BALTAR, 1996). Lastly, it is important to stress that one of the forms in which companies reacted to the adverse economic conjuncture of the 90s<sup>13</sup> was resorting to programs

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13 The 1990s, as already mentioned, was marked by disappointing economic development and declining investment rates, which in itself represented a negative context for industrial activities. However, some specific points shall be noted. In the first place, the decade started out with great recession of the domestic market (fall of 4.4% of the GDP in 1990, only 1% recovery in 1991 and new fall of 0.5% in 1992), when in the same period developed countries also faced tremendous recession, which limited (for many companies) the alternative to compensate domestic sales drops with increased exports. The opening of the economy coinciding with the beginning of the decade was intensified following the adoption of the Real Plan, which also promoted accentuated exchange rate valorization resulting in increased challenges for domestic production. The analysis of the entire decade allows us to generalize the statement described the concrete conditions for international competition as quite disadvantageous for companies in the domestic market, which had to face valorized exchange rate, high interests, credit retraction, lack of an industrial policy and a fomentation bank – National Development Bank (BNDES) – concerned with only with promoting privatizations. For further views on these themes, see: Cano (2008); Filgueiras (2006) and Dedecca (2005, 2003).

for productive and organizational restructuring, which invariably entailed employment reduction and great effort to obtain “marginally” productive gains through the intensification of work. Such reality impacted especially the most industrialized regions leading to the reduced participation in the national income<sup>14</sup> by the state of São Paulo and others of industrial activities of relatively high weight, like Minas Gerais and Rio Grande do Sul.

It is important to bear in mind that the adoption of the neoliberal ideas for the national State’s performance in the 90s had a negative impact on the design of regional policies – neglected in favor of the valorization of the “more competitive” regions of the country in regard to attracting investments, as reminds Sousa (2010). In fact, Sousa (2010) and other authors<sup>15</sup> stress about the 90s that the competition for investments is increasingly grounded on the “tax war” between the states of the federation and some municipalities, what ended up leading to a deleterious effect on public accounts besides not representing a form of sustained and articulated attraction of the investment volume required for the reduction of the regional disparity across the country. Worst still, since the 1980s – especially during the 1990s –, the evolution of the neoliberal hegemony brought with it national income growth below the historical Brazilian average. Movements identified in some studies on the reduction of the São Paulo participation in the GDP and of some states’ participation in the national income in the 90s have mere statistical effects and stem much more from the fact that the more industrialized regions are more strongly affected by recessive policies. Hence, eventual increase in the participation of peripheral regions in the national income in a context of stagnation or decline should not be regarded as auspicious once it does not represent results originated from structural changes to the spacial distribution of the country’s economic activity.

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14 Besides the cited reduced relative participation of the state of São Paulo in the national income, we can also recall that between 1995 and 2004 the participation of the state of Rio Grande do Sul in the national income dropped from 8.3% to 8.1%, and that of Minas Gerais from 9.7% to 9.4%.

15 Pacheco (1998) and Cano (2008), although through different viewpoints, methodology and approaches, also highlight the issues stemming from the “tax war” between the states along the 1990s.

More recently, the debate on Brazil's economic development gains new breath thanks to the outlook for recovered economic growth with the discovery of pre-salt oil fields and investments in infrastructure correlated (or not) with these oil fields and with other forms of energetic development, a theme that also sets an agenda for debate on economic growth. Furthermore, the recent formalization of the nation's labor market as well as the effects of policies for income transfer, notably in the peripheral regions of the country where these effects are more evident, also foster a new discussion on the issue of income distribution, including the regional income distribution in the face of the accentuated regional asymmetries characteristic of the country's economy<sup>16</sup>. Moreover, recent indicators reveal an important change in the labor market with the recovery of the trajectory of employment formalization reversing the process of informalization in place since the 1980s (IPEA, 2005).

Such progressive employment formalization shall be regarded as the fruits of sustained growth the Brazilian economy has been rehearsing since the economic policy of the Lula government adopted as from 2004 and intensified as from 2006. It represents a new attitude<sup>17</sup> that has enabled the Brazilian economy to benefit from the broadened international conjuncture with immediate effect over the level of employment. The recovery of the economic activity level, previously rehearsed in Lula's first period in office<sup>18</sup>, was posteriorly boosted in his second period through the national State's more expansionist fiscal action, broadened structuring social policies and credit expansion – factors that contributed to fostering a significant increase in the generation of formal employment both in the industrial and third sector of the economy.

16 The wide range of recent issues on the Brazilian economic development is discussed in some articles gathered by Macambira and Carleial (2009).

17 In 2004 three major movements were started: credit expansion, expansion of income transferences to low income families and recovery of the minimum wage's absolute value. These elements were the pillars of the Lula government tax policy in his second period in office, when they, in fact, had greater emphasis than in his first term.

18 We can say that in 2006 a new attitude regarding the nation's economic policy was observed that gave this policy a more intense "developmental" nature (although totally apart from the neoliberal aspects in the definition of the economic policy), contrary to the previous period in which "neoliberal" views were predominant.

One of the results of such attitude in what concerns tax and credit policies was the growth of formal employment in the North and Northeast regions in a much more accelerated pace than the national average, probably due to the indirect effects of the expanded policies for income transfer on employment formalization (CARDOSO JR., 2007).

In the following section we intend to analyze the economic changes recently occurred in the Northeast, based on indicators of the evolution of regional participation in the total and sectorial national income as well as on indicators of labor market and income distribution.

### 3 – ANALYSIS OF RECENT RESULTS<sup>19</sup>

This section presents and discusses data that aim to investigate the evidence that the economy of the Northeast region may have demonstrated a better performance than the national average in recent years, be it a result of its increased relative participation in some selected economic activities be it through the trajectory of formalization and structuring of the regional labor market according to some traditional indicators. The selected economic activities are those directly or indirectly most affected by the development of industrial activities<sup>20</sup>.

19 With the exception of the first and the last, all the Tables in this section are based on data from the PNADs and account for the period up to 2008. We chose not to consider 2009 because it was seen as an atypical year due to the impact of the international crisis on the Brazilian labor market. Thus, the inclusion of such data could make it difficult for the interpretation of trends for changes in the occupational structure assessed in the study. Indicators pertinent to 2010 were also left out once there are no PNAD data that year because it is a (IBGE) Census year. The Census detailed results that could contribute to the present study were not yet available. In the end of this section, we chose to bring a Table based on the data of the Annual Industrial Research by IBGE. All Tables were conceived and elaborated by the authors, in their work in the Ipea Technical Advisory Board.

20 The literature on the theme of industrial development is prodigious in highlighting the effects of the expansion of the industrial activity over the other sectors of economic activity, stressing the entailing effects promoted on segments that generate higher aggregated value within the services and other activities of the third sector. Various authors dedicated to the theme of industrialization argue that productivity gains brought about by the expansion of the industrial activity generate demand for other sectors (inside and outside the industry), allowing for the creation of new activities and/or the expansion of the existing activities. See: Kaldor (1960); Cohen and Zysman (1987) and Cruz and Santos (2009).

**Table 1 – Participation of the Northeast Region in the Total Brazilian Income in Terms of Gross Added Value to Basic Prices per Selected Economic Activity 2004-2008**

Selected	Activities				
	2004	2005	2006	2007	2008
<b>Total</b>	<b>13.0</b>	<b>13.3</b>	<b>13.3</b>	<b>13.3</b>	<b>13.5</b>
Transformation Industry	8.7	9.2	9.2	8.8	8.9
Civil Construction	15.4	17.2	16.8	17.1	17.0
SIUP (*)	18.6	18.4	18.5	18.4	20.6
Maintenance and repair trade and services	13.5	14.2	13.8	14.4	14.5
Public Administration (**)	18.0	18.5	18.9	18.8	19.0

**Source:** Elaborated by the authors based on data from the IBGE (2010).

(\*) Refers to the production and distribution of gas and electricity, water, sewage and urban cleaning.

(\*\*) Includes education and public health and social security activities.

The first clear evidence of relative improvement of the Northeastern economy at national level is described by the information on the Regional Accounts, available up to 2008, as shown in Table 1. Aside from the Northeast's growing participation in Brazil's gross added value, between 2004 and 2008, there was also greater regional participation in some of the selected sectors<sup>21</sup>: public utility industrial services, trade activities, public administration and civil construction. At a lesser degree, it shall be highlighted the apparently modest<sup>22</sup> increase of the relative participation of the Northeast in the transformation industry in the added value per each activity in the whole of the Brazilian

economy. Such results seem especially auspicious when considered that in the 2004-2008 period, the Brazilian GDP had an ascendant trajectory (GDP and *per capita* GDP grew on average more than in the first four years of the century and significantly more than in the 1980s and 1990s); i.e., the participation of the Northeastern region in the Brazilian GDP and selected economic activities occurred in the context of dynamism of the Brazilian economy.

Aiming to qualify the differentiated performance of the Northeastern economy, as suggests the information in Table 1, the data describing the evolution of some indicators of the labor market in the major Brazilian regions in the 1998-2008 period are shown in Table 2. Based on information in Table 2, we intend to identify distinctive characteristics of the Northeastern economy *vis-à-vis* the other regions and the Brazilian economy as a whole.

Table 2 reveals the recent evolution, measured in terms of the annual average growth rate, of the occupied population per activity status and status in occupation for the major Brazilian regions between 1998 and 2008, also presenting data pertaining to 2003. When compared the evolution of the Northeast's economically active population (whether in the first or last year of the interval, i.e., 1998 and 2008 or in the sub-periods in which 2003 is included) with the same indicators for the other regions or the whole country, little can be perceived regarding a differentiated behavior of the Northeast

21 These activities characterized by the promotion of higher productivity gains for the whole of the economic activity (like civil construction, which enhances the infrastructure used by the business activities or those of public administration as the ones defined herein, which enhance the social infrastructure) or denoting the region's heated internal market, like the trade activities.

22 Anyhow, it is important to register that between 2002 and 2008, again according to the IBGE Regional Accounts, the Northeastern transformation industry grew 31.1%, while growing 22.8% in the whole of the country. The modest increase in participation, shown in Table 1, is due to the fact industrial production grew significantly in other regions and states. The dynamism of the Northeastern economy compared with the national growth can also be measured by the fact that in the same period some of the economic activities associated with the industrial development, like services rendered to companies and the financial sector activities grew above the national average – in the first case, 42.2% against 37.9% and in the second 51.7% against 46%. With reference to transportation (not highlighted in Table 1), the performance of the Northeastern economy again exceeded that of the national average: 29.4% against 21.8% in the same period. Lastly, it is also worth mentioning that the recent movement of the Northeastern transformation industry differs from what occurred in the 1990s, when the participation of such activities of the Northeastern economy suffered major falls in relation to the whole of the Brazilian economy, as shown by Cano (2008).

region. When establishing comparison of regional status in occupation, however, the excellence of the Northeastern behavior<sup>23</sup> becomes evident, notably when considered that in the same period there was an average annual growth of 5.4% in registered work in the region against 4.8% in the Brazilian average. In the recent years in question, i.e., between 2003 and 2008, these rates were even higher (6.3% and 5.8%, respectively), what reveals unseen behavior since the 1970s at national level and employment formalization in the Northeast region at an unprecedented pace, even in times of the so-called Brazilian Economic Miracle, whose success – expressed by labor market indicators – were concentrated on the Southeast region. In other words, in the recent trajectory of formalization of the Brazilian labor market (in which there is the inversion of a behavior of de-structuring of labor relations in Brazil that had been in place for a period of at least 20 years, as mentioned in the introduction herein) the formal labor behavior (registered work) in the Northeast was even more virtuous than at national level, drawing the experts' attention to this region's recent economic development.

Regarding the quality of insertion in the labor market, another contrast confirms the evident excellence of the recent behavior of the Northeastern economy. With reference to the trajectory of unpaid occupations, the data pertaining to the Northeast stands out once an average annual drop of around 4.2% was observed between 1998 and 2008 – quite expressive data and undoubtedly a greater rate than the 3.5% drop in the national average for same period. It is worth highlighting that in a more recent period (2003-2008), shown in Table 2, the annual average decline of this form of occupation was even higher (7.0% in the Northeast and 5.6% in Brazil as whole).

These data seem to reflect, on the one hand, an important structural change occurred in the Brazilian economic activity in the last decades – the reduction of the relative weight of agricultural activities, where the

major part of this form of occupation is concentrated; on the other hand, they also seem to express the expansion of programs for income transfer, notably those prior to the *Bolsa-familia* Program and that one in itself, whose scope was broadened precisely as from 2003.<sup>24</sup> It is important to stress that such phenomenon of reduced weight of the unpaid occupations occurred in all the major regions, except for the North, but the movement was more intense in the Northeast, maybe due to the fact that this region concentrates at the same time the greatest reduction in agricultural activities and the greatest incidence of the *Bolsa-familia* Program.<sup>25</sup>

Another precarious form of insertion in the labor market is the so-called self-occupation, or self-employment. These workers also suffered annual average reduction of 0.2% a year between 2003 and 2008 in the Northeast region (whereas there was an increase of around 0.3% in the national average in the same period) what leads to a trajectory of structuring of the Brazilian labor market and of the Northeastern market in particular. The Northeast specific indicator of self-employment was also more auspicious than the national average.

Considered these initial indicators, it is then necessary to analyze in detail the labor market behavior in the Northeastern region, which can represent the first step towards a new trend of the regional economic development in coming years. The data in Table 3 and Table 4 reveal greater evidence of the structuring of the Northeastern labor market in recent years.

<sup>23</sup> From the various points of view that corroborate the ones discussed hereon we could also highlight the exuberant development of the North and Mid-West regions in recent years; however, this study focuses exclusively in the Northeast region.

<sup>24</sup> Not to mention that the real increase in the minimum wage, in the same period, promoted substantial increase in the value of other forms of income transference, like the Social Assistance Organic Law (Loas) and of the pensions themselves, with the most significant impact on the less developed regions in the country.

<sup>25</sup> Another means of approaching the issue is found in the contribution of Araújo and Lima (2010), where the authors show, through a comparative analysis of the evolution of the age distribution of the occupied population in the Northeast and Southeast regions, that the reduction of those between 10 and 17 years of age in both regions between 2002 and 2008 (similar to the period under analysis) was more expressive in the Northeast, what drove the authors to conclude that such difference was due to the fact that in that region (more than in the Southeast) increase in the average work income coupled with the more acute effects of the public policies for income transfer programs led to an even more relevant reduction in the least developed region of the occupied population in the informal sector of the economy, in which, in turn, the people in the referred age range are concentrated.

**Table 2 – Growth Rate of Occupied Population per Activity Status and per Status in Occupation, in the Major Regions in 1998, 2003 and 2008**

Selected categories	North		Northeast		Southeast		South		Midwest		Total									
	2003/ 1998	2008/ 2003	2003/ 1998	2008/ 2003	2003/ 1998	2008/ 2003	2003/ 1998	2008/ 2003	2003/ 1998	2008/ 2003	2003/ 1998	2008/ 2003								
	Activity status																			
Economically active	7.4	3.7	5.6	2.4	1.9	2.1	3.0	2.0	2.5	2.6	2.6	3.1	2.9	2.0	2.5					
Non economically active	5.6	4.2	4.9	2.5	1.8	2.1	1.0	0.8	0.9	1.4	2.3	2.3	1.9	1.5	1.7					
Occupation status																				
Occupied	7.3	4.4	5.8	2.1	2.0	2.1	2.8	2.8	2.8	2.8	1.5	2.1	2.1	2.6	2.7					
Unoccupied	8.9	-2.9	2.8	6.7	-1.1	2.8	4.2	-5.7	-0.9	0.8	-5.2	-2.2	-2.2	2.9	-0.6	1.2	4.5	-3.9	0.2	
Status in occupation																				
Registered worker	10.7	9.3	10.0	4.5	6.3	5.4	3.1	5.7	4.4	3.7	4.7	4.2	4.2	5.1	6.7	5.9	3.8	3.8	5.8	4.8
Public servant (statutory & military)	4.5	7.3	5.9	3.0	3.7	3.4	2.3	3.5	2.9	4.7	3.0	3.9	3.9	2.9	2.9	2.9	3.1	3.1	3.7	3.4
Unregistered worker	7.9	3.0	5.4	2.2	2.8	2.5	3.6	0.9	2.2	2.9	2.2	2.5	2.5	1.6	0.7	1.2	3.1	3.1	1.8	2.5
Domestic servant	10.2	0.8	5.4	3.9	3.8	3.9	4.4	0.2	2.3	1.9	1.3	1.6	1.6	3.3	1.3	2.3	4.1	4.1	1.3	2.7
Self-employed	5.4	2.4	3.9	1.6	-0.2	0.7	2.2	0.8	1.5	2.3	-1.2	0.5	0.5	3.2	2.6	2.9	2.2	2.2	0.3	1.3
Employer	10.4	5.9	8.2	3.0	5.7	4.3	3.0	2.7	2.8	4.0	4.5	4.2	4.2	1.8	6.2	4.0	3.3	3.3	4.1	3.7
Unpaid worker	4.1	-1.9	1.0	-1.2	-7.0	-4.2	-2.5	-2.4	-2.4	-1.6	-6.3	-4.0	-4.0	-3.4	-3.3	-3.3	-1.5	-1.5	-5.6	-3.5
Work for own consumption or use (construction)	0.7	-3.0	-1.2	1.4	7.8	4.5	2.1	-1.3	0.4	4.8	-4.0	0.3	0.3	-7.1	7.4	-0.1	1.7	1.7	2.9	2.3

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

Before further considerations, two distinct factors regarding the evolution of the regional income in recent years shall be stressed in favor of the Northeastern labor market: (a) its average income grew higher than the national average; (b) its distributive profile improved a bit more than that of the other regions.<sup>26</sup> It is now worth investigating the occupational content that explains the comparative performance of the Northeast region described by the data presented herein thus far.

Table 3 shows the evolution of the occupational composition of three income strata<sup>27</sup> between 1998, 2003 and 2008 defined for the Northeast region. The selected status in occupation is the same as in Table 2, the unpaid occupations excepted.

When considering the whole of the occupied population in the Northeast, it becomes evident what the data in Table 2 had already preannounced: a continuous expansion of the relative weight of registered workers in the period between 1998 and 2008, as may be confirmed by the comparison of the two extreme years and 2003 as well. The weight of registered work in the Northeast went from 20.17% of the total occupied population in 1998 to 21.57% in 2003 and, posteriorly, to 25.35% in 2008. In the columns to the right in Table 2, it can be perceived that this was the status in occupation of largest growth in the selected years (a 5.4% annual average between 1998 and 2008 and 6.3% between 2003 and 2008). In the same period the relative weight of

unregistered work and mainly of self-employment suffers a decrease also evident in the trajectory of formalization of labor relations in the Northeast in the 10-year period ended in 2008. The analysis of such trajectory according to income strata may lead to further conclusions.

Considering the strata of the wealthiest 25% (i.e., the group of people whose income is among the highest 25% in the distributive pyramid of the Northeast region), it can be perceived that the greater relative weight of formal salaried workers jumped from 31.75% in 1998 to 38.01% in 2008 in the same period when all the other types of occupational insertion remained practically stable, except for the self-employed workers, whose reduction was, therefore, almost entirely compensated by the increased weight of the formal salaried employment.

In the lower income strata, the already extremely low share of registered workers suffered even greater reduction in the period between 1998 and 2008, when it reached insignificant 0.27%. In this stratum the dominant forms of work are those typical of underdeveloped scenarios: domestic work and self-employment, not to mention the informal (and illegal) salaried employment. Among these forms of occupation, domestic work (whose average income is around 12% higher than that of self-employment, as can be seen in Table 5, below) presented the largest growth between 1998 and 2008. In other words, between 1998 and 2008, the form of occupation that enjoyed the greatest relative increase at the bottom of the distributive pyramid of the Northeast region was the domestic work – whose income characterizes the least dramatic situation among all the various forms of precarious work.

The fact that registered work has suffered relative weight decrease in the lowest income stratum reveals the dynamism acquired by this type of occupation in the recently growing economy of the region, which allowed these workers social ascendance as a result of their newly conquered positions in the higher strata of the income distributive pyramid of the Northeast region. This can be verified by the expressively higher number of registered workers in the intermediate stratum, which, again, signals the structuring process experienced by the Northeastern labor market, as occurred with the labor market of the Southeast in the years of the nation's heavy industrialization (1955 to 1980).

<sup>26</sup> Many recent works have drawn attention to these factors. Due to space constraints and also to emphasize other elements of the recent development process in a more organized manner, we chose to highlight in this footnote just a little information retrieved from the excellent study carried out by Araújo and Lima (2010) in which the authors present, among other data, that between 2004 and 2008, the relation between the average income in the Southeast and the Northeast fell from 2.2 to 2.0 according to data from the PNAD in reference to the real average income of all work done by people of 10 years of age or older. In the same study the authors also point out that the relation between the Gini index of the Northeast and Southeast fell from 1.122 to 1.100 between 1993 and 2008 (it shall be reminded that the two regions (NE e SE) together, juntas, account for around 70% of the total of the Brazilian labor market). In what concerns the recent evolution of these regions' per capita GDP, Sousa (2010) highlights a slightly better trajectory of the Northeast region in comparison with the Southeast region; however, wisely and correctly underlining that the differences in income between the two is still a relevant factor.

<sup>27</sup> A stratum that gathers 25% of the people with the highest income, another that gathers the poorest 25% in the distributive pyramid, and an intermediate stratum of the remaining 50% of occupied people with an income.

Table 3 – Composition of the Occupied Population per Status in Occupation for Selected Years in the Northeast

Status in Occupation	Quantity			Composition			Annual Growth Rate		
	1998*	2003**	2008	1998	2003	2008	1998/2003	2003/2008	1998/2008
Poorest 25%	0	0	0	1.09	0.52	0.27	-10,1	-10,5	-10,3
Registered worker	0	0	0	0.74	0.16	0	-23,1		
Public servant	0	0	0	35.10	30.44	31.99	1,3	2,8	2,1
Unregistered worker									
Domestic servant	Poorest 25% (income equal or inferior to R\$200,00)	Poorest 25% (income equal or inferior to R\$200,00)	Poorest 25% (income equal or inferior to R\$200,00)	11.52	14.43	16.55	9,1	4,6	6,8
Self-employed	Average	Average	Average	51.03	53.54	49.96	5,2	0,4	2,8
Employer	67	96	158	0.52	0.90	1.23	16,1	8,3	12,1
Total	62	89	.	100.00	100.00	100.00	4,2	1,8	3,0
Wealthiest 25%	0	0	0	31.75	34.81	38.01	5,3	6,2	5,7
Registered worker	0	0	0	17.14	17.17	17.41	3,4	4,6	4,0
Public servant	0	0	0	11.49	12.03	12.15	4,3	4,5	4,4
Unregistered worker									
Domestic servant	Wealthiest 25% (income equal or superior to R\$600,00)	Wealthiest 25% (income equal or superior to R\$600,00)	Wealthiest 25% (income equal or superior to R\$600,00)	0.54	0.66	0.71	7,4	6,0	6,7
Self-employed	Average	Average	Average	28.82	25.47	21.45	0,9	0,8	0,8
Employer	723	838	1.274	10.26	9.85	10.27	2,5	5,2	3,9
Total	920	1.187	2.006	100.00	100.00	100.00	3,4	4,3	3,9
50%	0	0	0	24.03	26.26	31.44	4,2	6,5	5,4
Registered worker	0	0	0	5.61	5.88	5.87	3,4	2,7	3,0
Public servant	0	0	0	30.45	30.56	29.94	2,5	2,3	2,4
Unregistered worker									
Domestic servant	50% (income superior to R\$200,00 and inferior to R\$600,00)	50% (income superior to R\$200,00 and inferior to R\$600,00)	50% (income superior to R\$200,00 and inferior to R\$600,00)	8.45	7.47	7.50	-0,1	2,8	1,3
Self-employed	Average	Average	Average	30.09	28.44	23.54	1,2	-1,1	0,1
Employer	177	262	442	1.37	1.39	1.72	2,7	7,1	4,9
Total	171	263	443	100.00	100.00	100.00	2,4	2,7	2,6
Total	0	0	0	20.17	21.57	25.35	4,5	6,3	5,4
Registered worker	0	0	0	7.31	7.27	7.57	3,0	3,8	3,4
Public servant	0	0	0	26.79	25.74	25.54	2,3	2,8	2,5
Unregistered worker									
Domestic servant	Total	Total	Total	7.21	7.57	7.92	4,1	3,8	4,0
Self-employed	Average	Average	Average	35.08	34.40	29.66	2,7	-0,1	1,3
Employer	395	501	787	3.42	3.45	3.96	3,3	5,8	4,5
Total	616	826	1.438	100.00	100.00	100.00	3,1	2,9	3,0

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

In Table 4 we can see the contribution per activity groups to the recent changes in the Northeastern economic activity. In this Table we presents the data pertaining to 2003 and 2008<sup>28</sup> for cross-information on the status in occupation associated to the activity sector, in such way that the data thus displayed may enable the assessment of their trajectory in the three established income strata. In other words, with reference to the activity sectors, Table 4 details the evolution of the occupational profile described for the three income strata defined in Table 3.

Table 4 shows that between 2003 and 2008 the participation of agricultural activities in the Northeastern labor market was significantly reduced while the weight of civil construction activities increased in all income strata. The weight of activities of the transformation industry increased in the bottom and the intermediate strata of the income distribution pyramid and remained practically the same in the high income stratum. In this case, however, there was increased participation of registered work reflecting the importance of industrial activities to the already revealed expansion of the formalization of the labor market of the highest income stratum in the Northeastern (from 34.8% to 38,0%). In the majority of the remaining activities described in Table 4 there was also increased contribution by the formalized types of occupation in the highest income stratum, which denotes a generalized process of structuring of the Northeastern labor market in that period.

Besides the growing formalization of important activities in the highest income stratum of the Northeast region, other indications of the structuring of the regional labour market are reflected in the increased participation of industrial activities in the intermediate income stratum and the increased weight of the formal salaried work in each one of the major activities, resulting in a 5.18% growth (from 26.26% to 31.44%) between 2003 and 2008 of the participation of registered work in this income stratum.

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<sup>28</sup> A Table was not made of the data of 1998 due to a change of classification of activities after that year that hinders a precise comparison with the data pertaining to 2003 and 2008.

We have yet to carry out an analysis of the evolution of real average income per stratum and status in occupation, for the selected years, in order to qualify some of the changes occurring in the occupational structure and enable a better assessment of workers' move across the income strata.

Table 5 shows that between 1998 and 2003 there was a generalized decrease of the real income average, which was totally reversed in all strata in the subsequent years (2003-2008), except for the wealthiest 25% stratum. Such recovery was more noticeable among public servants, domestic servants and unregistered workers although the latter two are typically characterized as low income occupations. Perhaps the broadened scope and real value of income transfer programs have somehow affected this income level, which represents the foundation of the labor market. Similarly, the increase in the minimum wage, despite these being informal occupations, must have had some guiding effect on the determination of this income, as argued by the literature on the informal sector in Brazil (CACCIAMALI, 2000; CACCIAMALI, 1985, 1986; SOUZA, 1980).

It also calls the attention in regard to the evolution of income that income in the poorest 25% stratum rose higher than in the other extreme of the distributive pyramid, suggesting improved distribution profile in the region, notably as from 2003.

The joint analysis of the evolution of average income per status in occupation in the different strata (Table 5) and the trajectory of the occupational composition per strata (Table 4) suggests the bottom of the labor market pyramid had an increase in income in the scenario of general growth of the relative weight of registered work. There is evidence that a significant part of registered workers "migrated" to higher income strata, relegating to the poorest 25% stratum its traditional form of work: domestic work, whose participation, as has already been pointed out, enjoyed some growth – from 14.4% to 16.6% (see Table 4) – and self-employment in the trade and repair sector as well as the in civil construction and personnel services sectors (and in a few low productivity activities of the transformation industry). Any way you look at it, even these activities of precarious insertion in the labor market enjoyed

**Table 4 – Composition, per Activity Sector and Status of Occupation, of the Poorest 25% of the Occupied Population with Major Work Income in the Northeast Region from 2003 to 2008.**

Activity Group	Registered worker		Public servant (statutory & military)		Unregistered worker		Domestic servant		Self-Employment		Employer		Total	
	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008
	Agriculture	0,07	0,03	-	-	14,27	12,41	-	-	26,75	22,77	0,75	0,95	41,84
Other industrial activities	0,01	-	-	-	0,11	0,13	-	-	0,09	0,07	-	0,00	0,21	0,21
Transformation industry	0,02	0,00	-	-	3,05	3,45	-	-	6,52	6,62	0,01	0,01	9,60	10,08
Construction	0,02	0,01	-	-	1,79	2,60	-	-	1,50	2,30	-	0,05	3,32	4,95
Trade and repair	0,05	0,03	0,01	-	5,69	5,87	-	-	10,21	8,70	0,10	0,13	16,05	14,72
Lodging and food	0,03	0,00	-	-	1,29	1,51	-	-	1,68	1,81	0,01	0,02	3,02	3,35
Transport, storage and communication	-	0,03	-	-	0,74	0,70	-	-	1,97	1,89	0,02	0,01	2,73	2,63
Public administration	0,05	-	0,06	-	0,34	0,47	-	-	-	-	-	-	0,46	0,47
Education, health and social services	0,21	0,15	0,09	-	1,47	1,51	-	-	0,75	0,82	0,02	-	2,53	2,48
Domestic services	-	-	-	-	-	-	14,43	16,55	-	-	-	-	14,43	16,55
Other collective, social and personal services	0,05	0,01	-	-	1,17	2,25	-	-	3,13	3,48	-	0,04	4,35	5,78
Other activities	0,02	0,01	-	-	0,50	0,99	-	-	0,18	0,59	-	0,01	0,70	1,60
Ill-defined activities	-	-	-	-	0,02	0,10	-	-	0,75	0,93	-	-	0,77	1,03
Total	0,52	0,27	0,16	-	30,44	31,99	14,43	16,55	53,54	49,96	0,90	1,23	100,00	100,00

**Composition of the Wealthiest 25% of the Occupied Population with Major Work Income in the Northeast in 2003 e 2008**

Activity Group	Registered worker		Public servant (statutory & military)		Unregistered worker		Domestic servant		Self-Employment		Employer		Total	
	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008
	Agriculture	1,35	1,66	0,02	-	0,64	0,57	-	-	4,18	2,63	1,70	1,08	7,90
Other industrial activities	1,45	1,31	0,32	0,36	0,09	0,04	-	-	0,06	0,06	0,00	0,01	1,93	1,78
Transformation industry	5,64	6,21	0,08	0,04	0,92	0,95	-	-	2,07	1,53	1,15	1,10	9,86	9,83
Construction	2,13	3,64	0,04	0,03	1,25	1,37	-	-	2,84	2,74	0,49	0,86	6,76	8,64
Trade and repair	7,05	7,46	0,04	0,02	2,02	1,91	-	-	8,60	6,72	3,98	4,10	21,68	20,20
Lodging and food	0,83	1,13	-	0,00	0,30	0,26	-	-	1,38	1,37	0,60	0,79	3,10	3,55
Transport, storage and communication	3,62	3,74	0,16	0,14	1,02	0,89	-	-	2,76	2,55	0,35	0,31	7,90	7,64
Public administration	1,61	1,15	8,45	8,47	1,77	1,96	-	-	-	-	-	-	11,83	11,59

**Table 4 – Composition, per Activity Sector and Status of Occupation, of the Poorest 25% of the Occupied Population with Major Work Income in the Northeast Region from 2003 to 2008.**

Grupo de Atividade	Empregado com carteira assinada		Funcionário público (estatutário + militar)		Empregado sem carteira assinada		Empregado doméstico		Conta própria		Empregador		Total	
	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008
Education, health and social services	4,98	4,97	7,48	7,84	2,06	2,20	-	-	0,43	0,41	0,54	0,53	15,49	15,94
Domestic services	-	-	-	-	-	-	0,66	0,71	-	-	-	-	0,66	0,71
Other collective, social and personal services	1,01	1,03	0,12	0,09	0,92	0,92	-	-	1,09	1,44	0,28	0,53	3,42	4,02
Other activities	5,12	5,70	0,45	0,40	1,04	1,07	-	-	2,02	1,97	0,77	0,97	9,39	10,10
Ill-defined activities	0,03	-	-	-	-	0,01	-	-	0,05	0,03	-	0,00	0,07	0,04
Total	34,81	38,01	17,17	17,41	12,03	12,15	0,66	0,71	25,47	21,45	9,85	10,27	100,00	100,00
<b>Composition of the 50% of the Occupied Population with Major Work Income in the Northeast in 2003 e 2008</b>														
Activity Group	Registered worker		Public servant (statutory & military)		Unregistered worker		Domestic servant		Self-Employment		Employer		Total	
	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008	2003	2008
Agriculture	3,44	3,29	-	-	9,95	7,42	-	-	10,54	6,79	0,64	0,57	24,57	18,08
Other industrial activities	0,22	0,29	0,05	0,03	0,19	0,20	-	-	0,22	0,07	-	0,01	0,68	0,60
Transformation industry	5,17	6,20	0,03	0,02	2,77	2,84	-	-	2,23	2,07	0,14	0,16	10,33	11,29
Construction	1,49	2,35	0,01	0,02	2,89	3,52	-	-	3,09	3,35	0,10	0,24	7,58	9,48
Trade and repair	5,52	7,42	0,02	0,03	4,74	5,01	-	-	7,24	5,94	0,28	0,45	17,80	18,85
Lodging and food	1,19	1,46	0,02	0,02	1,05	1,28	-	-	1,37	1,35	0,11	0,11	3,73	4,20
Transport, storage and communication	0,74	1,12	0,01	0,01	1,10	0,95	-	-	1,64	1,70	0,03	0,04	3,53	3,82
Public administration	1,35	1,15	2,22	2,45	2,06	2,06	-	-	-	-	-	-	5,63	5,66
Education, health and social services	3,55	3,59	3,35	3,19	3,42	3,81	-	-	0,22	0,26	0,05	0,03	10,59	10,88
Domestic services	-	-	-	-	-	-	7,47	7,50	-	-	-	-	7,47	7,50
Other collective, social and personal services	0,90	0,94	0,13	0,10	1,34	1,51	-	-	1,23	1,37	0,02	0,05	3,62	3,97
Other activities	2,67	3,54	0,06	0,02	1,06	1,31	-	-	0,41	0,42	0,01	0,05	4,21	5,34
Ill-defined activities	0,01	0,07	-	-	0,01	0,04	-	-	0,25	0,21	-	-	0,27	0,32
Total	26,26	31,44	5,88	5,87	30,56	29,94	7,47	7,50	28,44	23,54	1,39	1,72	100,00	100,00

**Source:** Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

**Table 5 – Real Major Work Income Average of the Most Well-paid 10% per Status in Occupation in the Selected Years in the Northeast**

Status in Occupation		Average Income			Annual Growth Rate		
		1998*	2003**	2008	1998/2003	2003/2008	1998/2008
Wealthiest 10%	Registered worker	2,649.15	2,040.68	2,456.33	-5.1	3.8	-0.8
	Public servant	3,000.52	2,198.50	2,890.07	-6.0	5.6	-0.4
	Unregistered worker	2,659.90	2,105.36	2,528.07	-4.6	3.7	-0.5
	Domestic servant	1,463.36	1,474.81	1,487.56	0.2	0.2	0.2
	Self-employed	2,444.18	1,973.30	2,260.80	-4.2	2.8	-0.8
	Employer	4,107.95	3,136.98	3,833.72	-5.3	4.1	-0.7
	Total	2,942.12	2,261.75	2,788.94	-5.1	4.3	-0.5

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

increased income, notably between 2003 and 2008 (Table 5), resulting from the greatest dynamism experienced by the Brazilian labor market, especially in the Northeast region. Among the occupied population in the intermediate strata the average income growth in all status in occupation was notorious between 2003 e 2008.

Lastly a cross-analysis between the average income behavior (Table 5) and the occupational composition (Table 4) of the highest income stratum of the Northeastern labor market reveals increased offer of registered work and a

greater number of employers as well as a modest increase in the weight of public servant sector (whose income represents the best behavior between 2003 and 2008). In this same income stratum the fast-pace structuring of the Northeastern labor market becomes evident once increased supply of salaried work in the industry and organized (formal) trade is also observed.

Still in regard to income behavior, the data in Table 5 suggest a reduction of income disparity in the region, especially as from 2003, and Table 6 presents information that seems to confirm such reality. Considering various

**Table 6 – Inequality Rates in the Northeast and Selected States**

Region	Inequality Indicator	1995	2003	2008
Northeast	10/10 (a)	61.01	55.82	47.02
	10/40 (b)	22.91	20.63	17.76
	20/20 (c)	23.93	22.10	19.04
	1% (d)	16.31	15.29	14.32
	Gini (e)	0.60	0.58	0.56
Bahia	10/10 (a)	56.72	55.72	48.10
	10/40 (b)	23.09	21.27	17.99
	20/20 (c)	23.25	22.16	19.52
	1% (d)	17.95	16.23	14.21
	Gini (e)	0.60	0.59	0.56
Pernambuco	10/10 (a)	46.27	67.04	50.46
	10/40 (b)	19.16	21.41	18.55
	20/20 (c)	19.42	23.97	19.76
	1% (d)	13.15	14.98	15.11
	Gini (e)	0.57	0.59	0.56
Ceará	10/10 (a)	68.15	52.63	34.81
	10/40 (b)	24.74	18.85	15.78
	20/20 (c)	25.96	20.55	15.98
	1% (d)	16.80	13.93	13.36
	Gini (e)	0.62	0.57	0.54

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008) and the Institute of Labor and Society Studies.

**Table 7 – Occupied Population and Composition of the Most Well-paid 10% per Status in Occupation in the Selected years in the Northeast**

Status in Occupation		Composition			Annual Growth Rate		
		1998	2003	2008	1998/ 2003	2003/ 2008	1998/2008
Wealthiest 10%	Registered worker	29.20	28.03	29.75	2.6	5.2	3.9
	Public servant	20.46	24.25	25.77	7.0	5.3	6.1
	Unregistered worker	7.75	8.72	9.21	5.9	5.1	5.5
	Domestic servant	0.09	0.02	0.08	-20.5	31.1	2.1
	Self-employed	23.96	21.47	17.15	1.2	-0.6	0.3
	Employer	18.54	17.49	18.04	2.2	4.6	3.4
	Total	100.00	100.00	100.00	3.4	4.0	3.7

**Source:** Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

indicators of income diversity per stratum as well as the amount of income appropriated by the wealthiest 1% of the distributive pyramid, plus the Gini index, one can perceive that between 1995 and 2008, including data pertinent to 2003, the accentuated income disparity in the Northeast region seems to have been somewhat reduced in the region as a whole and in its three most important states. These results are corroborated by recent studies that show an improved distributive profile in the Brazilian economy in most recent years (IPEA, 2005). The data clearly indicate that in the Northeast region, historically characterized by extremely strong income concentration (even for Brazilian standards), a process of reduction of labour income disparity is in course. It is plausible to imagine that such phenomenon is somehow associated with the process of increasing weight of the industry and the activities pertinent to the very industrial development as well as with the growth in the level of formalization of the labor force and consequent reduction of the precarious occupations traditionally existent in the region's occupational scenario<sup>29</sup>, in great absolute and relative figures.

The formalization phenomenon in the Northeastern labor market can also be confirmed by the evolution of the occupational composition of the wealthiest 10% stratum, with pronounced fall in the participation of self-employed within this privileged segment of the region's distributive scope, with the counterpart of increased relative importance of registered workers and public

servants (Table 7). With regard to registered workers, data from the PNADs (not included in this study due to size constraints) reveal that civil construction and transformation industry sectors were the major drivers of this expansion – activities that lead to the dynamism of the whole economic activity, promoting productive gains in the whole of the economy. These changes in the occupational composition of the wealthiest 10% stratum represent yet another element of the structuring of the Northeastern labor market in recent years.

The income behavior of this group shows that the Northeastern's "wealthy" are no longer "the same old ones" (employers, autonomous professionals, who appear in the data as "self-employed", and some "privileged" public servants) but rather include salaried workers of the private sector in various activities, conforming a trend for the structuring of the Northeastern labor market in a quite similar manner as that of the Southeast when, in the 1950s, the country initiated its process of heavy industrialization, culminating with the era of the "economic miracle" and of the II PND, last industrialization effort conducted by the Brazilian State. Table 8 shows the average income of the registered worker grew close to the average of the stratum in the 2003-2008 period.

We now move on to the analysis of the evolution in the occupational composition of the Northeastern labor market through the taxonomy defined in this study – fifteen occupational categories (or occupation classes) stemming from the aggregation of 49 occupations assessed by the PNADs. Tables 9, Table 10 and Table 11 below reveal the evolution between 2002 and 2008

<sup>29</sup> Ipea (2005) and Cardoso Jr. (2007) are among the studies that have highlighted the role of work formalization in the distributive profile, notably in a society marked by a heterogeneous labor market as is the Brazilian society.

**Table 8 – Real Major Work Income Average of the Most Well-paid 10% per Status in Occupation in the Selected Years in the Northeast**

Status in Occupation		Average Income			Annual Growth Rate		
		1998*	2003**	2008	1998/2003	2003/2008	1998/2008
Wealthiest 10%	Registered worker	2,649.15	2,040.68	2,456.33	-5.1	3.8	-0.8
	Public servant	3,000.52	2,198.50	2,890.07	-6.0	5.6	-0.4
	Unregistered worker	2,659.90	2,105.36	2,528.07	-4.6	3.7	-0.5
	Domestic servant	1,463.36	1,474.81	1,487.56	0.2	0.2	0.2
	Self-employed	2,444.18	1,973.30	2,260.80	-4.2	2.8	-0.8
	Employer	4,107.95	3,136.98	3,833.72	-5.3	4.1	-0.7
	Total	2,942.12	2,261.75	2,788.94	-5.1	4.3	-0.5

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

of the occupational structure for the 15 occupational categories defined<sup>30</sup> in the three economically most

important states in the Northeast<sup>31</sup>.

The three above mentioned Tables show that Category 4, Category 5, Category 8 and Category 10 were the occupational activities with the largest growth

30 In Tables 9, 10 and 11, the categories (or occupation classes) are:  
 OCCUPATION CLASS 1: includes the military – army, navy, and air force; police officers and firefighters. OCCUPATION CLASS 2: includes high members and leaders in the public administration; leaders of companies and organizations (except those of public interest) and managers. Note: the majority of these professionals have high-level education, but there is also significant share of worker of secondary school education, especially in the private sector. OCCUPATION CLASS 3: includes poly-scientific professionals; professionals of exact sciences, physics, and engineering and the like; polyvalent technical workers; secondary school level technical workers in the exact sciences, physics, chemistry, engineering and the like; secondary school level technical workers in transportation services. Note: includes qualified professionals of companies' productive area. Technical workers are in their majority of secondary school education, but the technical professionals have college education. OCCUPATION CLASS 4: includes technical professionals of biological, biochemical, and health sciences, and the like. Note: represents a wider range of health activities. Technical professionals have college education and technical workers have incomplete secondary school or college education. OCCUPATION CLASS 5: includes teaching professionals with college education. OCCUPATION CLASS 6: includes professionals of legal sciences and of social and human sciences. Note: professionals with college education that work in the majority of the cases in service companies or firms; and, in some cases, also in the public sector. OCCUPATION CLASS 7: includes only lay teachers and those of secondary school level. Note: well-defined function in education. OCCUPATION CLASS 8: includes communicators, artists, religious personnel (occupation 15 in the PNAD); and secondary school level technical workers of cultural services, communications and sports (occupation 22). Note: the two respective groups appear together in the PNAD. The decision to gather them in the same occupation class is due to the fact that they work in an area we can define in a broader sense as production or execution of cultural activities. We find great heterogeneity regarding schooling in this group, but a slight predominance of secondary school level professionals can be identified and equal proportions of primary school and college education. OCCUPATION CLASS 9: includes secondary school level technical workers in administrative sciences and other secondary school level technical workers. Note: although these professionals are present in a wide range of activity sectors, their functions are the same and we find a considerable proportion of workers of primary school education also. OCCUPATION CLASS 10: includes

clerks and workers who render services to the public. Note: although these professionals are present in a wide range of activity sectors, their functions are the same and there is strong predominance (around 65%) of professionals of secondary school education. OCCUPATION CLASS 11: includes the workers in the service sector. Note: given the well-defined nature of these activities and the dimension of this group, we find it coherent to leave it as in the original classification, composing a single occupation class. OCCUPATION CLASS 12: includes sales people and service renders in trade. Note: identical to the previous class. OCCUPATION CLASS 13: includes agriculture and cattle raising producers; workers in agricultural and cattle raising exploration; fishermen, hunters, forest-extractivism population; workers in the mechanization of agriculture and cattle raising and forest-extractivism and workers in extractivism and civil construction industries. OCCUPATION CLASS 14: includes workers in metal and composite transformation; workers in electrical and electronics production and installations; assembly worker of precision instruments and musical instruments; jewelers, glass blowers, ceramics workers and the like; workers in the textile, leather, garment and graphic arts industries; workers in the wood and furniture industries; workers in continuous process industries and others; workers of transversal functions; workers in mining and construction materials; workers in installations and machine-operators for the production of cellulose, paper, cardboard, and artifacts; workers in the production of food, beverages, and tobacco; operators in installations of production and distribution of energy, utilities, capacitation, water treatment and distribution; other industrial elementary workers; workers in mechanic repair and maintenance; poly-maintainers; other workers in conservation, maintenance and repair. Note: professionals in the productive sector, around 40% of which have incomplete elementary education and 30% have elementary level education; the remaining workers have secondary education level. OCCUPATION CLASS 15: loosely-defined occupations. In the original classification: occupation 49.

31 Unfortunately there is no room for including data on the other six Northeastern states, in which we must say the scenery is not very different from that described for the three major states. Anyway, it is important to highlight that the three selected states account for around two thirds of the whole of the region's economy.

in the period. The growth in Category 9 in Bahia and Pernambuco, Category 2 in Ceará, and Category 3 in Bahia also deserve to be highlighted. Category 14 is also to be stressed as it gathers a significant number of workers connected to industrial activities and presented a lower percentage variation (2002-2008) in comparison with other categories; however, given the dimension of the occupied population in this category it enjoyed considerable percentage point growth in its participation in the whole of the occupied population.

Category 4 gathers college education professionals and secondary education technical workers in the fields of health, biochemistry and correlated areas; Category 5 is comprised of college education level professionals in all fields; Category 8 has a heterogeneous group of professionals in the field of production and execution of cultural activities, among which secondary education level professional are predominant but carry out quite specific and qualified labor activities from the point of view of consumption and services; Category 10 gathers a wide range of secondary education level professionals in the service sector among which we

highlight services to the public. In Category 9 we find the secondary education level technical workers in the management field – an occupation whose growth denotes the increased number of businesses in the various activities sectors. Finally, it is very important to highlight and interpret the expansion of Category 14, which as mentioned above gathers a wide range of workers engaged in industrial activities (see footnote for a description of the occupation classes defined herein), many of whom have secondary education and others primary education; however, all are engaged in productive activities in the secondary sector of the economy, what reinforces the expansion verified in the data pertinent to sectorial employment and status in occupation herein described in Tables up to 8. In the three states the growth in occupations in industrial activities (mainly in Category 14) as well as the wide range of technical activities in other categories increased above the average of all occupations put together, revealing a process of structural change of the occupational in scenario of the Northeast.

**Table 9 – Distribution of the Occupied Population, Total Growth and Percentage Growth per Occupational Category Selected between 2002 and 2008 – State of Bahia**

CATEGORIES	BAHIA			
	2002	2008	Total Growth 2002-2008	Growth Percentage Points
Category 1	0.4	0.4	8.4	-0.02
Category 2	3.7	3.1	-4.0	-0.59
Category 3	1.0	1.2	40.4	0.23
Category 4	1.0	1.3	44.2	0.26
Category 5	0.9	1.5	91.5	0.61
Category 6	0.7	0.7	12.9	-0.01
Category 7	2.8	2.1	-13.3	-0.67
Category 8	0.9	1.3	69.4	0.41
Category 9	1.8	2.0	27.1	0.21
Category 10	4.9	6.6	55.0	1.74
Category 11	16.5	18.3	26.9	1.84
Category 12	9.7	9.4	11.1	-0.26
Category 13	44.9	40.1	2.1	-4.76
Category 14	10.8	12.0	26.7	1.19
Category 15	0.2	0.0	0.0	-0.16
Total	100.0	100.0	14.2	0.00

**Source:** Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

**Table 10 – Distribution of Occupied Population, Total Growth and Percentage Growth per Occupational Category Selected between 2002 and 2008 – State of Pernambuco**

CATEGORIES	PERNAMBUCO			
	2002	2008	Total Growth 2002-2008	Growth Percentage Points
Category 1	0.8	0.6	-18.6	-0.20
Category 2	3.8	3.9	10.6	0.14
Category 3	1.2	1.2	3.7	-0.03
Category 4	1.4	1.8	37.3	0.40
Category 5	1.5	2.1	55.2	0.67
Category 6	1.1	1.0	3.4	-0.03
Category 7	2.1	1.7	-11.9	-0.37
Category 8	1.2	1.5	34.1	0.31
Category 9	1.9	2.4	39.7	0.58
Category 10	5.8	7.3	35.2	1.54
Category 11	18.4	19.0	10.1	0.58
Category 12	11.9	11.0	-0.8	-0.84
Category 13	36.2	33.2	-2.1	-2.99
Category 14	12.4	13.1	12.7	0.70
Category 15	0.5	0.0	0.0	-0.45
Total	100.0	100.0	6.7	0.00

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

**Table 11 – Distribution of Occupied Population, Total Growth and Percentage Growth per Occupational Category Selected between 2002 and 2008 – State of Ceará**

CATEGORIES	CEARÁ			
	2002	2008	Total Growth 2002-2008	Growth Percentage Points
Category 1	0.3	0.3	50.1	0.07
Category 2	2.5	3.6	68.9	1.03
Category 3	1.2	1.1	18.5	-0.02
Category 4	0.8	1.4	121.1	0.65
Category 5	2.0	2.1	30.9	0.18
Category 6	0.7	0.7	20.4	0.00
Category 7	1.7	1.2	-17.8	-0.55
Category 8	1.3	1.3	26.3	0.06
Category 9	2.3	1.9	-2.9	-0.44
Category 10	5.0	6.0	43.9	1.00
Category 11	16.9	19.0	34.7	2.06
Category 12	11.5	11.1	16.4	-0.36
Category 13	36.7	32.2	5.4	-4.49
Category 14	17.0	18.0	27.3	1.02
Category 15	0.2	0.0	0.0	-0.22
Total	100,0	100,0	20,1	0,00

Source: Elaborated by the authors based on data from the IBGE (1998, 2003, 2008).

Lastly, Table 12 gathers information on the composition of industrial activity, whose interpretation also allows us to assess the coherence of the recently changes occurred in the Northeastern productive structure. The evolution in industrial activities showed in these Tables signals the perspective of evolution of productivity gains in the coming years, making space for improved patterns of income distribution and dynamism of the region's labor market given the strategic relevance of industrial activities in the whole of economic activities. The data were retrieved from the Industrial Annual Research (PIA), of the IBGE,

up to 2007, from 1996 so as to allow reasonable comparison.

Table 12 initially reveals a jump in relative participation of productive activities of intermediate goods, notably in the turn of the century; followed by more modest increase in the relative weight of production activities of durable consumer goods and capital goods between 2004 and 2007. Such movement, however, was not significant enough to surpass the region's industrial characteristic, dominated by the sectors of intermediate goods and non-durable

**Table 12 – Evolution of Participation of the Industry Sector in the Total Value of the Transformation Industry per State and in the whole of the Northeast Region**

State	Non-Durable Consumer Goods					
	1996	2000	2002	2004	2006	2007
<b>Alagoas</b>	<b>47</b>	<b>60</b>	<b>67</b>	<b>57</b>	<b>73</b>	<b>72</b>
Bahia	23	16	18	20	13	14
Ceará	76	80	75	72	63	68
Maranhão	27	17	19	10	16	16
Paraíba	61	70	62	62	63	64
Pernambuco	55	43	45	48	54	46
Piauí	87	71	69	78	75	74
Rio Grande do Norte	78	83	81	76	75	75
Sergipe	74	43	43	42	47	54
<b>Total</b>	<b>47</b>	<b>38</b>	<b>38</b>	<b>37</b>	<b>33</b>	<b>34</b>
	Intermediate Goods					
	1996	2000	2002	2004	2006	2007
Alagoas	52	39	31	41	25	26
Bahia	72	77	74	70	74	73
Ceará	17	15	19	22	30	25
Maranhão	73	83	81	89	84	83
Paraíba	39	29	37	37	36	34
Pernambuco	35	46	45	45	36	43
Piauí	12	22	26	21	23	23
Rio Grande do Norte	19	14	16	19	18	19
Sergipe	26	51	54	55	48	40
<b>Total</b>	<b>47</b>	<b>55</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>57</b>
	Durable Consumer Goods and Capital Goods					
	1996	2000	2002	2004	2006	2007
Alagoas	1	1	1	1	2	2
Bahia	5	7	8	11	14	12
Ceará	7	5	6	6	6	7
Maranhão	1	1	1	0	1	1
Paraíba	1	2	1	1	2	2
Pernambuco	11	10	10	8	10	11
Piauí	1	7	5	1	3	3
Rio Grande do Norte	3	2	3	5	7	6
Sergipe	1	6	2	3	5	5
<b>Total</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>10</b>

**Source:** Elaborated by the authors based on data from the IBGE (19--).

consumer goods, relegating to the sector of greater aggregated value (durable goods and capital goods) a participation of only 10% of the industrial added value.

By no means, however, can the increased relevance of activities of greater aggregated value on the industrial structure of the Northeast region, preannounced by labor market indicators, be neglected – notably those associated with the activities presented in Table 12 –, as cannot the growing formalization of industrial activities as well. The increased relative importance of the segments of greater aggregated value in industrial activities besides being relevant in itself plays a major part in the induced effects on other activities of aggregated value in the service sector, modifying the occupational and sectorial profile of activities of the Northeastern third sector of the economy<sup>32</sup>. Thus, both the increased role of industrial activities, which by nature<sup>33</sup> has a greater relative number of registered workers and salaries above the region's historical average, and the generation of segments of the third sector, which promote greater added value to the whole of the regional economy (those more closely associated with the industrial activities such as financial, transportation and communications services and services of support to entrepreneurial activities) collaborate to foster a continuous structuring of the Northeastern labor market.

The data presented above, however, leads to the fact that not only the increased participation of industrial

activities of capital goods and durable consumer goods sectors (despite not despicable) is still little significant as well as – and most importantly – is less homogeneous within the region itself since it is more concentrated in the states of Bahia (especially) and Rio Grande do Norte, Pernambuco and Sergipe (at least when regarded the evolution in the 2004-2007 period).<sup>34</sup>

Furthermore, the scenario of industrial activity in the Northeast – described by the de-aggregation shown in Table 12 – is still a productive structure of little dynamism and very dependent on the complementarity of the industrial activities of the Southeast.

In the next section, we will make some final considerations in light of results and evidence from the analysis presented above and considering the teachings of the history of the nation's economic development.

## 4 – CONCLUSIONS

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There is strong evidence that a virtuous change is in course in the economic development of the Northeast and it is not limited to the greater participation of the Northeastern GDP in the national GDP and that of specific sectors in recent years, especially as from 2003. The data also reveal a process of formalization of the Northeast's labor market at an even larger pace considering the whole of the Brazilian labor market.

It shall also be highlighted that the increased role of the Northeastern economy on the national economy is a reality in a scenario of growth of the national economy itself; in other words, in a different context than that of some periods in the last decades when it stemmed greatly from the economy deflation of more dynamic centers in the country<sup>35</sup>.

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32 Silva (2009) shows that the service sector in the Northeast region is still very concentrated on service activities that aggregate relatively lower value, such as distributive services (including activities like repair and maintenance of vehicle and personal objects, transportation and storage), social or collective services (including especially public administration and sales of health and education services) and personal services (including mainly domestic services but also lodging and food-related activities) and consequently less concentrated on services that aggregate more value, i.e., the so-called productive services (and its complementary services), like real estate activities, financial services and communications activities, besides all those services of support to the business activities. Among all kinds of services, those of lower percentage in the formalized occupations are exactly those relatively most present in the Northeast (with the exception of social services, which have strong weight on the formalized occupations). The literature on the development of services activities reveals their profile tends to change as a economy or region starts to attract manufacturing sectors and other activities (such as civil construction, for example) that require the expansion of support or complementary services.

33 As occurs with companies in the industrial sector that produce durable consumer goods, capital goods and even intermediate goods.

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34 Unfortunately, there are no recent data by the PIA-IBGE. Studies on recent investments and investment in the near future, however, allow us to assume the biggest states in the region (Pernambuco, Bahia and Ceará) have benefited the most between 2007 and 2010. Anyhow one shall bear in mind that the Northeastern region is quite heterogeneous, as states Araújo (1995). For the assessment of the outlook for regional income distribution in the coming years, see Lemos (2009), especially pages 152-154.

35 Considering the data of the Regional Accounts by the IBGE, it can be seen that in 1980 the Northeast region's income accounted for 12.2% of the national income and in 2000 for 13.1%; in the same period the participation of the São Paulo economy in the national income fell from 37.7% to 33.7%. It also deserves to be mentioned that between 1980

The structuring of the Northeastern market cannot be measured simply by the increased participation of formal employment on the whole of its activities but rather considering that such growth has occurred in all income strata and generalized across the various sectors as well. More job posts in the transformation industry are to be created so that this process can be consolidated, thus promoting positive effects on other sectors of economic activity, as shown in the literature on capitalist development and especially as revealed in the nation's industrialization process. The progressive installation of activity sectors of greater productivity than the average productivity of the already installed activities is fundamental to the promotion of enhanced structuring of the regional labor market and it is in that sense that the major challenge is laid for the region to indeed consolidate a new trend for economic development in the coming years.

Data on the short period between 2003 and 2008 have indicated a state that might mean change to the rational framework of the Northeastern society, where the wealthy and upper middle class were represented in their majority by employers (in the country and in urban activities) and high-end education public servants. The high income strata, however, have increasingly included salaried workers in activities that pay good salaries, like industrial activities and others directly or indirectly associated activities such as financial services, services of greater productivity (in their diverse activities) as well as more organized and oligopolized commercial activities. The consistency of such changes depends upon the installation in the Northeast Region of industrial sectors of greater aggregated value as well as of a growing pace of investment in infrastructure aimed not only to the attraction of industrial investments but also to promote and further maintain a trajectory of structuring of the regional labor market.

It also necessary to mention the increased participation, in the period under analysis, of the of activities of the public sector, including social security and public health and education activities which

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and 2000 the per capita national GDP increased modest 0.17% a year, on average, whereas between 2003 and 2008 it grew around 3.5% a year, on average (and we can suppose it to continue so in the coming years).

denote the expectation for the consolidation of a social infrastructure in the Northeast region. Still regarding the activity sectors, a notable expansion of civil construction activities enables a glimpse of increased productivity of the economic activity in the coming years once a significant part of such construction activities count with public and private investments in infrastructure for transportation and energy generation, important assets for the continual growth of the industrial activity and of the other productive segments of the Northeastern economy, thus attracting new companies to the region.

The income analysis also denotes the strengthened domestic market of the Northeastern economy during the period in question with the notorious base-income growth in the labor market, certainly a result of the increase in the real value of the minimum wage, which directly and indirectly affects the work income of a very expressive share of occupations and is decisive to the promotion of an enhanced distributive profile, as show Neder and Ribeiro (2010) among other recent studies. Let us also bear in mind that the indirect effects on the work income of the expanded income transfer programs – like the Bolsa-familia, especially – mainly in smaller towns and/or in those of predominant agricultural activities. Many recent studies<sup>36</sup> have already revealed the structuring potential of these income transfer programs on regional labor markets by generating stable demands for various trade activities, which, in turn, tend to establish stronger employment bonds resulting from expectation for increased sales of goods and services to low income workers and citizens<sup>37</sup>. Nevertheless, the above cited studies also draw attention to the fact that the consolidation of the labor market as well as the conscious betterment of distributive profiles depend upon the creation of formal job posts in activities across the occupational structure of the labor market and not just of its inferior strata (SALM, 2006).

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36 See, for instance: Cardoso Jr. (2007); Dedecca (2006); Salm (2006) and Castro and Modesto (2010).

37 Pereira (2009) shows, using the RAIS data, that the recent formalization process of the Brazilian labor market was even more significant in small towns – and in particular in those in the North and Northeast regions –, corroborating the important role of income transfer mechanisms in the structuring of regional labor markets.

With regard to the effect of the generalized acknowledgment of the fact that income transfer mechanisms (considering the increase in both the minimum wage and the Bolsa-família, among other programs of lesser scope) have benefited especially the Northeast Region, it is still necessary to discuss the major challenges to the design of public and private economic policies. On the one hand, it is necessary to guarantee that the income transfer programs be long-lasting programs that allow for its direct and indirect effects on the regional economic activity to persist in time. On the other hand, as the intra and inter-regional income disparity is reduced, these policies – by every means necessary – will become progressively insufficient due to their declining capacity to promote continual structural changes in the regional economy in the future. In such a scenario, it will be increasingly more important that more dynamic activity sectors be installed that can generate job posts of higher salaries than the current regional average income. Briefly, the dynamism of small businesses generated by the income transfer mechanisms implemented and expanded in more recent years shall be maintained as more job posts and productive activities are created that generate expressive productivity gains in the whole of the Northeastern economy.

In what the good perspectives for investments in infrastructure<sup>38</sup> and the consequent attractiveness for the installation of new large businesses in the Northeast are concerned, it shall be highlighted that the promising process of exploration of the pre-salt oil fields – naturally concentrated in certain specific Southeast region of the country – can promote new trends of concentration of income in the already most developed region, unless, as warned by Araújo and Lima (2010), the Brazilian state takes the responsibility to design a regional policy in tune with the new moment for industrial and technological development that this exploration may represent.

The possibilities for the installation of sustained economic development of the Northeast are laid. For such, however, besides an economic policy that can maintain the Brazilian economy at a per capita GDP growth pace consistent with that verified in the 2006-

2010 period, it is necessary that the national State maintain its actions with an eye on the regional issue, consolidating a reversed situation in relation to what occurred in the 1990s. The signs described by the data in this study as well as the recent investments in installation of new quality-public universities (including those in mid-size towns in the interior of various states), the actual costs and those promised for the development of infrastructure (Transnordestina railway, transposition of the São Francisco River etc) as well as greater investments in mining, oil (refineries), automobile and naval sectors, not to mention the already installed and the promised centers of excellence in technology, form a conjunction of factors that enable a glimpse of consistent productivity gains in the regional economic activity, as was always highlighted by Celso Furtado since the foundation of Sudene and in his vast works. Such structural changes will endow the Northeastern economy with its own dynamism and will entail major changes to the regional distributive profile, with impact on the structuring of its labor market, thus approximating it to characteristics typical of a truly industrialized economy: increasing weight of industrial occupations or of occupations in the third sector associated with the development of industrial activities (i.e., high productive third sector); increasing the weight of employment on the agro-industrial activities and not just merely agricultural activities, regardless of the degree of formalization of its work relations; increased participation of the formal employment in the whole of the labor market – though, realistically, it should be remembered that in an economy such as the Brazilian economy, there will always be some degree of heterogeneity, but which cannot be so much bigger in the Northeast and other regions in comparison with the wealthiest region; and, fundamentally, reduction of the income concentration and of the wealth, only way to truly consolidate the domestic consumer market, as, in fact, was also among Furtado's main concerns since the constitution of the GTDN.

All factors described above – installation of universities and technology centers, investments in infrastructure for transportation and various types of energy, and installation of large companies producers of raw material for the industrial development (mining and oil) or end products that generate long

38 As pointed out in a BNDES study, organized by Lemos (2009).

and diversified supply chain (naval and automobile) – tend to promote the installation of a wide range of companies in all activity sectors, establishing a domestic market that is ever more integrated with the other regions of the country at the same time it also more autonomous. So that all this can be continued, the general challenge to the Brazilian State is to put an economic policy in place – with all it entails in regard to interest rates, exchange rate and trade and industrial policies – that can maintain the accelerated growth of the nation's economy.

It is only considering the conditions described above that a significant growth in the participation of the Northeastern GDP in the national GDP could actually take place, rather than just the punctual improvement indicated by the data, as shown in this study. By all means, these indicators, undoubtedly, reveal a better situation than in any other historical moment in Brazil since the beginning of the nation's heavy industrialization; however, reservation should be made regarding the still too short a period analyzed to allow more categorical statements.

There is still a lot to be done. First of all, as has been stated above and we now reinforce, it is necessary that the Brazilian economy maintain a growth pace that is at least similar to that of the 2006-2010 period. Besides maintaining a more mature and sustainable growth trajectory over time, it is necessary that industrial sectors that generate greater aggregated value be established in the region in such way that they in fact expand the region's GDP in the national GDP more consistently. In the face of the international economy crisis since 2008, with renewed effects along 2011 and unpredictable unfolding, it is also necessary to face the effects that the new international work division (with the growth of the Chinese products and of other Asian countries in the world manufactured products), notably in the Brazilian scenario of valorized exchange rate and high real interests, promote over employment and Brazilian industrial production – especially in the intensive-work industrial activities – the type of activity that is more precisely present in the Northeastern manufacturing activity.

By all means, despite all these warnings (still a short period of positive changes pointed out; still

little participation of industrial sectors of greater aggregated value in the Northeastern industrial structure; uncertainty in regard to the maintenance of the domestic economic growth pace in the face of the international economy instability; difficulty generated by the valorized exchange and risk of de-industrialization) the recent data enable a positive outlook in regard to the trajectory of improved regional income distribution profile in Brazil.

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