

Migration and Regional Development in Brazil: What do the data from the 2010 Census tell us?

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Introduction

This article is intended to update considerations already published about the most significant migratory processes in Brazil in the light of recent data provided by the Brazilian National Census of 2010.

It is clear that, after a long period of economic crisis, which was at its worst point in the 1980s and to some extent continued into the 1990s, Brazil entered the 2000s with better perspectives. It is generally recognized that the country's socioeconomic conditions in recent years have improved considerably. However, economic growth has been sustained by increased activities in the area of commodity production, petrochemical operations and services and, to a lesser degree, by the manufacturing industry (CANO, 2011). These factors have apparently failed to bring about any broad deconcentration of production. The considerable economic differences among the regions have therefore continued basically the same. These trends have probably had impacts on the process of spatial redistribution of the population, or are likely to do so in the future. This process, in turn, has been affected by the restructuring of production, public policies directed toward the needs of the low-income population, etc.

It might therefore be expected that a recovery of the economy, higher employment and the reduction of poverty would have impacts on the volume and intensity of migratory flows. In recent years, however, one can see the consolidation of several processes that were already noticeable in the past, including the progressive saturation of the agricultural frontiers – including the most recently occupied areas in the Central-Western and Northern regions of the country. Demographic recuperation in the states of Minas Gerais and Paraná have also been visible, as well as the

emergence of newly evolved hubs, such as Santa Catarina.

In the case of the historical migratory flows from Northeast to Southeast, the surprisingly high rates of return migration seen in the 1990s seem to have lost some of their impetus. Nonetheless, the Northeast continued to show lower demographic losses while, the population of the State of São Paulo continued to grow. It is still early to draw conclusions about the trends shown by the 2010 Census in terms of the processes of regional and socioeconomic development, but the indications presented in this text will hopefully provide some clues based on a careful analysis of data from the 1990s and the 2000s.

It should be remembered that consolidated data exist up until the 2000 Census, and were discussed in a paper by the present authors (CUNHA and BAENINGER, 2007). The focus of this present article will therefore be on the changes that occurred between 2000 and 2010. For this purpose we will highlight only data available regarding the last two decades.

The aim is to update, albeit tentatively, the most important facts in the country in terms of state-level migrations. The text describes national migratory trends that have taken place in the 21st century, based on the dynamics marked by migratory complementarity. This first part of the paper will discuss the main trends in inter-regional migrations over recent decades, followed by a section indicating the country's main internal migratory movements, the characteristics of this migration and analyses of current migratory processes.

I. Main inter-regional trends in recent decades¹

The analyses of the process of spatial distribution of the population as of 1980 bring with them theoretical and methodological challenges in view of the empirical evidence and the characteristics of the migratory phenomenon on a national scale. Martine (1994:5) states that in the 1980s "The extent of the demographic metamorphosis was as significant as it was unexpected." Fecundity fell at a faster rate than was anticipated, the high demographic growth at

¹ This paper takes the concept of "*State of previous residence*" as its criterion for defining *migrant*. In the academic milieu this concept is often referred to as "*Last stage*." In this sense, therefore, migrants are all those who, having lived for less than ten years in the state in which they were interviewed, had previously resided in some other state. The data analyzed here do not take into account persons who came from other countries. Although the above definition is not the only way to classify *migrant* in the demographic censuses, it was chosen due to several of its qualities, the most important being that it provides information from the entire intercensal period and captures shorter-term flows. For greater detail on this question, see Rigotti, 2011, and Cunha, 2012.

the frontiers came to an end and explosive growth in large urban areas gave way to growth in medium-sized cities and small towns.

An analysis of the internal inter-regional migration over the last four decades must include processes of in-migration, emigration and return migration and their specific characteristics as influenced by historical factors such as "migratory complementarities." Although return migrations are not a new phenomenon in Brazilian demographic history, they have become a central element for understanding long-distance flows, especially from the Southeast of Brazil to the Northeast. The explanations for this phenomenon were based on the impact of economic crisis in the metropolitan area (CUNHA and BAENINGER, 2007) and on the incipient process of deconcentration of production in the northeastern and southeastern regions (PACHECO, 1998). The numbers of return migrants to their states of origin between 1981 and 1991 was double that seen in the 1970s and involved 25.2% of all migrants. The volume of return migrations rose from 1.2 million persons in the 1970s, to 2.6 million between 1981 and 1991. This growth in volume also entailed an intensification of the phenomenon in relative terms. Nationwide, the average annual rate of return doubled between the 1970s and the 1990s when, not surprisingly, it reached the highest number at any point during the last four decades (0.06% per year)

The factor that stands out in these return migrations is that the State of São Paulo responded for 18% of the national total between 1970 and 1980, rising to 26% between 1981 and 1991. In the case of the State of Bahia, for example, 53% of those who returned said that their immediately previous residence had been in the State of São Paulo (CUNHA and BAENINGER, 2007).

The debate over the "concentrated-deconcentration" of the economy (CANO, 1988) found space in demographic studies that analyzed the country's internal migrations as of the 1980s. Arguments were based on the metropolitan crisis and the deconcentration of industry that was expected to benefit regions outside the southeastern part of the country. It was hoped that this trend would bring the migrants back to their original regions and retain their current populations with the new process of economic growth.

Ever since the 1970s inter-regional migrations have shown enormous changes in numbers, flows and characteristics, especially in regard to: a) the fall in long-distance interstate

migrations and, b) the return migrations that re-redesigned the forces of centripetal and centrifugal redistribution of the population.

Over the last forty years inter-regional migrations have therefore taken on greater complexity with a predominance of migrations between urban areas. In the 1980s and 1990s interstate migrations involved 10 million persons per decade, whereas this number was approximately 12.5 million during the 1990s (Table 1). In contrast, during the period from 2000 to 2010 interstate migrations totaled approximately 11.4 million persons.

The empirical evidence on interstate migratory movements during the 1990s and 2000s, however, indicates that some of the changes that took place during the 1980s failed to continue at the same rate during the following decades, and that there was even a reversal of certain trends. For example, there was clearly a fall in the impetus of processes of occupying frontier areas in several different regions, especially in the Central-West, specifically, the State of Mato Grosso. The trend toward increased numbers of out-migrants also persisted in the Northern Region (from 294,000 persons in the 1970s to 797,000 in the 1980s, reaching 958,000 in the 1990s and one million during the first decade of the new century). At the same time, the number of immigrants remained high (approximately 1.3 million per decade in the 1980s and the 1990s), but fell off to 1.1 million in the 2000s.

Another point consists of the movement of populations from the Northeast to the Southeast, which seemed to have fallen off in the 1980s but rose again in the 1990s. There was an increase in the emigration of Northeasterners, rising from 3.2 million in the 1970s to 3.6 million in the 1980s, and then to 4.0 million in the 1990s, remaining at this level during the 2000s. At the same time, there was a sizeable increase in in-migration to the Southeast between 1970 and 2000, although with a little reduction during the 1980s. From 4.9 million persons between 1970–1980, the number fell to 4.3 million in the 1980s and rose again to 5.2 million between 1990–2000. However, the census data for 2010 indicate a total of 4.4 million immigrants for the period between 2000–2010.

This reduction primarily reflects the considerable fall in numbers of immigrants received by the State of São Paulo, especially from the Northeast (see attached migration matrix). This result stands out because there was an appreciable revival of the economy in the 2000s, including higher employment.

The Northeastern states of Bahia, Maranhão and Piauí showed the highest rise in numbers of out-migrants over the last four decades. In the Southeast, however, the 1990s showed, for São Paulo and Rio de Janeiro, an inversion of the trend toward lower in-migration seen between 1970 and 1980. Between 1990–2000 these states (Rio de Janeiro and São Paulo) showed an increase in their numbers of immigrants, with São Paulo returning to the same levels as those seen in the 1970s, that is, approximately 3.2 million immigrants (in the 1980s, had been 2.7 million). But between 2000 and 2010 the State of São Paulo once again fell to 2.5 million immigrants.

In terms of total interstate movements the South was the only region that showed the same trend as it had during the 1980s, namely, less demographic reduction. The total number of out-migrants fell from 1.8 million in the 1970s to 1.3 million in the 1990s, and then rose slightly to 1.4 million between 2000–2010. There was also an increase in the number of immigrants (from 923,000 to 1,500,000 over the last two decades). It should be noted, however, that for the period between 2000–2010, the nature of the emigration processes from the Southern Region differed from those seen during the 1970s, when its farming frontier became saturated. The current migratory movements are thus limited to an intra-regional scope.

It is also interesting to note these trends from the point of view of the final impact on migration by comparing the differences between in-migration and emigration for each state. First one can note the continuous fall in net demographic losses of the northeastern states, with the exception of Bahia (which continued to show losses in the 2000s similar to those of the preceding decade). For the older frontier areas, such as Rondônia, Mato Grosso do Sul and Mato Grosso, the fall in demographic gains over the last four decades has been generally accepted as fact. Even newer frontier areas, such as Pará, Roraima and Amapá, were unable to sustain their impetus of demographic gains for more than a single decade (1990) and have already shown significant decreases in the 2000s.

Table 1**Gross (Total) Numbers of Interstate Immigrants and Out-migrants (*)**

State	1970/1980		1981—1991		1991—2000		2000—2010	
	in-migration	out-migration	in-migration	out-migration	in-migration	out-migration	in-migration	out-migration
Rondônia	285,67	39,672	411,802	157,957	197,589	152,867	152,914	136,367
Acre	16,64	19,08	29,245	30,55	36,07	30,993	33,501	34,377
Amazonas	73,353	55,151	113,399	96,782	189,953	119,703	171,151	122,441
Roraima	18,3	4,122	62,579	13,526	87,975	23,283	62,078	25,601
Pará	395,378	165,773	508,412	340,289	475,891	451,819	451,988	460,689
Amapá	22,749	10,722	43,152	14,006	98,842	29,106	85,69	36,882
Tocantins			159,015	144,702	218,922	151,15	190,421	184,424
Total North	812,09	294,52	1,327,603	797,813	1,305,242	958,921	1,147,743	1,000,781
Maranhão	182,825	329,057	236,891	498,083	262,555	573,807	268,487	677,35
Piauí	92,677	227,224	161,234	287,566	196,658	320,115	173,776	351,306
Ceará	150,434	464,781	292,914	519,712	388,399	434,086	309,027	452,275
R.G.Norte	99,802	167,322	159,248	165,447	174,915	152,231	161,443	140,981
Paraíba	124,518	363,65	208,521	356,296	245,653	364,182	223,337	324,489
Pernambuco	280,279	654,491	370,588	657,833	410,619	654,965	370,987	588,262
Alagoas	98,635	192,261	133,852	212,367	151,187	283,325	143,703	307,06
Sergipe	73,122	103,133	122,046	94,04	125,552	117,034	121,924	118,966
Bahia	350,471	727,815	455,169	876,9	619,172	1,133,797	609,205	1,119,515
Total N-East	1,452,763	3,229,734	2,140,462	3,668,244	2,574,710	4,033,524	2,381,889	4,080,204
M. Gerais	613,732	1,218,957	797,879	1,016,120	910,447	887,733	914,847	986,045
E. Santo	201,156	204,985	269,063	197,134	296,248	180,482	286,428	185,623
Rio Janeiro	855,23	531,36	576,399	623,739	775,806	549,872	701,275	585,18
São Paulo	3,250,889	1,287,748	2,679,169	1,494,930	3,254,389	1,789,544	2,507,631	1,840,193
Total S-East	4,921,007	3,243,050	4,322,510	3,331,922	5,236,890	3,407,631	4,410,181	3,597,041
Paraná	523,856	1,329,474	588,088	1,081,535	754,178	798,265	649,067	738,089
Sta.Catarina	245,628	242,877	329,917	271,443	458,614	285,084	618,129	328,653
R. G. Sul	153,771	312,383	233,954	296,126	309,605	279,08	292,636	384,031
Total South	923,255	1,884,734	1,151,959	1,649,104	1,522,397	1,353,429	1,559,832	1,450,773
M. G. Sul	292,914	224,978	262,612	237,424	236,03	206,103	227,334	197,269
M. Grosso	326,148	151,093	541,742	244,438	420,296	249,423	386,904	259,182
Goiás	383,475	408,237	518,145	345,179	758,863	341,856	817,939	393,761
Federal Dist	475,807	151,113	349,189	340,098	424,362	383,153	475,254	428,063
Toptal Central-West	1,478,344	935,421	1,671,688	1,167,140	1,839,551	1,180,535	1,907,431	1,278,275
Brazil	9,587,459		10,614,223		12,478,790		11,409,086	

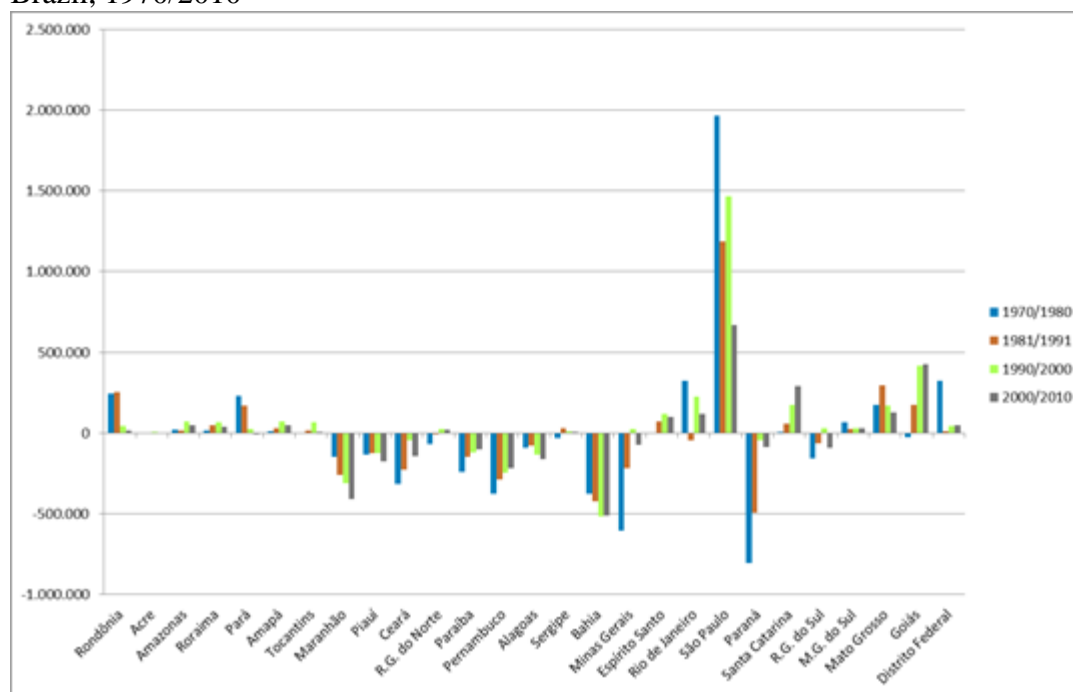
(*) Last-stage migration

Source: FIBGE, Demographic Censuses of 1980, 1991, 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP)

The data for Minas Gerais and Paraná show the strength of their demographic recovery, even though they are far from constituting areas of demographic attraction. In other words, one sees much more a reduction in losses than increases.

It is also generally recognized that the Federal District (Brazil's capital) and Goiás, in the Central-Western Region, show an intense relationship between their respective demographic and migratory dynamics.² Goiás has absorbed a high proportion of the demographic expansion of the Federal District (which is territorially situated within the State's boundaries). Although Goiás shows other dynamic areas, there is no doubt that its significant migratory gains reflect this relationship with the nation's capital.

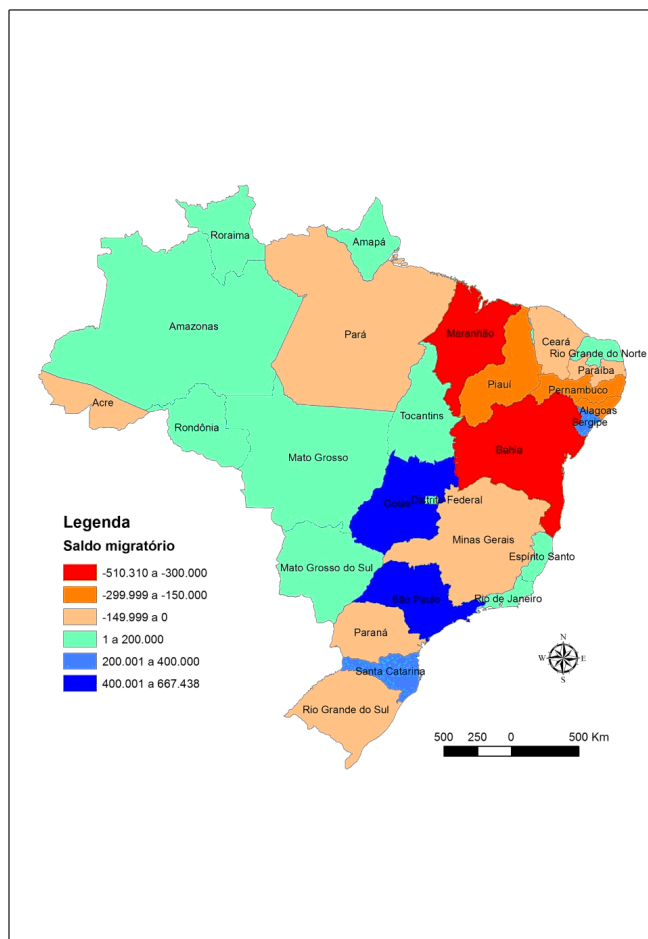
Graph 1
Differences between numbers of in-migrants and out-migrants by state
Brazil, 1970/2010



Source: FIBGE, Demographic Censuses of 1980, 1991, 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP)

² Translator's note: Strictly speaking the Federal District is not a "state," but for demographic purposes it is included as such here, according to common practice;

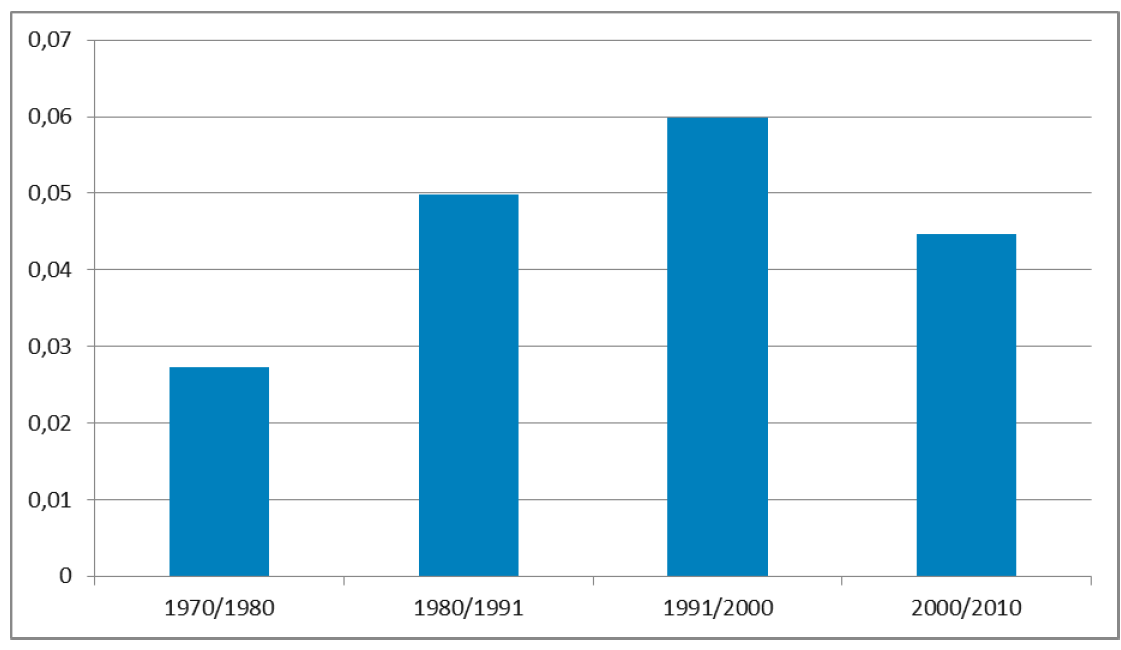
Map 1
Net migration* in numbers, by state
Brazil 2000/2010



Source: FIBGE, 2010 Demographic Census.
 (*) See note 22

Lastly, special emphasis is given to return migration. As was stated above, the phenomenon is nothing new, but it was significant in the country during the 1990s. The available data show that the number of returning migrants increased steadily, rising from 1.2 million in the 1970s to almost 3.8 million in the 1990s, when it reached its highest peak. In addition, as shown in Graph 2, the intensity of this phenomenon was also higher between 1990-2000, a level that coincides with major changes in the country's process of economic and social development.

Graph 2
Annual average rate of return migration
Brazil, 1970/2010



Source: FIBGE, Demographic Censuses of 1980, 1991, 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

The question of return migration will be discussed below, due to its importance for understanding the different migratory processes that have taken place in the country.

II. Main changes in Brazilian migration in the 2000s

In order to present a smoothly flowing text, the authors decided to summarize the complex and heterogeneous migratory dynamics in the country by considering only the most representative states. Several aspects regarding these states will be treated in detail, as they are considered important for an understanding of the overall national migratory process. The following states were chosen for this more detailed analysis:

- a) Roraima and Pará, in the Northern Region, as "new frontiers and mineral frontier";
- b) Also in the Northern Region, the states of Rondônia and Mato Grosso, characterized as nearly saturated frontiers;
- c) The northeastern states of Pernambuco, Ceará and Bahia, which still show high rates of in-

migration and emigration with the Southeast;

d) The states of Minas Gerais and Paraná, as areas with high levels of return migration and with recovery of its migratory gains.

e) The states of Santa Catarina and Goiás and the Federal District, seen as "new" and old regional centers;

f) The states of São Paulo and Rio de Janeiro, which are areas of intense migratory arrivals and departures for many northeasterners.

Although the data on Table 1 were already commented on above, it would seem worthwhile to return to them here in order to reinforce possible changes and/or continuities of migratory behavior in the chosen states.

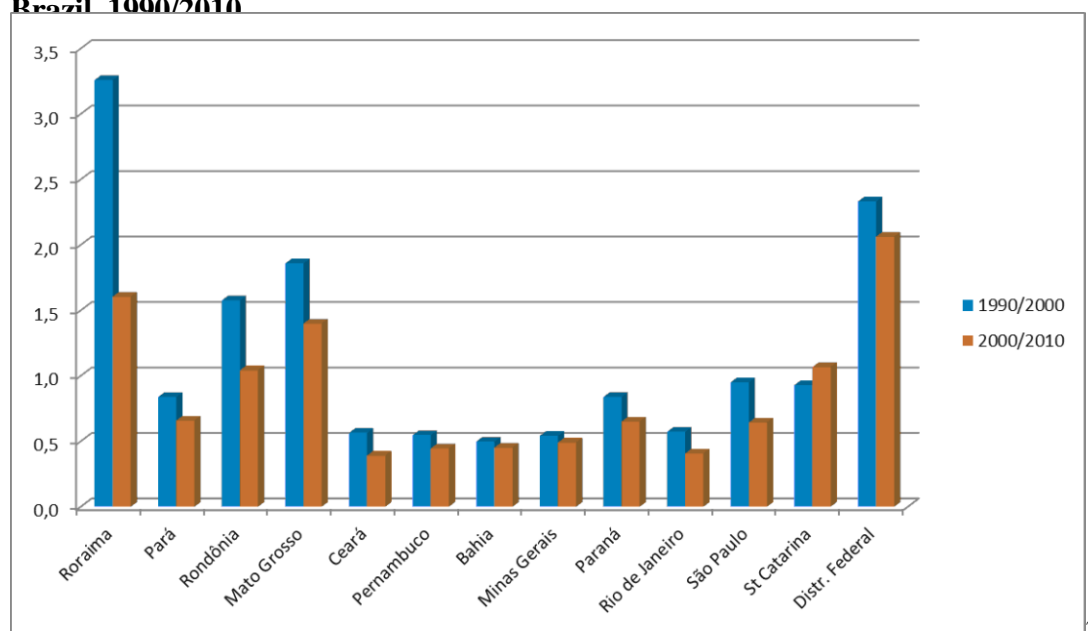
In regard to in-migration, the 2010 Census shows that the number of persons who had moved from one state to another since 2000 fell almost 9%, from 12.4 million to approximately 11.4 million. As can be clearly seen in Table 1, this reduction took place in virtually all the states (exceptions include Santa Catarina, which is classified in the group of emerging areas). This situation becomes even more interesting when one compares the previous data with the average³ annual rates of in-migration. Graph 3 shows the impact of in-migration on the states, which is quite different from what is suggested by gross numbers. Even though in-migration fell during the 2000s, it is still an important factor in the demographic dynamics of the frontier areas and the Federal District.

³ The rates used here were calculated with the average population for the intercensal period in the denominator.

Graph 3

Annual average rate of interstate in-migration, selected states

Brazil 1990/2010



Source: FIBGE, Demographic 2000 Census and 2010. Special tabulations by NEPO/University of Campinas (UNICAMP).

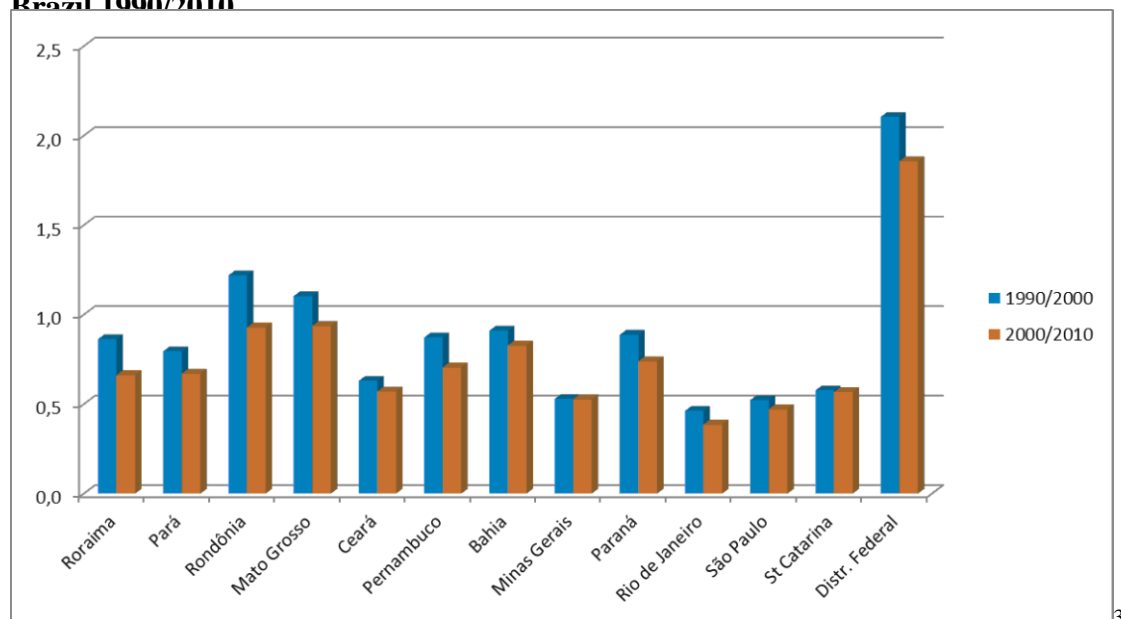
From the point of view of the departures of persons from states, the data from the 2010 Census (Table 1) show that there had been a general increase in these demographic losses since 2000, with a few but important exceptions in the Northeast (Pernambuco and Paraíba) and in Paraná, where emigration fell significantly. However, once again the contrast with the average rate of emigration (Graph 4) tends to invert these conclusions because it is clear that the intensity of the reductions in population fell almost everywhere in the country.

However, the behavior of the states in the Northeast and the Federal District should be noted. Despite its history of demographic decreases, the Northeast shows an incipient but apparently constant process of reduction in the intensity of its demographic losses.⁴ But in the case of the Federal District, its demographic fall showed the highest rates in the country, despite its being the seat of the country's capital city, Brasília.

Graph 4

Annual average rate of interstate emigration, selected states

Brazil 1990/2000



Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/University of Campinas (UNICAMP).

Finally, it is important to appraise the net impact of this process of coming and going. It should first be noted that, with the exception of the State of Santa Catarina, mentioned above as being a new regional hub of attraction, all the other selected states showed a fall in the intensity of "net migration" during the 2000s. This fall was seen both in areas with positive rates and those with negative rates.

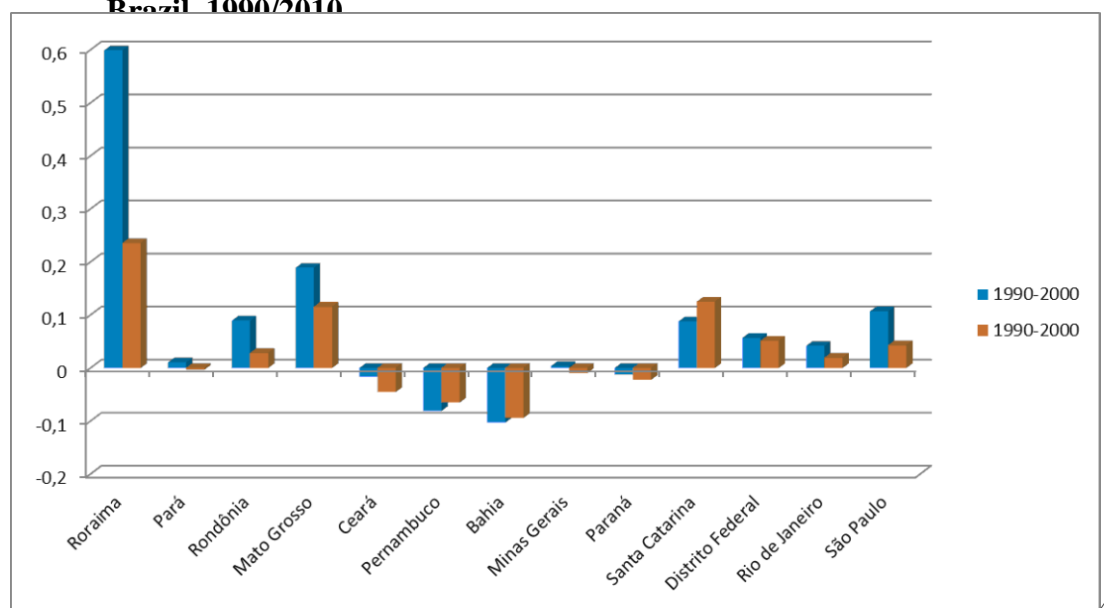
To this end the reader could go back to Graph 1, above, and contrast it with the rates of "net

⁴ Data for the decades of 1980 and 1970, not shown here, make clear this sustained falling trend of the intensity of

migration" in the states now being studied. The information on Graph 5 shows situations that are very different from those shown by the data on numbers of immigrants and out-migrants shown on Table 1. For example, while São Paulo is clearly the state with the country's highest volume of both immigration and emigration, this does not mean that São Paulo shows the highest rate of net migration. In this regard, other states, such as Roraima, Rondônia and Mato Grosso (all of which are frontier areas) sustained much heavier impacts from migration.

The same can be said of the Northeast. Although it showed significant levels of demographic movement (see Table 1), it saw a relatively low, and negative, "net migration" over the last four decades.

Graph 5
Annual average "net migration"(*), selected states
Brazil, 1990/2010



Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/University of Campinas (UNICAMP)

(*) Formally, the difference between in-migration and emigration derived from data on the "last stage" does not correspond to true net migration, but rather to a mere approximation.

If the facts set forth up to this point are seen from a broader temporal perspective, they corroborate a characteristic that the Brazilian migratory process is gradually taking on with every

emigration in the majority of the northeastern states.

decade that goes by. In other words, interstate migration seems to be losing its strength as a "motor" for the process of spatial redistribution of the population, as it was during the 1960s and 1970s.

The data analyzed up till now suggest that both the traditional areas attract immigrants and areas of departure are gradually losing the characteristics for which they have been closely identified. Obviously, this does not mean that internal migration in Brazil has lost its importance, but only that new processes, especially of regional and intra-regional scope, have become more influential on demographic dynamics. But to go further into this issue would take us away from the scope of the present paper.

Characteristics of migration

One hypothesis has influenced analyses presented until now and was also suggested in other texts (CUNHA and BAENINGER, 2007, CUNHA, 2006; BAENINGER, 2012). Specifically, it holds that the crisis that began in Brazil in the 1980s and was sustained, although on other levels, during the 1990s, associated with an incomplete but effective process of restructuring the country's production, may have had at least two important impacts. One is the possibility for persons to stay in the large cities, and the other is that it may also have increased the weight of other determining factors of migration, such as public services and policies, especially those related directly to income transfer programs.

In fact, the data analyzed until now and other data that will be presented shortly show that migration in the 1990s seems to have reacted to this situation. This may have implied greater circulation of persons over shorter periods of time or, as Baeninger put it (2012), greater turnover⁵ of people.

In this regard, at least two pieces of information taken from the demographic censuses and from the data analyzed above may help clarify this question. The first is information on *duration of residence* and the second on *age*.

⁵ The concept of migratory turnover is based on the trend toward high numbers of arrivals and departures in a specific area. The need for surplus population is built into the concept to the extent that the dynamics of the economy sometimes mobilize contingents of laborers at the "origin" and at other times at the place of "destination," including

Data on the distribution of immigrants by duration of residence in the state in which they were interviewed suggest that there was in fact greater circulation of persons over shorter periods of time, especially during the 1990s (Table 2). To corroborate this hypothesis it suffices to note that the pattern of in-migration according to this variable is quite different for the states in the Northeast. Especially on the 2000 Census, the percentage of recent arrivals (those with less than two years of residence) was higher in this region than in the others. The most interesting fact, however, as also seen on Table 2, is that this concentration of shorter duration of residence even higher for return migrants, a situation that also holds true for the states of Minas Gerais and Paraná.

Another aspect of these data also stands out. It is easy to see that the State of São Paulo was one of the main origins of returned migrants. In the 1990s – the period during which return migration intensified – there was low concentration of its immigrants in short periods of residence. But this situation changed considerably in the next decade. In other words, precisely when, once again, return migrations fell both in numbers and intensity (see Graph 2), the state began to show higher numbers of recent migrants. It can therefore be assumed that the low percentage of immigrants with less than two years of residence shown by São Paulo in the 1990s was the result of the "faster" return of the immigrants received, especially those from the Northeast. This is further indication that, in reality, the turnover during this period may have been even higher than that counted.

Another way to look for inferences on this question and, at the same time, to speculate on the determinants of migration, would be to analyze its composition by age and by gender. Therefore, a brief and limited analysis of these variables for the selected states is presented below, classified according to the main spatial contexts in terms of migration.

The age pyramids below illustrate the diversity of composition by age upon migrating,⁶ and by gender. They consequently show the profile of migration present in the trends mentioned above (Chart 1).

return migration (BAENINGER, 2012).

⁶ Age upon migrating was obtained from the difference between interviewees' declared age at the moment of the census and the duration of residence in the state. This resource has the purpose of providing a reliable age profile of migrants who arrive in or leave states.

Table 2

Immigrants according to duration of residence in the state where interviewed, selected cases, 1990–2010

States	In-migrants				Return Migrants			
	2000/2010				2000/2010			
	up to 2 years	3 to 4 years	5 to 7 years	8 to 9 years	up to 2 years	3 to 4 years	5 to 7 years	8 to 9 years
Rondônia	36.3	21.4	23.3	18.9	38.1	30.2	19.1	12.7
Pará	34.9	22.1	27.1	16.0	36.8	22.8	25.8	14.6
Ceará	40.3	20.8	24.1	14.8	39.4	21.2	24.8	14.7
Pernambuco	42.9	21.1	22.8	13.3	40.2	21.5	24.0	14.2
Bahia	40.5	21.8	23.6	14.0	40.0	21.7	24.1	14.2
M. Gerais	43.1	21.8	22.2	12.9	40.4	22.4	23.8	13.5
São Paulo	40.1	22.6	23.0	14.2	40.1	23.1	23.5	13.4
Paraná	41.4	22.5	22.6	13.6	40.6	22.7	22.9	13.7
Sta.Catarina	40.5	24.2	22.0	13.3	39.2	22.4	23.6	14.8
M. Grosso	37.0	17.8	27.1	18.1	41.1	20.1	24.5	14.3
Federal District	39.9	21.4	24.5	14.1	43.7	20.8	22.4	13.2
	1990/2000				1990/2000			
Rondônia	35.0	30.2	24.2	10.6	35.0	30.3	24.1	10.5
Pará	35.9	22.3	26.2	15.5	35.9	22.0	26.6	15.4
Ceará	40.1	25.2	22.2	12.5	42.5	24.9	21.1	11.4
Pernambuco	38.4	24.5	23.4	13.7	39.8	23.8	23.1	13.3
Bahia	43.0	22.9	21.2	12.9	44.1	22.3	21.0	12.6
M. Gerais	37.8	25.1	23.3	13.9	40.5	24.9	22.1	12.5
São Paulo	28.3	25.7	29.9	16.0	27.8	26.0	30.3	15.8
Paraná	37.4	24.7	23.6	14.3	39.4	24.5	22.5	13.6
Sta.Catarina	36.5	24.0	25.3	14.2	37.6	24.2	24.8	13.4
M. Grosso	37.7	21.8	25.8	14.8	38.0	21.6	25.7	14.6
Federal District	37.2	22.8	25.5	14.5	37.1	22.7	25.6	14.6

Source: FIBGE, 2000 and 2010 Demographic Censuses. Special tabulations by NEPO/ University of Campinas (UNICAMP).

In the case of the new frontier areas and mineral frontiers, the pyramids for the States of Roraima and Pará show typical family migration, although individuals moving alone were also probably common, since there is also a large contingent of individuals at adult and young-adult ages. Also, the reflections of the frontier can be seen in the case of the State of Mato Grosso in 2000, with the strong presence of individuals between ages 1 and 4 years. In contrast, in the pyramid for 2010, in-migration to Mato Grosso seems to have been concentrated in the category of young adults, indicating that it is now less typically a frontier area and that its agribusiness is

currently attracting large contingents of migrating adults (ages 20-34).

In-migration to the northeastern states is characterized by the presence of children and young adults, indicating families at the beginning of their vital cycles. The relative weight of children under age 5 is much higher in this case than in any other analyzed. It is also clear that many more children were present in the 1990s than in the 2000s. This unusual fact regarding the age profile of migrants⁷ would also seem to back up the hypothesis of a higher turnover of migrants, especially northeasterners.

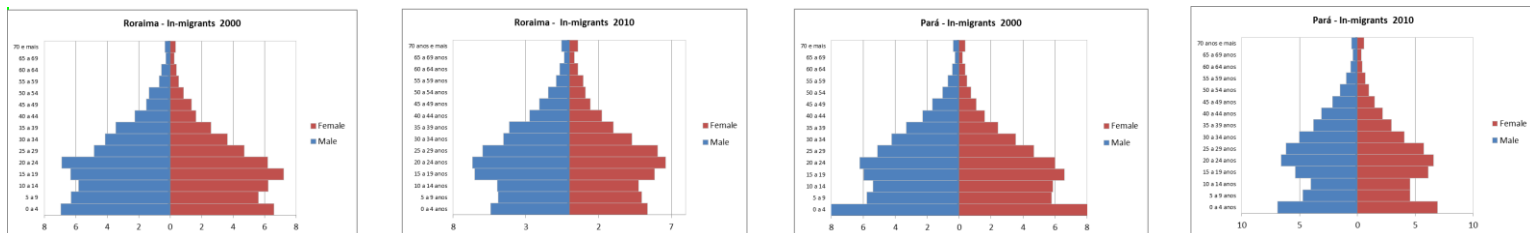
In areas that have experimented a recovery in their net gains of population one sees a strong presence of immigrating children and young adults. The Federal District and the State of Santa Catarina, which are both regional hubs, are characterized as areas that attract young adult migrants. Finally, São Paulo attracts many more adult/young migrants and, in this regard, its selectivity rose in 2010, showing a higher proportion of persons in the age 20—24 bracket

⁷ Obviously, the present authors are not suggesting that the migration of children under the age of 5 is not a reality. The purpose here is to call attention to the fact that the percentage observed in these cases is much higher than usual, even in frontier areas where family migration is predominant (CUNHA, 2002a, 2002b and CUNHA and BAENINGER, 2000).

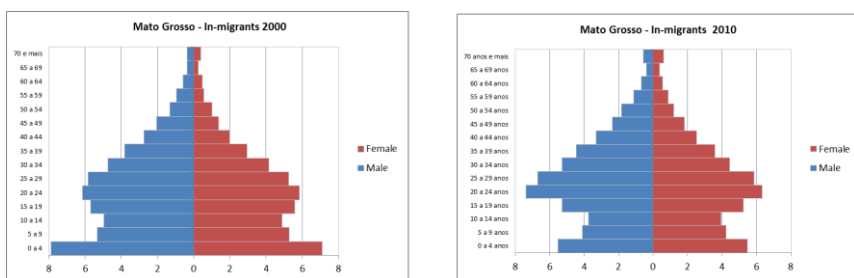
Chart 1

Distribution of in-migrants by age upon migrating and by gender in the selected states, classified on the basis of migratory context 2000 and 2010

New farming and mineral frontiers



Saturated frontier



In-migration to the Northeast

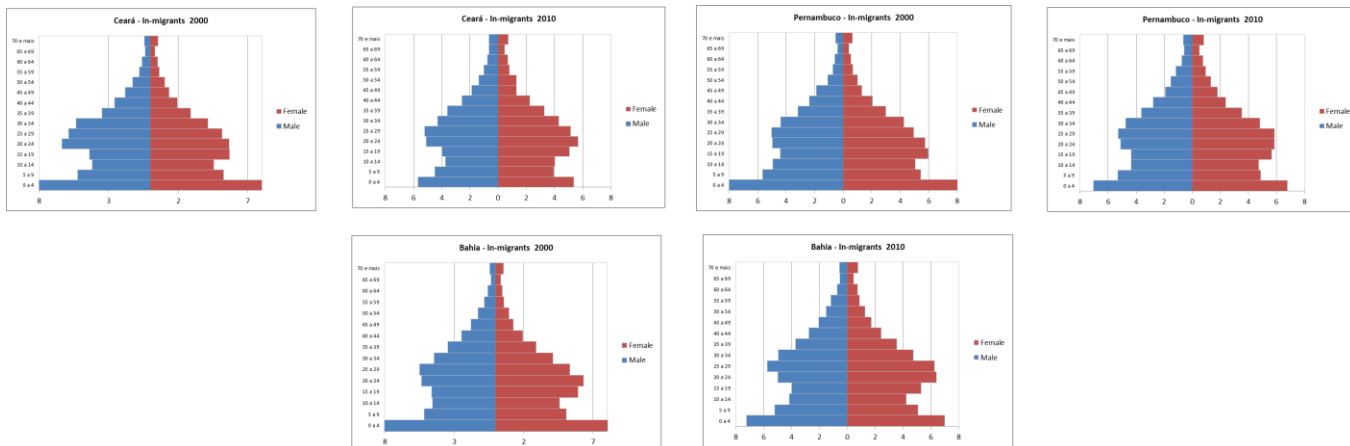
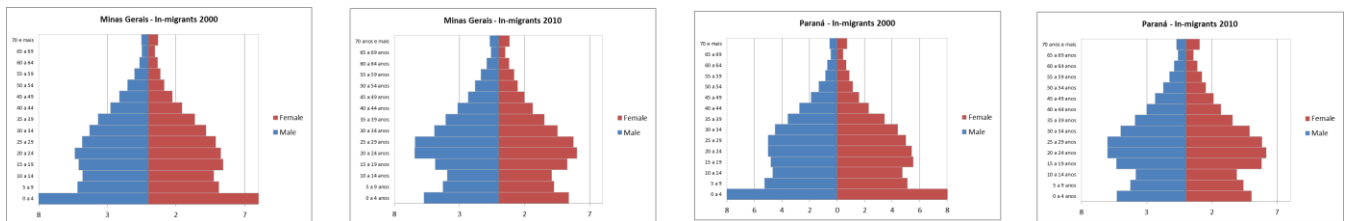
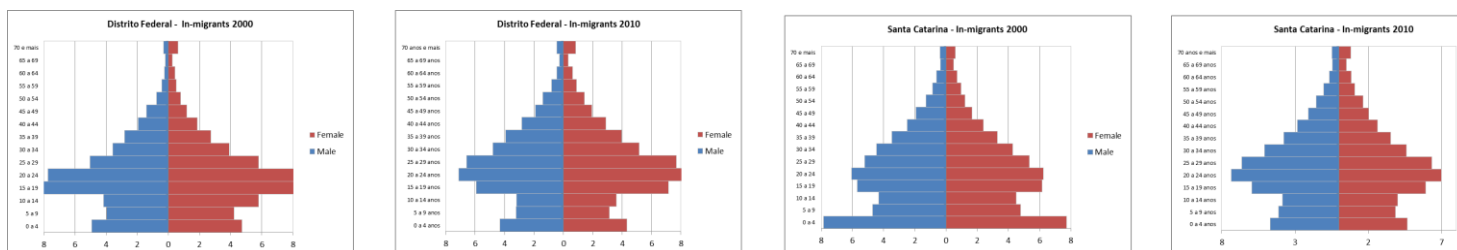


Chart 1 (cont.)

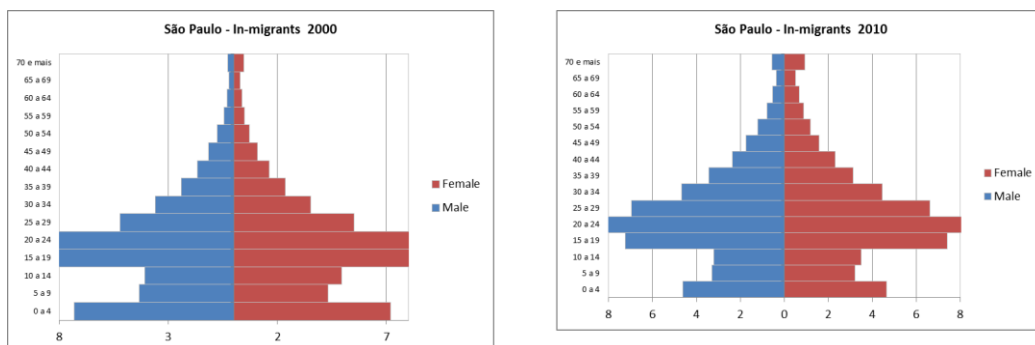
Areas that recovery their net gains of population



New Regional Poles



Main National Pole, São Paulo



Source: FIBGE, Demographic Censuses of 1980, 1991, 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

The oscillations in the numbers of interstate migrants for the periods between 1990–2000 and between 2000–2010 indicate that part of the trends seen in the 1970s and 1980s did not continue, especially considering certain areas and their emigration and in-migration processes. But from the perspective of the conceptual limits of areas of expulsion/departure/origin and areas of

attraction/absorption/destination, the concept of *migratory complementarity* makes it possible to articulate space, time and different scales to capture the complexity of the migratory phenomenon over the last 20 years. The first complementarity is that seen between Northeast and Southeast; the second complementarity refers to the flows between metropolitan regions and the interiors of states; and the third refers to intra-regional migrations. In this text, only analyses of the migratory complementarity between Northeast and Southeast will be dealt with.

III. Migratory complementarity between Northeast and Southeast in the 2000s

To analyze internal migrations in Brazil in the 21st century it is important to recognize the importance of processes that represent historical milestones (SINGER, 1973) and that reconfigure and redefine the characteristics of migratory dynamics (BRITO, 2009). In this regard, the concept of migratory complementarity can be used to explain and analyze migrations by including interpretations of economic dynamics at the "origin" and/or at the "destination." For example, complementarity can also refer to dimensions that can be used to create social images of migrations (VAINER, 1991), the question of culture (CUNHA and AZEVEDO, 2001), return migration, the resignification of migratory spaces, etc.

Taking into consideration internal migratory processes in Brazil since the 1930s and 1940s, the main destination of migrations from the Northeast of Brazil has been the Southeast (BUARQUE DE HOLANDA, 1936; BALAN, 1974; MARTINE and CAMARGO, 1984; BRITO, 1997; CUNHA, 1991). The history of migrations between these regions have been interpreted over the last sixty years in terms of the attraction exerted by the industrialization in the Southeast and the intense migration from rural zones to the cities in the Northeast (SINGER, 1973).

The complementarity between Northeast and Southeast in the 21st century has been especially marked by the modality of return migration. In fact, this type of movement illustrates the two complementary extremes of the migratory process. The northeastern states continued to have high numbers of emigrations – 3.2 million persons in the 1970s, 3.7 million in the 1980s and approximately four million per decade in the 1990s and the 2000s. Nevertheless, there was an increase in in-migration to the Northeast, with the highest point being the 1990s, with 2,574,710 persons, including northeasterners returning to the region. During the period between 2000–2010 the number of immigrants to the Northeast fell to slightly less than 2.4 million persons.

As mentioned above, return migration involved 3.8 million persons between 1990–2000 (vs. 1.1 million in the 1970s), representing 30% of all migrations in the country and reaching almost 52% of the in-migration to the northeastern states during that period. For the period between 2000–2010, return migration corresponded to approximately 3.2 million migrants, with a slight fall to 28.2% of all interstate migrations (Table 3).

In the overall context of internal migrations in Brazil, it can be seen that – except for Rio Grande do Sul, Rondônia, Roraima, São Paulo and the Federal District – the states showed a fall in the proportion of return migrants in the total of interstate migrations. The highest proportions of return were seen in states that have historically been exporters of population, such as those in the Northeast (especially Bahia, Pernambuco and Ceará), as well as Minas Gerais and Rio Grande do Sul (Table 3).

However, considered in the context of the complementarity between Northeast and Southeast, this flow between the Northeast and the State of São Paulo shows the potential of return migration in the intense processes of coming and going. The share of return migration from São Paulo in the total of return migrations to states such as Alagoas, Pernambuco and Bahia, define the composition of this movement. In the 1990s approximately 32% of in-migration to these northeastern states consisted of return migration. This percentage was even higher in the 2000s (40%), especially in the State of Bahia, where more than 55% of the returning migrants came from the State of São Paulo. The reversibility of migratory processes (DOMENACH and PICOUE, 1990) aids in understanding return migration in the context of the migratory complementarity that was reconfigured in the processes between Northeast and Southeast.

Table 3

Percentage of return migration in total in-migration for all states in Brazil, 1990–2000 and 2000–2010

State	Percentage of return migration		Percentage of return migration coming from state of São Paulo	
	1990/2000	2000/2010		
Rondônia	12.6	12.6	8.4	8.7
Acre	35.2	22.9	2.6	6.5
Amazonas	24.3	20.4	2.8	4.2
Roraima	4.7	7.7	0.8	3.2
Pará	25.1	19.9	4.5	8.9
Amapá	9.9	8.1	1.6	5.4
Tocantins	26.7	16.9	2.6	4.6
Maranhão	51.3	40.7	8.2	12.7
Piauí	51.2	43.7	34.1	36.5
Ceará	57.8	51.3	31.1	37.6
R.G.Norte	45.9	37.8	23.5	30.0
Paraíba	55.5	45.6	30.1	33.4
Pernambuco	52.2	44.0	36.7	45.0
Alagoas	50.6	43.9	32.1	46.1
Sergipe	36.2	32.7	25.5	35.8
Bahia	51.7	44.5	43.1	55.3
M. Gerais	45.2	39.8	37.8	45.7
E. Santo	24.9	19.5	8.1	10.6
Rio Janeiro	26.4	26.4	12.8	19.5
São Paulo	18.0	22.7		
Paraná	38.9	36.4	34.9	39.7
Sta.Catarina	27.6	19.5	10.2	13.8
R. G. Sul	48.0	55.4	9.7	11.8
M. G. Sul	23.0	22.2	27.1	30.3
M. Grosso	13.7	10.6	7.4	14.2
Goiás	20.8	15.4	7.2	8.8
Federal Dist	4.8	14.8	6.2	6.8
Brazil	30.1	28.2	21.3	25.1

Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

The destination of interstate in-migration to metropolitan areas versus to the interior of states (Table 4) shows, on the one hand, that over 70% of the in-migration to Pará, Minas Gerais and Bahia moved to the interior of these states. As Lyra (2000) showed for the State of Pernambuco in the 1980s, this type of move generally means people returning to their birthplaces. In contrast, the highest proportions of immigrants arriving from other states with destination to large cities are more frequent in the southeast (in the case of the Metropolitan Area of São Paulo, 72%, and the Metropolitan Area of Rio de Janeiro, 64%) and to metropolitan areas in the Northeast, especially the Fortaleza Metropolitan Region and the State of Pernambuco, which concentrate 51% and 45%, respectively, of the interstate in-migration to these states. This result suggests that the receiving capacity of these metropolitan regions of the Northeast seems to contribute both to lower levels of emigration to the southeast and possibly to a redefinition to the areas of in-migration of successive returns between the Northeast and São Paulo, especially between their metropolitan areas.

Table 4
Interstate in-migration according to place of destination
Selected states with metropolitan regions (*) 2000–2010

State	Destination of State's In-migration			
	1991/2000		2000/2010	
	to state's interior	to metropolitan region	to state's interior	to metropolitan region
Pará	79.5	20.5	83.2	16.8
ceará	58.7	41.3	49.3	50.7
Pernambuco	63.9	36.1	55.3	44.7
Bahia	82.1	17.9	75.1	24.9
Minas Gerais	75.6	24.4	76.5	23.5
Rio de Janeiro	20.7	79.3	28.1	71.9
São Paulo	30.1	69.9	36.3	63.7
Paraná	52.7	47.3	50.7	49.3
Rio Grande do Sul	59.8	40.2	45.0	55.0

Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

As an advance in the understanding of the demographic contingents involved in the complementarity between São Paulo and the Northeast and its characteristics, analyses referring to *age upon migrating*, extracted from the Demographic Censuses of 2000 and 2010 were used (Chart 2).

Through these analyses one can note that the flows from São Paulo to the Northeast⁸ refer largely to migrants who were young adults. The second largest age bracket in these migrations is that of children between ages 0 and 4 years, but with greater significance only during the 1990s. This seems to indicate that departures from São Paulo toward the Northeast are comprised largely of families at the beginning of their vital cycle. But in the case of the flow from São Paulo to Ceará there was a higher percentage of men in 2000. This may mean higher migration of single men from São Paulo to Ceará,⁹ but it might also suggest the migratory return of men who had left their families in Ceará, since the age bracket upon migrating was concentrated in the 30-34 age bracket. In the flow from São Paulo to Ceará in 2010 one can note in these contingents a strong trend toward concentration of older ages, with greater presence of men between ages 35 and 39 and a significant proportion of children between ages 0 and 14, reflecting the family compositions of this in-migration. In the flow from São Paulo to Pernambuco and Bahia, the predominant pattern is family in-migration.

As mentioned above, it is important to note the presence of considerable numbers of children under the age of 5 in the migratory flows of the 1990s.¹⁰ This behavior seems to show that the coming and going of migrants became even faster during this period and, as already noted, was affected by the economic crisis in the traditional target areas for migrants, such as the Greater São Paulo Area. In addition, the fecundity in the country, although falling, was still leading to families with numerous children.

For the flow from Northeast to São Paulo (Chart 3) another migration profile can also be seen when one considers age upon migrating, with a high concentration of persons between the ages of 15 and 24 and low numbers of children. In 2010 the migratory selectivity by age was even more accentuated in the age bracket between 20–24.

⁸ In order to further simplify the analysis, only the states of Ceará, Pernambuco and Bahia were considered representative of the Northeastern Region. As can be seen on this table regarding origins and destinations, the three states mentioned above represent the main areas with which the State of São Paulo has demographic exchanges.

⁹ It is probably no coincidence that precisely during this period the State of Ceará was benefitted by significant industrial deconcentration, especially related to the textile industry.

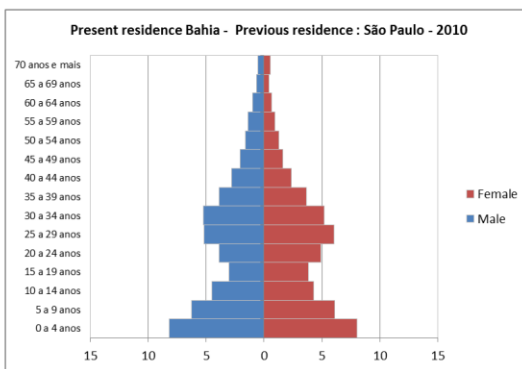
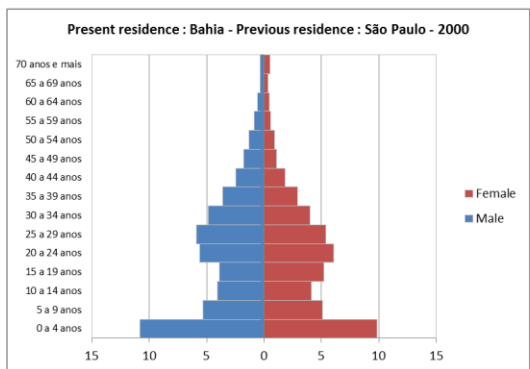
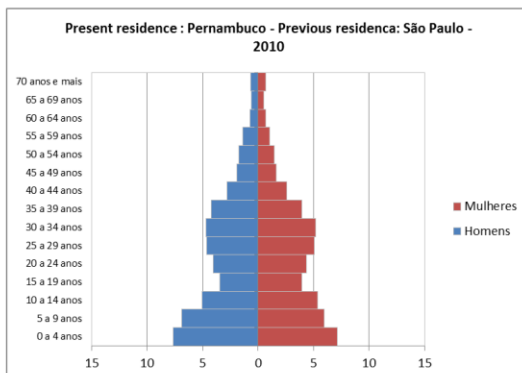
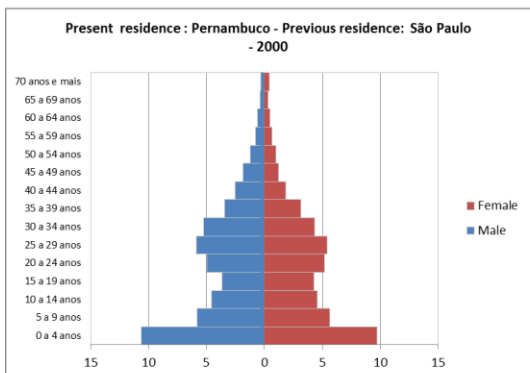
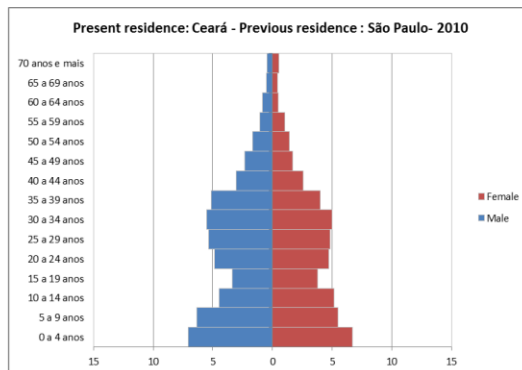
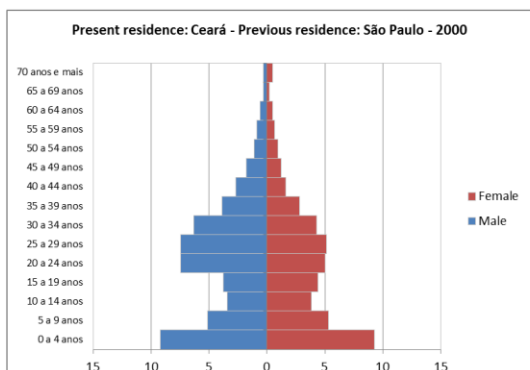
¹⁰ See Note 6, above.

Chart 2

Distribution by age upon migrating and by sex

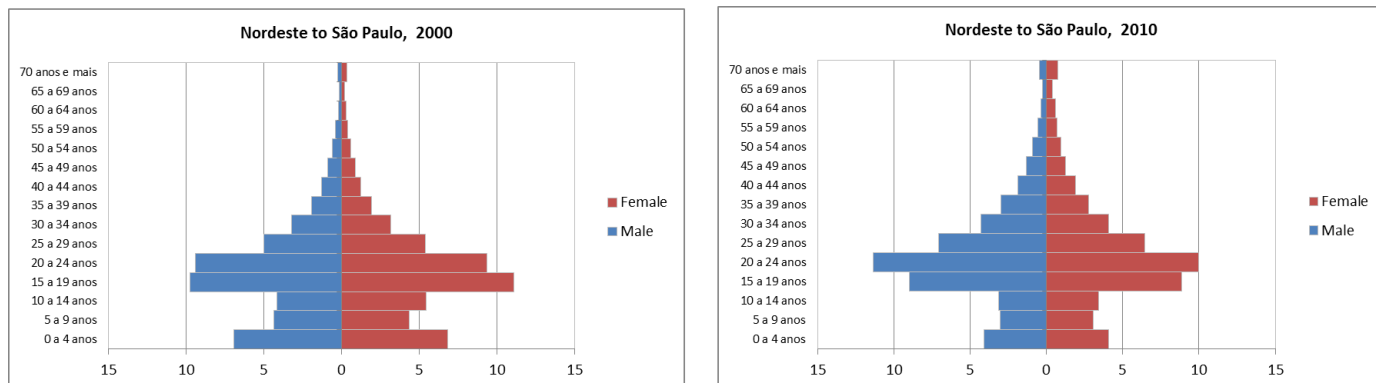
São Paulo and selected flows with the Northeast

2000 and 2010



Source: FIBGE, Demographic Censuses from 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

Chart 3
Distribution by age upon migrating and by sex
Northeast and São Paulo
2000 and 2010



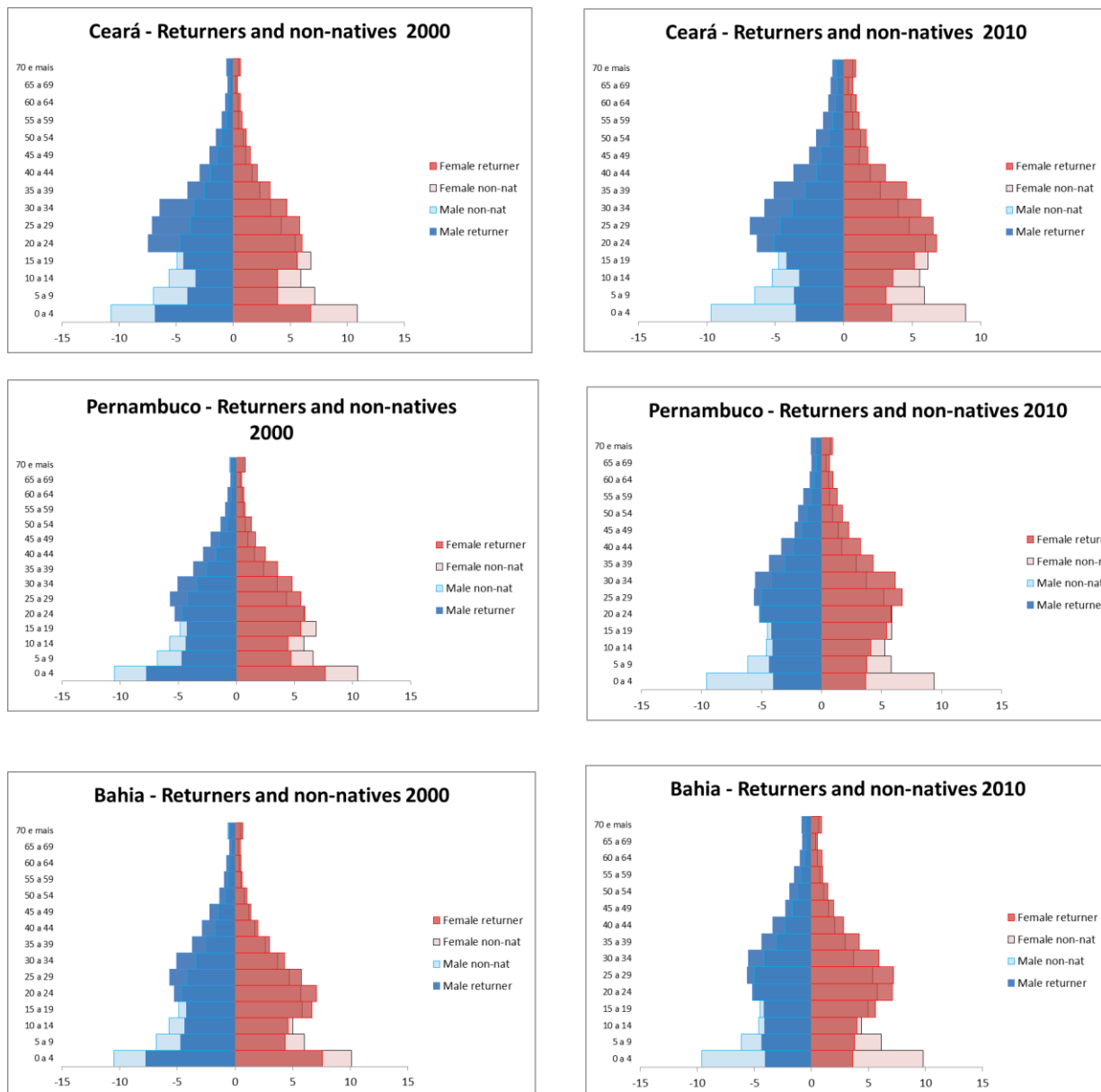
Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/ University of Campinas (UNICAMP).

The age pyramids according to migratory situation, shown in Chart 4, help visualize the high level of return migration in the different age brackets and show that non-natives in the 0-to-15-year-old bracket apparently portray the "indirect effect"¹¹ of return migration. The statistics indicate the turnover present in the migratory processes between Northeast and Southeast in Brazil. In practice this means that many migrants move south when they are younger and go back as adults with their own children. It can be seen that the pyramid of returners (the inside part of the graph, in brighter colors) is much younger in the 2000 Census. In other words, this was precisely when immigration, in both directions, increased. What stands out is that these children were born in the Northeast. This fact corroborates once again the hypothesis of the appreciable coming and going that must have taken place more intensely during the 1990s, due to the economic crisis in São Paulo. It can also be noted that returning adults are older than "non-migrant" adults (indirect effect) who arrive in these states.

¹¹ This number refers to persons who arrived with natives that return to the state. Non-native children and spouses are included in this effect. Estimates regarding Brazil indicate that the effect is significant, especially in reference to the Northeast. For greater details, see Ribeiro et al., 1996, and Garcia and Miranda Ribeiro, 2005.

Chart 4

Distribution by age upon migrating and by migratory situation (returners and non-natives) and by sex. Selected states in the Northeast, 2000 and 2010



Source: FIBGE, Demographic Censuses of 2000 and 2010. Special tabulations by NEPO/University of Campinas (UNICAMP).

Final Considerations

The panorama of internal migration in Brazil, with its diversity of movements and directions, indicates both the complexity of and explanations for the phenomenon. The dynamics of the economy and regional development continue to be basic aspects of the new faces of the phenomenon of migration, but they fail to cover all migratory situations.

On the one hand, this regional background may indicate possibilities for interpreting in the scope of long- and short-distance migration. On the other hand, however, it has its limitations, especially when one notes the oscillations in return migration, increased arrivals and departures, and migratory routes unrelated to the central hubs of current economic evolution.

In this regard, the analyses carried out here are aimed at presenting an overall picture of migration in Brazil between 2000 and 2010, in order to identify the new characteristics of long-distance migration and especially the complementarity between northeastern and southeastern Brazil.

With interpretations based on the economic crisis of the 1980s and 1990s in the Greater São Paulo Area it was possible to understand the importance of return migrations (CUNHA and BAENINGER, 2007). However, they were nevertheless important even between 2000–2010, as can be seen from the configuration of migration from the Northeast.

Considering the dynamics of the economy between 1989–2003, Cano (2011) indicates the following factors that contributed to the continued deconcentration of regional production in the country: policies that favored exports, especially of commodities in agriculture, agribusiness and minerals; the fiscal war, mainly in terms of transformation industries; the development of a decentralized infrastructure; and the effects of industrial deconcentration. For Cano, the debate on regional dynamism in the late 1990s and early 2000s, in the context of the international restructuring of production, took on issues related to competition between regions, local production arrangements and local power.

Among the determinants of the regional and urban questions in Brazil between 2003-2010, Cano (2011) calls special attention to the increase in the political and economic power of large private domestic and international groups over broad stretches of the Brazilian territory, especially

in the North and parts of the Northeast and Central-West. For Cano, "It is obvious that the deconcentration of production continued in all major sectors. Specifically, this consisted of the consolidation of the farming and cattle raising frontier in the North and Central-West and increased occupation of forests in Bahia, Piauí and Maranhão for a variety of purposes, such as the production of exportable commodities, the consolidation of the Carajás mineral province, [and] the expansion of oil drilling and extraction in the States of Rio de Janeiro, Espírito Santo and Rio Grande do Norte. [...] The expansion of the periphery is closely related to that of São Paulo. [...] The exception to this process resides in the "regional" autonomy taken on by certain areas of the country, with the expansion of production for exportation (especially of commodities) and various types of energy production, including sugarcane alcohol, oil and hydroelectricity" (CANO, 2011 p. 26).

In this context, the analysis of migratory movements in the 2000s reinforces the trend of the configuration of new spaces for migration, and this process brings with it the need for broader views of the regions where these flows take place and the meanings and repercussions of the migrations on different levels.

The different spaces of migration in Brazil during the decade between 2000 and 2009 can be categorized as follows:

- i) Areas of national and regional retention of migration, consisting of a new hub of attraction; this is an area of expansion of the new farming and cattle-raising frontier, specifically, the State of Goiás, in the Central-Western Region of the country;
- ii) Areas of retention of regional migration, namely, the states of Roraima, Pará (Northern Region), Rio Grande do Norte (Northeastern Region) and Santa Catarina (Southern Region);
- iii) Areas of national turnover migration, specifically, the states of São Paulo and Rio de Janeiro, especially their metropolitan areas.

The internal migrations in Brazil during the first decade of the 21st century can be seen in this light. One part took place largely along a belt extending from Mato Grosso into Goiás, Tocantins, Maranhão and Piauí, eventually reaching Pará. This belt is an area of exportable commodities, and a mineral, farming and cattle-raising frontier. In the North and Northeast of the country new areas of expansion of the farming frontier are also taking on importance as receivers of

migratory flows from Pará, as occurs in Roraima.

But the other corridor of national migration has already been historically formed between the Northeast and the Southeast. Recently there have been considerable reverse flows from the Southeast back to the Northeast, where the most intense migration in Brazil is now taking place, with areas of very high migratory turnover. Migration spatialities are also being reconfigured on a sub-regional level, as is the case of Minas Gerais, Bahia and São Paulo.

The internal migrations in Brazil in the 21st century are thus being redesigned, on the one hand, in consonance with the spreading of regional development throughout the country. In addition, historical regional specificities and current economic realities are giving new dynamics to the migratory movements, which are being reorganized in different spaces.

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