

Equality and Efficiency in Education: Motivations and Targets

Summary

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1) General Perspective

The “Educational PAC” recently-released by the federal government, and a series of societal initiatives, in particular the Commitment All for Education (Compromisso Todos pela Educação), have placed basic education at the core of the Brazilian social debate. A primary objective of the present research is to subsidize the debate in course, showing how different levels of education—and the policies associated—can be evaluated through the means of broad, easy-to-interpret indicators. Initially, we analyze how much each educational level reaches the poorest population. For example, how are those in the bottom strata of income distribution benefited by childcare centers, private secondary education, public university or adult education. The next step is to quantify the return of educational actions, from the point of view of the average citizen, be that individual poor, middle class or elite. Based on recent national data, we evaluate how different educational levels affect the employability and income conquered in the labor market. The third step in this research is to show that, aside from the clear effects of education on income, there are other positive effects to be considered by student—and managers—such as school impacts on the perceived health. The research annex presents summaries of other studies that detail impacts of education on other people’s lives, be those within the same family, including descendants, other members of the community, or the economy as a whole. The objective is to provide a conceptual mark to understand the dilemmas behind educational politics.

It is not enough to comprehend from an outsider’s perspectives the good properties of educational politics, such as the potential for equality and the private or social returns; it is necessary to understand how this information reached individuals and how they incorporate these into their decisions. In the second part of the study, we present objective evidence of some subjective aspects associated to education. We discuss direct questions such as: why is it that young adults of a certain age do not attend school? Is it because they must work to help with the family income? Because they do not have access to an educational facility, or simply because they do not want the type of school being offered? Aside from the school related reasons, we propose a synthetic school permanence index, which combines the registration rates, and the length of the school day.

The electronic version of this text allows us to delve deeper into topics of greater interest in the text through the means of links with components in the research website [S](#), with texts [I](#), notes [N](#), seminar and debate videos [V](#) and a database with interactive panoramas and simulators [BD](#) based on econometric models. These databases offer the opportunity to work many aspects in the objective and subjective dimensions of education, correlating individual student characteristics, as well as that of their parents, such as age, gender, income, etc. Regional rankings situate the relative position of states in the race for

better educational indicators. These numbers aim to motivate the challenge of placing education at the top of societal and local government priorities. In conclusion, we discuss the advantages, misfortunes and cares needed in the establishment of financial transfers from governments based on scholastic performance.

2. Equality and Efficiency

“One Real applied to basic education has 22 more times the capacity of reaching the poorest than when applied to public higher education.”

Education, as any public policy of structural nature, affects the lives of individuals through the improvement in access conditions and/or returns from these actions, which brings us to the traditional dilemma between equality and efficiency through public actions. We begin by the analysis of educational policies through the prism of equality: A pro-poor policy is that which benefits the poorest as opposed to the non-poor. This means that, given a fixed cost for the government and a student's return, a pro-poor policy should result in a greater reduction in poverty. Policy A will be more pro-poor than policy B if, for the identical cost of executing them, policy A leads to a greater reduction in poverty than policy B. We use indicators to determine the extent of how pro-poor is a policy that have been formulated by Nanak Kakwani and Hyun Son, which are then applied to Brazilian education in a joint study, show here first hand.

Aside from the technicalities involved, the advantage of the proposed indicator is its intuitive interpretation, which leads to a simple analysis by the policy managers, and even the average citizen¹. Otherwise we observe: the greater the respective pro-poor indicator of a given policy, the ability of each allocated Real reaching the poor is greater. The smallest level of the indicator is zero, when for each Real distributed per citizen, that same Real does not reach any poor; when the indicator reaches one, each Real has the ability of reaching the poor equivalent to a universal policy that reaches all individuals uniformly, be they poor, middle class or wealthy.

a. Equality

¹ The functional form of the indicator is $\lambda = \frac{1}{\bar{b} \eta \theta} \int \frac{\partial P}{\partial x} b(x) f(x) dx$ where \bar{b} is the educational benefit

distributed, η is the absolute elasticity of poverty in relation to the benefit, θ is the aggregate level of poverty, and x is income.

E.g.: (i) = 1.20 : refers to a specific program that reduces poverty 20% more than a policy with universal targeting. (ii) = 0.70 : refers to a program reducing poverty 30% more than one with universal targeting.

“The equality index of private secondary education is close to that of public university, suggesting that the same individuals attend these courses, in distinct time periods.”

An advantage of the equality indicator as proposed is its adaptability to different poverty measures found in literature. We opt here for displaying in Table 1 two poverty indicators: in the second column, we present P^1 , which attributes the same weight to those below the poverty line and in the third column, we use P^2 , which attributes more weight to the poorest. The indicators are calculated based on the CPS poverty line, equivalent to R\$120 per month at the Greater São Paulo prices, adjusted for regional living expense differences by the IBGE's new POF. In the greater part of the analysis, we opt for P^2 specifically because of its greater forwardness.

The equality ranking of those who are undergoing different educational levels shows that, in general, the lower levels of education are more pro-poor than higher education. Another aspect in the equality hierarchy that is stronger for P^2 is that it's more sensitive to the poor. The equality indicator tends to increase in the lower levels of education when the poorest of the poor are prioritized—as observed when we move from P^1 to P^2 , while the opposite occurs in the higher levels of education.

Table 1 – Education Pro-Poor Index

| By Grade | Same Weight to the Poor – P^1 | Pro-Poor – P^2 |
|---|------------------------------------|------------------------------------|
| Childcare | 1.08 | 1.14 |
| Pre-School | 1.46 | 1.56 |
| Alphabetization – adults | 1.73 | 1.90 |
| Elementary Education – regular | 1.53 | 1.57 |
| Elementary Education – regular public | 1.68 | 1.73 |
| Elementary Education – regular private | 0.27 | 0.23 |
| Adult Education – elementary education | 1.09 | 1.04 |
| Secondary Education – regular | 0.73 | 0.63 |
| Secondary Education – regular public | 0.83 | 0.72 |
| Secondary Education – regular private | 0.10 | 0.09 |
| Adult Education – secondary education | 0.52 | 0.44 |
| College Entrance Exam (Pré-Vestibular) | 0.19 | 0.15 |
| Tertiary Education | 0.07 | 0.07 |
| Tertiary Education – public | 0.12 | 0.10 |
| Tertiary Education – private | 0.05 | 0.06 |
| Graduate | 0.00 | 0.00 |

Source: PNAD/IBGE Microdata

The pro-poor indexes at the extremes of the educational spectrum confirm the expectation that the lower levels of education are more equitable or pro-poor than the higher levels: graduate education displays a zero index (until the hundredth decimal) and the lowest level of adult alphabetization has the highest indicator of 1.9. Moving on to more common levels, regular basic education has an index of 1.57,

against 0.63 of secondary education and 0.07 of higher education. This means that an additional Real spent in basic education has 2.5 more times the ability of reaching the poor than one spent in secondary education and 22.5 times that spent in higher education.

As could be expected in all levels of teaching, the supply of public education is more pro-poor than the private. In basic education, the pro-poor index is of 1.73 in public supply versus 0.23 in the case of private supply. At the high school level, these indicators reach 0.72 for public and 0.09 for private; in the case of higher education, these indexes reach 0.1 for public and 0.06 for private. In other words, the possibility of a poor reaching public university is much less than practically all other levels. The index of focalization for private secondary education of 0.09 is close to that of public university, which is consistent with the idea that private school students are those who reach public universities. The degree of focalization of the college entrance exams (pré-vestibular) of 0.15 shows that few poor attempt to move from secondary to tertiary education through them.

Finally, early childhood education and pre-school show pro-poor indexes of 1.14 and 1.56, which demonstrates a degree of focalization superior to that of the public universities. Recent research [P](#) shows that the access rate to pre-school in the Northeast, the poorest region of the country, is greater than the other regions. In a general manner, the emphasis given to basic education in the Plan for the Development of Education is much more pro-poor than the emphasis previously attributed by the federal government to higher education.

b. Public and Private Expenses in Public and Private Education

“The cost of total private education is of R\$14.00 monthly per Brazilian or R\$89.90 per Brazilian student..”

“The cost per student of a student registered in high school was of R\$1,152 in 2002, against R\$10,054 per student registered in higher public education.”

“Each Real spent in public higher education is 7 times more unlikely to reach the poor, as opposed to the same amount tenfold spent in secondary education.”

The decision of staying in school so as to reach higher educational levels generates, aside from the potential available associated benefits, direct opportunity costs. The basic criteria at the individual level is whether the increase in labor income supplied until retirement exceed the costs of direct payments and opportunity for the substitution of working for studying. In the case of public managers, we should consider the public costs and the external benefits emanating from higher education among the population. We deal here only with the relative costs of the expenses paid by the government and families in the case of

private education, but in the Annex we have increased the breadth of relative evidences to diverse costs and benefits from education.

We now lightly examine how much Brazil spent with education in 2002—deadline of data acquisition. That year, the public expense with education, in proportion to the GDP (prior to the recent GDP revision) was of 4.4%. In absolute terms, the annual public expense per student registered in basic education from 1st to 4th grade was of R\$870 in 2002; per student registered in basic education from 5th to 8th grade, of R\$1,105; and per student registered in secondary education, of R\$1,152. The annual expenses per student registered in higher education, however, was almost tenfold, of R\$10,054. In other words, the government spends much more per student in tertiary education. We present below an estimate of private direct expenses at different levels of education.

Table 2: Private Expenses with Education - Monthly

| | R\$ SPENT PER STUDENT | R\$ SPENT PER BRAZILIAN | % BRAZILIANS WITH EXPENSE |
|--|----------------------------------|------------------------------------|--------------------------------------|
| Pre-School | 75.78 | 0.82 | 1.08 |
| Regular Basic Education | 166.76 | 2.55 | 1.53 |
| Regular Secondary Education | 194.10 | 1.43 | 0.74 |
| Regular Tertiary Education | 324.95 | 5.41 | 1.67 |
| Combined Grades | 48.27 | 0.07 | 0.14 |
| College Entrance Exams (Pré-Vestibular) | 59.90 | 0.31 | 0.53 |
| Technical Education | 53.25 | 0.09 | 0.17 |
| Master's | 222.03 | 0.42 | 0.19 |
| Doctorate | 138.85 | 0.00 | 0.00 |
| <i>Educational Textbooks-Primary & Secondary</i> | <i>9.14</i> | <i>0.36</i> | <i>3.91</i> |
| <i>Other educational books and technical magazines</i> | <i>13.56</i> | <i>0.25</i> | <i>1.82</i> |
| <i>Other expenses</i> | <i>26.61</i> | <i>3.23</i> | <i>12.13</i> |

Source: CPS/FGV based on POF/IBGE microdata.

In the aggregate, we reach the private expense with education in family budgets at the value of R\$14.00 monthly per Brazilian or R\$89.90 monthly per Brazilian student, leading to the annual base of R\$1,078 per student.

c. Educational Premiums

“The wage of those with college-level education is 540% greater than that of illiterates, and their probability of employment is 308% greater.”

It is obvious that educational policies should not be solely determined by equality. It is necessary to evaluate the efficiency of the policy in transforming the lives of those who receive the educational benefit. Otherwise, a school for the poor of doubtful reputation and of high cost could be chosen as the ideal, which is not the case. An impact of educational policy that we will analyze refers to the changes observed in the insertion in the labor market and the general conditions of the job market. We now look at the individual returns when leaving school, given the impact analysis of learning in the individual's ability of being employed and the wage earned.

Table 3 reveals how educational hierarchy is reflected in labor hierarchy (aka occupation and salaries). For example, salary increases from R\$322 (R\$1.97 hourly wage) for illiterates to R\$1,682 (R\$18.2 hourly wage) for those with a graduate degree. Similarly, the occupation rate between extremes in the educational spectrum increases from 60.7% for those who did not go beyond one year of learning to 81.5% for those who have undergone graduate school. Even when we compare individuals with the same socio-demographic characteristics—such as gender, age, range and geography—except for education: the salaries of those with a college degree are 540% higher than that of illiterates, and their probability of employment is 308% larger. What is impressive in this data is the regularity of rankings with which the higher levels of education present better labor placement. In other words, the hierarchy of educational levels mirrors labor rankings.

Table 3 – Labor Impacts on Education

| Highest Level Studied | % Employed | In Relation to Illiterates* | | | |
|-----------------------|------------|-----------------------------|-------------|----------------------------|----------------|
| | | Average Salary R\$ | Hourly Wage | Probability of Employment* | %Wage Premium* |
| <i>Illiterates</i> | 60.65 | 321.73 | 1.97 | 1 | 0 |
| <i>Basic</i> | 63.73 | 517.11 | 2.99 | 1.36 | 40.05 |
| <i>Secondary</i> | 68.11 | 767.08 | 4.31 | 2.29 | 125.23 |
| <i>Undergraduate</i> | 78.16 | 1681.52 | 10.31 | 3.80 | 318.76 |
| <i>Graduate</i> | 81.48 | 3041.1 | 18.22 | 4.08 | 540.42 |

* controlled by gender, color or race, age, migration, city size, type of sector and federal unit

Source: CPS/IBRE/FGV based on IBGE microdata 2005.

[BDS](#)

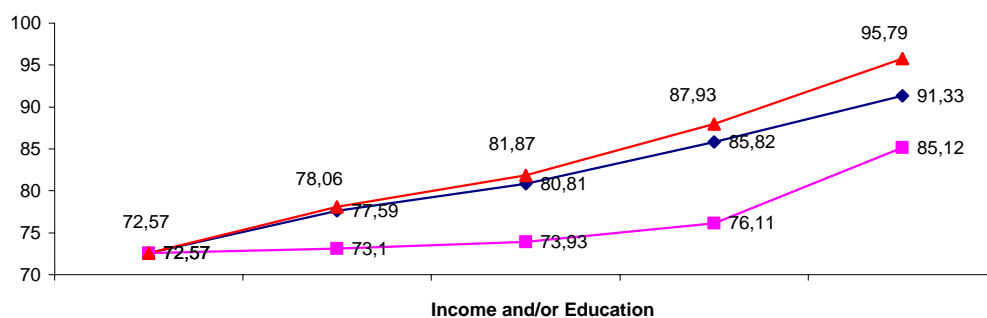
d. Education and Health

“A greater level of education in the population impacts diverse elements in individuals’ lives, such as fertility, criminality, health, etc.”

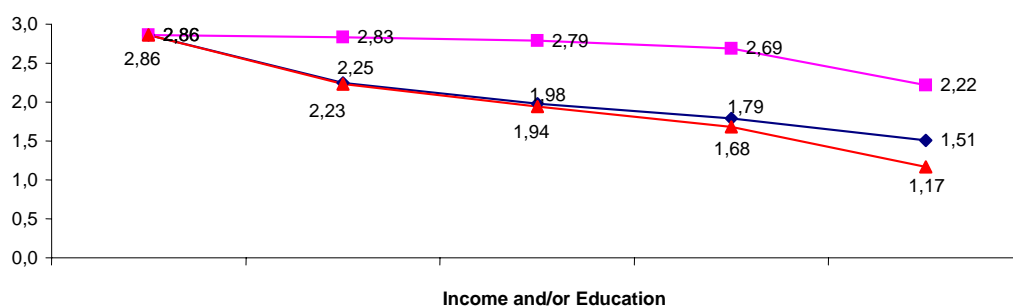
“95% of perceived improvements in health when comparing an illiterate individual with a college graduate are given by the pure and direct effect of education, and not by income.”

Going beyond the pragmatism of income generation, the greater education of the population impacts other elements in the life of individuals, such as fertility, criminality, and health, among others. In these cases, education potentially affects interest variables through the direct effect and indirect effect on the function of greater generated income. The table below specifies the existent relationship between the educational range of the head of household and the respective per capita household average income. We take, for example, the comparison between self-perceived data in individual health conditions. Health improves with an individual's income and education. But what is more important, school or income? The lesson visible in graph 1 is that the health trajectory, although it corresponds to changes in income, 95% of the effect of perceived improvements in health with associated changes in education and income are given by the direct effect of education (i.e. maintaining income constant). Similar effects are observed for individuals who have had bed-rest in the past two weeks, where education corresponds to 89.4% of the obtained improvements. In other words, education seems to be a more fundamental cause for health improvements than income.

Considers own Health State to be Good or Very Good %



Was in bed rest during the last two weeks %



—◆— CONSTANT INCOME = 162 —■— CONSTANT EDUC = LESS THAN 1 YEAR —▲— INC AND EDUC VARIATING

Source: CPS/FGV base don PNAD/IBGE Health Supplement Microdata.

The positive impacts of greater education on individuals' private returns should not justify—initially—public action in school, for if individuals perceive greater incomes as a function of greater education, then educational financing would be restricted solely by restrictions on the credit market, which would limit individuals' investment in their own human capital.

In the case of public action, it is important still to act in areas where social returns are greater than private returns, function of an externality operation. For example, when you increase an individual's education, you not only improve their economic situation, their employability and wage, but also that of others. The impacts of parents' education on their children should be captured in the decision of public policy as well as private decisions. In the appendix, we synthesize some evidence from this line of study, through measurements of education mobility among generations. In the appendix, we also present international evidence that deal with more aggregate impacts in education about growth, exports, mortality and longevity.

3. Educational Motivations

“Brazilian young students lack the recognition of the power of transformation education exerts over their lives, such as the high impact exercised in employability and salaries.”

We present here a discussion of some motivational aspects in education policy. It is not enough to consider intrinsic properties in education policies, such as the potential return of specific actions, it is necessary to regard how this information reaches individuals and how they transform these into decisions. Actions diffusing information through the various levels of government and civic society are especially welcome. For example, the social literature offered conclusions, some time ago, on the central explanatory power of education in the high income inequality in Brazil. Now what's lacking is for the head of household and young student to recognize the power of transformation education exerts over their lives, such as the high impact exercised in employability and salaries observed in the Brazilian context. We need, above all, to educate the population about the importance of education. Without the participation of those most interested, there is no sustainable educational solution.

a. Motivations to Attend School

“45.1% of those between 15 and 17 years of age that do not attend school choose to do so because they do not want the school available to them. This is the data to be highlighted.”

The PNAD Education Supplement allows us to identify the motivations for those that are outside the educational school system, and focus the policy design on the needs and perceptions of those who

are of interest. We divide the motivations into four groups: difficulty to access (supply), need to work and generate income (demand), lack of intrinsic interest (demand) and other. The reasons associated to the difficulty in supply of reaching the school due to distance or access complications affects 31.3% of children from 10 to 14 years of age, and 10.9% of those between 15 and 17 years. Other residual reasons for school evasion are equally important in the two age groups, of around 20%. In other words, the problem of the 15 to 17 age range, which should be in secondary education but isn't, is the low demand which explains the high evasion rate of almost 70% of cases, according to the same clientele not reached by the school.

The first reasons of demand are those connected to the need of income generation, reaching 10.6% of children between 10 and 14 years old and 23% of those between 15 and 17 years old. However, supporting the proposed line of thought in the plan of extending the maximum age of educational subsidies in Bolsa Familia from 15 to 17 years: counter-factual exercises indicate that if a young man, afro-descendant, poor, with 17 years, started to receive the Bolsa Familia incentives, his probability of missing school would fall from 9.3% to 4.1%. We should note that the higher the prevalence of other intrinsic reasons to the lack of demand for school of the type "not wanting" in the two age groups: 37.7% for 10 to 14 years old and 45.1% for 15 to 17 years old, in other words, the lack of perception of the school's role in their lives is particularly high. This is the data to be highlighted.

V – The educational aspect of income transfer programs

N – First Job or Second Aid?

N - Bolsa-Familia 2.0

The recently released PNAD information technology supplement indicates that two thirds of students between 15 and 17 years old do not have access to a computer network, and the main reason attributed to the digital exclusion is the offer associated to the non-existence of computers or their high cost. Overall, 79% of the Brazilian population does not use the Internet, but of those that do use the Internet, the main reason for doing so is due to learning and studies (71.1%). The empiric literature in Brazil has not yet quantified the impact of the Internet over students' grades, causing the face value of the potential attraction exercised by the Internet in bringing young adults to school very high. More than that, the computer in school may be fundamental in the interaction of MEC in its function as regulatory (and motivational) agency with networks and schools, offering information and services at the national level.

BDP

b. Ranking of the Reasons from those Outside School

"Rondônia presents the highest rate 13.76% of young adults from 15 to 17 years that do not wish to attend school, constituting the greatest reason of school evasion at the national level."

“Acre is highlighted in other reasons: 4.99% of young adults do not attend school because there is no school available and 7.88% of them do not study because they have to generate income.”

The research now provides the negative reasons given by young adults of 15 to 17 years old for not being in school. Creating a podium for these reasons, we have: Acre, leader of the states without schools, where 4.99% of young adults do not study because there is no school accessible—the local transportation conditions certainly explain the phenomenon; Acre is also present as a highlight in the ranking of those who do not attend school because they must work (in or outside the home) or provide income, with 7.81% against 4.11% at the national level; and Rondônia, where 13.76% of those between 15 and 17 years do not want to study anymore constituting in the largest reason of school evasion at the national level. The data from the last PNADs have shown an increasing number of young adults of this age who do not study nor work.

**RANKING: REASONS FOR NOT ATTENDING SCHOOL
INCOME AND LABOR (DEMAND 1)**
15 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 4.11 |
| 1 Acre | 7.81 |
| 2 Paraná | 6.31 |
| 3 Pernambuco | 5.9 |
| 4 Santa Catarina | 5.85 |
| 5 Mato Grosso | 5.37 |
| 6 Sergipe | 5.11 |
| 7 Goiás | 5.11 |
| 8 Minas Gerais | 5.1 |
| 9 Mato Grosso do Sul | 5.02 |
| 10 Espírito Santo | 4.87 |
| 11 Rio Grande do Sul | 4.71 |
| 12 Rio Grande do Sul | 4.36 |
| 13 Alagoas | 4.34 |
| 14 Bahia | 4.13 |
| 15 Rio Grande do Norte | 3.89 |
| 16 Pará | 3.87 |
| 17 Amazonas | 3.59 |
| 18 Paraíba | 3.5 |
| 19 São Paulo | 3.03 |
| 20 Piauí | 3.00 |
| 21 Rondônia | 2.79 |
| 22 Rio de Janeiro | 2.78 |
| 23 Maranhão | 2.77 |
| 24 Tocantins | 2.11 |
| 25 Roraima | 1.2 |
| 26 Distrito Federal | 1.05 |
| 27 Amapá | 0.97 |

Source: CPS/FGV based on IBGE microdata.

**RANKING: REASONS FOR NOT ATTENDING SCHOOL
ACCESS (SUPPLY)**
15 TO 17 YEARS

| Federal Units | % |
|-----------------------|-------------|
| TOTAL BRAZIL | 2.01 |
| 1 Acre | 4.99 |
| 2 Maranhão | 4.06 |
| 3 Pará | 3.17 |
| 4 Roraima | 3.1 |
| 5 Rio Grande do Sul | 3.09 |
| 6 Rio Grande do Norte | 2.92 |
| 7 Piauí | 2.72 |
| 8 Rondônia | 2.63 |
| 9 Goiás | 2.55 |
| 10 Amapá | 2.44 |
| 11 Mato Grosso do Sul | 2.4 |
| 12 Espírito Santo | 2.31 |
| 13 Bahia | 2.28 |
| 14 Pernambuco | 2.22 |
| 15 Mato Grosso | 2.19 |
| 16 Minas Gerais | 2.11 |
| 17 Alagoas | 2.05 |
| 18 Distrito Federal | 1.8 |
| 19 Sergipe | 1.61 |
| 20 Tocantins | 1.59 |
| 21 Ceará | 1.5 |
| 22 Paraná | 1.48 |
| 23 Santa Catarina | 1.42 |
| 24 Paraíba | 1.36 |
| 25 São Paulo | 1.32 |
| 26 Rio de Janeiro | 1.23 |
| 27 Amazonas | 1.18 |

Source: CPS/FGV based on IBGE microdata.

**RANKING: REASONS FOR NOT ATTENDING SCHOOL
DOES NOT WANT (DEMAND 2)**
15 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 8.15 |
| 1 Rondônia | 13.76 |
| 2 Piauí | 12.53 |
| 3 Pernambuco | 12.53 |
| 4 Mato Grosso | 11.73 |
| 5 Mato Grosso do Sul | 10.92 |
| 6 Ceará | 10.45 |
| 7 Pará | 10.31 |
| 8 Tocantins | 10.29 |
| 9 Alagoas | 9.81 |
| 10 Espírito Santo | 9.74 |
| 11 Rio Grande do Norte | 9.73 |
| 12 Paraíba | 9.73 |
| 13 Paraná | 9.28 |
| 14 Minas Gerais | 9.25 |
| 15 Maranhão | 9.22 |
| 16 Bahia | 8.88 |
| 17 Acre | 7.41 |
| 18 Roraima | 7.35 |
| 19 Distrito Federal | 6.92 |
| 20 Rio Grande do Sul | 6.75 |
| 21 Goiás | 6.7 |
| 22 Amazonas | 6.22 |
| 23 São Paulo | 5.72 |
| 24 Sergipe | 5.64 |
| 25 Amapá | 5.16 |
| 26 Santa Catarina | 4.96 |
| 27 Rio de Janeiro | 4.49 |

Source: CPS/FGV based on IBGE microdata.

The reader can access in the appendix similar rankings for other age ranges (7 to 14, 0 to 6 and 0 to 17) and other geographical areas (metropolitan regions and macro regions). A merit of this type of data is to listen to the reasons of those who do not attend school straight from those who are of the most interest: parents and children. [BDP](#) (RJ)

c. Podium of the School Race

“In the Federal District, 79% of young adults between 15 and 17 years old remain more than four hours a day in school, with a considerable distance of almost 20 percentage points from the second place. Brasilia also displays the highest grades in the ENEM.” [BDP](#)

We present comparative rankings between the different federal units on the school attendance rate in the age groups covered by the different levels of education: from 0 to 6 years old for childhood education, 7 to 14 years in basic education, and 15 to 17 years in secondary education. We discuss here the last age range, and place further data regarding other groups in the appendix. In the age range of 15 to 17, the states that head the education race are Rio de Janeiro [BDP](#), leader in school attendance with 88% of young adults registered in the education system and the Federal District, where 79% of young adults remain more than four hours a day in school with a reasonable distance of almost 20 percentage points in relation to the second place. It is not at random that Brasilia presents the highest grades in the National Exam of Secondary Education (ENEM) performed at the end of the senior year and used as a criterion for entrance in university.

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
15 TO 17 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 81.93 |
| 1 Rio de Janeiro | 88.39 |
| 2 São Paulo | 86.96 |
| 3 Distrito Federal | 86.17 |
| 4 Amapá | 84.81 |
| 5 Santa Catarina | 84.04 |
| 6 Amazonas | 83.77 |
| 7 Rio Grande do Sul | 82.38 |
| 8 Sergipe | 82.26 |
| 9 Roraima | 81.77 |
| 10 Minas Gerais | 81.5 |
| 11 Goiás | 80.74 |
| 12 Rio Grande do Norte | 80.54 |
| 13 Paraíba | 80.54 |
| 14 Tocantins | 80.47 |
| 15 Piauí | 79.84 |
| 16 Paraná | 79.82 |
| 17 Bahia | 79.65 |
| 18 Ceará | 79.51 |
| 19 Espírito Santo | 79.23 |
| 20 Alagoas | 78.54 |
| 21 Maranhão | 78.04 |
| 22 Mato Grosso do Sul | 77.07 |
| 23 Rondônia | 76.59 |
| 24 Pará | 75.98 |
| 25 Mato Grosso | 75.95 |
| 26 Acre | 75.83 |
| 27 Pernambuco | 75.64 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
15 TO 17 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 37.22 |
| 1 Distrito Federal | 79.25 |
| 2 São Paulo | 59.15 |
| 3 Espírito Santo | 58.97 |
| 4 Minas Gerais | 54.27 |
| 5 Rio de Janeiro | 51.74 |
| 6 Goiás | 48.83 |
| 7 Amapá | 40.53 |
| 8 Pará | 31.96 |
| 9 Mato Grosso do Sul | 31.44 |
| 10 Rio Grande do Norte | 30.41 |
| 11 Piauí | 28.87 |
| 12 Bahia | 26.00 |
| 13 Maranhão | 25.65 |
| 14 Sergipe | 25.54 |
| 15 Paraná | 24.33 |
| 16 Pernambuco | 24.21 |
| 17 Paraíba | 23.54 |
| 18 Alagoas | 20.77 |
| 19 Rio Grande do Sul | 18.75 |
| 20 Roraima | 18.59 |
| 21 Amazonas | 17.12 |
| 22 Ceará | 14.39 |
| 23 Tocantins | 13.99 |
| 24 Mato Grosso | 11.53 |
| 25 Rondônia | 9.74 |
| 26 Acre | 9.01 |
| 27 Santa Catarina | 5.49 |

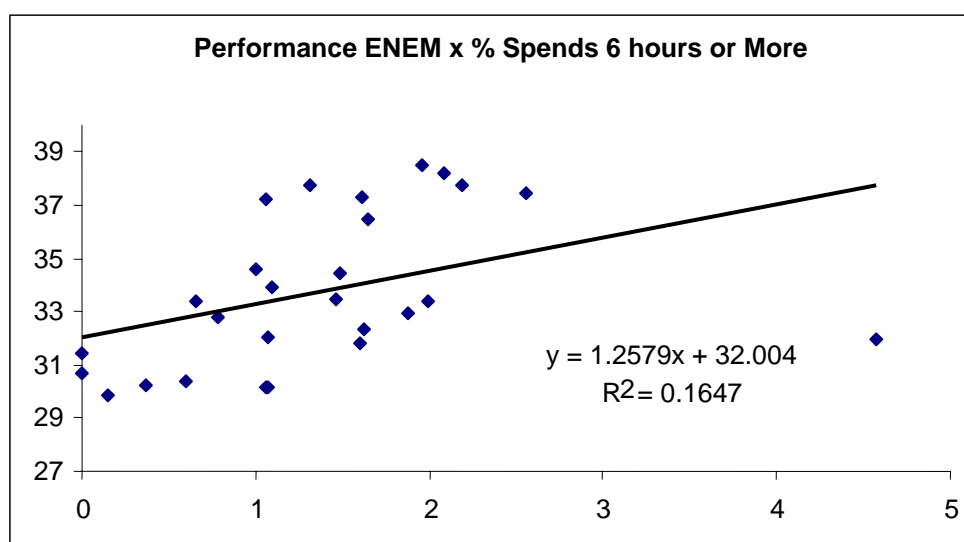
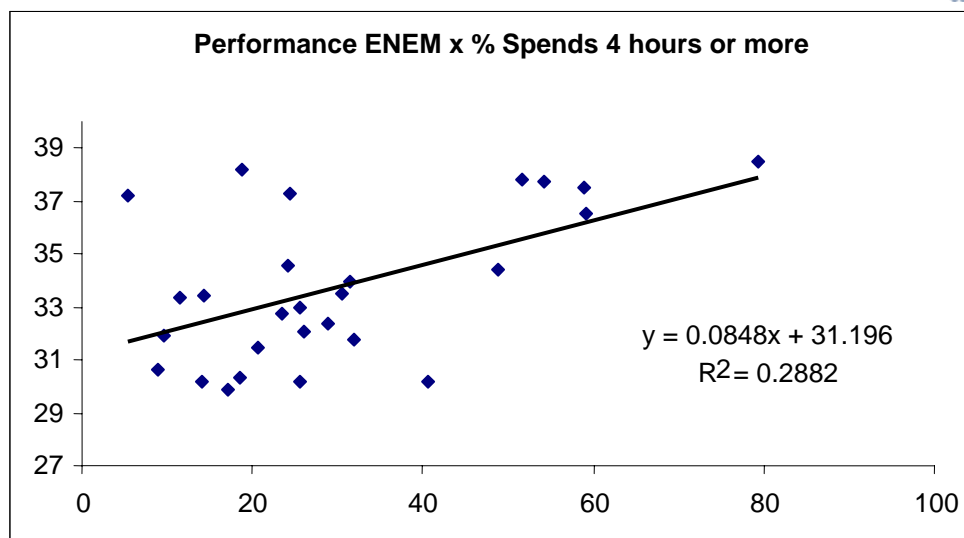
Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
15 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 1.41 |
| 1 Rondônia | 4.57 |
| 2 Espírito Santo | 2.56 |
| 3 Rio de Janeiro | 2.19 |
| 4 Rio Grande do Sul | 2.08 |
| 5 Mato Grosso | 1.99 |
| 6 Distrito Federal | 1.96 |
| 7 Sergipe | 1.88 |
| 8 São Paulo | 1.65 |
| 9 Piauí | 1.63 |
| 10 Paraná | 1.61 |
| 11 Pará | 1.6 |
| 12 Goiás | 1.49 |
| 13 Rio Grande do Norte | 1.46 |
| 14 Minas Gerais | 1.31 |
| 15 Mato Grosso do Sul | 1.09 |
| 16 Amapá | 1.07 |
| 17 Bahia | 1.07 |
| 18 Tocantins | 1.06 |
| 19 Santa Catarina | 1.06 |
| 20 Pernambuco | 1.00 |
| 21 Paraíba | 0.78 |
| 22 Ceará | 0.66 |
| 23 Roraima | 0.6 |
| 24 Maranhão | 0.37 |
| 25 Amazonas | 0.15 |
| 26 Acre | 0.00 |
| 27 Alagoas | 0.00 |

Source: CPS/FGV based on IBGE microdata.

The last table presents a ranking of the length of the strictest school day above 6 hours, which includes only 1.41% of youngsters, and even though it leads the rank, Rondônia only includes 4.57% of its students in this school day. Below is the analysis of the correlation between performance and the two criteria of length of school day for those between 15 and 17 years old.



The graphs and regressions indicate a positive and significant relationship between the increase in length of the school day and performance, which is more strongly present in the criteria in the minimum school day of four daily hours.

d. Permanence Index²

“Rio is the state leading the ranking of those registered in school, with 79% of the population between 0 and 17 years old registered, but if we take into consideration the shortest average school day (4.08 hours per day), and the largest index of absences (2.9% of absences), Rio is surpassed by Brasília, São Paulo, and Espírito Santo, falling to fourth place in the national ranks.

² The permanence index is a combination of the length of time spent in school (hours per day), the number of days attended (school attendance), and whether or not the individual is in school. It is used to measure how long a student is actively in school.

The registration rate effective of hours that youngsters spend in school decreases from 79% to 62%.

School attendance in different age ranges tends to be seen as a discrete variable, separating those who miss school and those registered. The PNAD educational supplement offers the opportunity to explore the gray areas between these extremes, utilizing absences and length of the school day as sources. We propose a school permanence index, composed of the index of those registered, the index of absences and the relative difference from the length of the school day when compared to the reference school day of 5 hours per day (see results in the last sub-section). In this exercise, we observe that in the age range of 0 to 17 years old, the registration index corresponds to 0.738 (26.2% of school evasion), that when multiplied by the attendance index of 0.957 (4.3% of school days missed) and by the difference in school day of 0.776 (3.88 expected hours per day divided by a school day length of 5 hours per day) generates an index of 0.547. In other words, if there were no absences and if the length of the school day was the proposed reference, the permanence index would be of 0.738 versus 0.547. [BDP](#) [BDS](#)

We present here the state rankings according to this indicator. Rio is the state leading the ranking of those registered in school, with 79% of the population between 0 and 17 years old registered, but if we take into consideration the shortest average school day (4.08 hours per day), and the largest index of absences (2.9% of absences), Rio is surpassed by Brasília, São Paulo, and Espírito Santo, falling to fourth place in the national ranks. The registration rate effective of hours that youngsters spend in school decreases from 79% to 62%.

Similarly, when looking at the age range of 15 to 17 years, once again Rio is the state leading the ranking of those registered in school, with 88% of young adults between 15 and 17 registered in the school system. But if we take into consideration the shortest average school day (4.2 daily hours) and the largest index of absenteeism (3.2% absences), Rio is surpassed by Brasília and São Paulo, falling to third place in the national rankings. The effective registration rate of hours that youngsters spend inside the classroom falls from 88% to 72%. The reader is invited to confirm the relative data of his/her state in other age ranges.

1. Ranking: School Permanence

1.1. Age Range: 15 to 17 years

RANKING: SCHOOL PERMANENCE PERMANENCE INDEX (Im*lp*lj)

15 TO 17 YEARS

Federal Units

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,6153 |
| 1 Distrito Federal | 0,8143 |
| 2 São Paulo | 0,7296 |
| 3 Rio de Janeiro | 0,7219 |
| 4 Espírito Santo | 0,6937 |
| 5 Minas Gerais | 0,6831 |
| 6 Goiás | 0,6613 |
| 7 Amapá | 0,6541 |
| 8 Sergipe | 0,5847 |
| 9 Rio Grande do Norte | 0,5736 |
| 10 Mato Grosso do Sul | 0,5707 |
| 11 Piauí | 0,5685 |
| 12 Pará | 0,5662 |
| 13 Amazonas | 0,5576 |
| 14 Paraná | 0,5560 |
| 15 Paraíba | 0,5554 |
| 16 Rio Grande do Sul | 0,5537 |
| 17 Bahia | 0,5492 |
| 18 Roraima | 0,5471 |
| 19 Alagoas | 0,5314 |
| 20 Pernambuco | 0,5279 |
| 21 Tocantins | 0,5259 |
| 22 Santa Catarina | 0,5159 |
| 23 Ceará | 0,5099 |
| 24 Mato Grosso | 0,4894 |
| 25 Maranhão | 0,4890 |
| 26 Rondônia | 0,4852 |
| 27 Acre | 0,4743 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE REGISTRATION INDEX (Im)

15 TO 17 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,8193 |
| 1 Rio de Janeiro | 0,8839 |
| 2 São Paulo | 0,8697 |
| 3 Distrito Federal | 0,8617 |
| 4 Amapá | 0,8481 |
| 5 Santa Catarina | 0,8404 |
| 6 Amazonas | 0,8377 |
| 7 Rio Grande do Sul | 0,8234 |
| 8 Sergipe | 0,8226 |
| 9 Roraima | 0,8177 |
| 10 Minas Gerais | 0,8151 |
| 11 Goiás | 0,8075 |
| 12 Paraíba | 0,8054 |
| 13 Rio Grande do Norte | 0,8053 |
| 14 Tocantins | 0,8047 |
| 15 Piauí | 0,7983 |
| 16 Paraná | 0,7982 |
| 17 Bahia | 0,7965 |
| 18 Ceará | 0,7950 |
| 19 Espírito Santo | 0,7923 |
| 20 Alagoas | 0,7854 |
| 21 Maranhão | 0,7805 |
| 22 Mato Grosso do Sul | 0,7708 |
| 23 Rondônia | 0,7659 |
| 24 Pará | 0,7598 |
| 25 Mato Grosso | 0,7594 |
| 26 Acre | 0,7583 |
| 27 Pernambuco | 0,7564 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL DAY INDEX (lj)

15 TO 17 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,7886 |
| 1 Distrito Federal | 0,9770 |
| 2 Espírito Santo | 0,9106 |
| 3 São Paulo | 0,8796 |
| 4 Minas Gerais | 0,8728 |
| 5 Goiás | 0,8493 |
| 6 Rio de Janeiro | 0,8441 |
| 7 Amapá | 0,7962 |
| 8 Pará | 0,7767 |
| 9 Mato Grosso do Sul | 0,7688 |
| 10 Rio Grande do Norte | 0,7583 |
| 11 Piauí | 0,7528 |
| 12 Bahia | 0,7359 |
| 13 Maranhão | 0,7334 |
| 14 Sergipe | 0,7333 |
| 15 Pernambuco | 0,7333 |
| 16 Paraná | 0,7300 |
| 17 Paraíba | 0,7208 |
| 18 Alagoas | 0,7058 |
| 19 Rio Grande do Sul | 0,7012 |
| 20 Roraima | 0,6939 |
| 21 Amazonas | 0,6825 |
| 22 Ceará | 0,6757 |
| 23 Tocantins | 0,6748 |
| 24 Rondônia | 0,6747 |
| 25 Mato Grosso | 0,6712 |
| 26 Acre | 0,6475 |
| 27 Santa Catarina | 0,6312 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL ATTENDANCE INDEX (lp)

15 TO 17 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,9524 |
| 1 Amazonas | 0,9753 |
| 2 Santa Catarina | 0,9726 |
| 3 Sergipe | 0,9693 |
| 4 Amapá | 0,9686 |
| 5 Tocantins | 0,9684 |
| 6 Rio de Janeiro | 0,9677 |
| 7 Distrito Federal | 0,9673 |
| 8 Acre | 0,9660 |
| 9 Goiás | 0,9643 |
| 10 Roraima | 0,9643 |
| 11 Mato Grosso do Sul | 0,9630 |
| 12 Espírito Santo | 0,9615 |
| 13 Minas Gerais | 0,9602 |
| 14 Mato Grosso | 0,9602 |
| 15 Pará | 0,9594 |
| 16 Rio Grande do Sul | 0,9590 |
| 17 Alagoas | 0,9587 |
| 18 Paraíba | 0,9567 |
| 19 Paraná | 0,9542 |
| 20 São Paulo | 0,9537 |
| 21 Pernambuco | 0,9518 |
| 22 Ceará | 0,9492 |
| 23 Piauí | 0,9460 |
| 24 Rio Grande do Norte | 0,9394 |
| 25 Rondônia | 0,9390 |
| 26 Bahia | 0,9369 |
| 27 Maranhão | 0,8544 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERI AVERAGE LENGTH OF SI

15 TO 17 YEARS

Federal Units

| TOTAL BRAZIL |
|------------------------|
| 1 Distrito Federal |
| 2 Espírito Santo |
| 3 São Paulo |
| 4 Minas Gerais |
| 5 Goiás |
| 6 Rio de Janeiro |
| 7 Amapá |
| 8 Pará |
| 9 Mato Grosso do Sul |
| 10 Rio Grande do Norte |
| 11 Piauí |
| 12 Bahia |
| 13 Maranhão |
| 14 Sergipe |
| 15 Pernambuco |
| 16 Paraná |
| 17 Paraíba |
| 18 Alagoas |
| 19 Rio Grande do Sul |
| 20 Roraima |
| 21 Amazonas |
| 22 Ceará |
| 23 Tocantins |
| 24 Rondônia |
| 25 Mato Grosso |
| 26 Acre |
| 27 Santa Catarina |

Source: CPS/FGV based on IBGE microdata

1.2. Age Range: 7 to 14 years

**RANKING: SCHOOL PERMANENCE
PERMANENCE INDEX (Im*lp*lj)
7 TO 14 YEARS
Federal Units**

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,7180 |
| 1 Distrito Federal | 0,9320 |
| 2 Espírito Santo | 0,8650 |
| 3 São Paulo | 0,8601 |
| 4 Minas Gerais | 0,8162 |
| 5 Goiás | 0,7789 |
| 6 Rio de Janeiro | 0,7731 |
| 7 Amapá | 0,7115 |
| 8 Rio Grande do Norte | 0,6930 |
| 9 Mato Grosso do Sul | 0,6879 |
| 10 Roraima | 0,6661 |
| 11 Paraná | 0,6643 |
| 12 Pernambuco | 0,6582 |
| 13 Sergipe | 0,6531 |
| 14 Piauí | 0,6511 |
| 15 Rio Grande do Sul | 0,6432 |
| 16 Bahia | 0,6398 |
| 17 Paraíba | 0,6335 |
| 18 Pará | 0,6319 |
| 19 Tocantins | 0,6258 |
| 20 Rondônia | 0,6190 |
| 21 Alagoas | 0,6183 |
| 22 Amazonas | 0,6092 |
| 23 Santa Catarina | 0,5988 |
| 24 Mato Grosso | 0,5979 |
| 25 Ceará | 0,5884 |
| 26 Maranhão | 0,5861 |
| 27 Acre | 0,5591 |

Source: CPS/FGV based on IBGE microdata

**RANKING: SCHOOL PERMANENCE
REGISTRATION INDEX (Im)
7 TO 14 YEARS
Federal Units**

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,9708 |
| 1 Santa Catarina | 0,9869 |
| 2 São Paulo | 0,9847 |
| 3 Distrito Federal | 0,9845 |
| 4 Rio de Janeiro | 0,9805 |
| 5 Rio Grande do Sul | 0,9789 |
| 6 Mato Grosso do Sul | 0,9779 |
| 7 Espírito Santo | 0,9766 |
| 8 Roraima | 0,9753 |
| 9 Minas Gerais | 0,9740 |
| 10 Piauí | 0,9733 |
| 11 Paraná | 0,9729 |
| 12 Rio Grande do Norte | 0,9719 |
| 13 Ceará | 0,9703 |
| 14 Goiás | 0,9700 |
| 15 Paraíba | 0,9669 |
| 16 Amapá | 0,9667 |
| 17 Tocantins | 0,9667 |
| 18 Mato Grosso | 0,9616 |
| 19 Sergipe | 0,9608 |
| 20 Maranhão | 0,9578 |
| 21 Bahia | 0,9567 |
| 22 Pernambuco | 0,9533 |
| 23 Amazonas | 0,9532 |
| 24 Alagoas | 0,9511 |
| 25 Pará | 0,9460 |
| 26 Rondônia | 0,9434 |
| 27 Acre | 0,9278 |

Source: CPS/FGV based on IBGE microdata

**RANKING: SCHOOL PERMANENCE
SCHOOL DAY INDEX (lj)
7 TO 14 YEARS
Federal Units**

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,7702 |
| 1 Distrito Federal | 0,9729 |
| 2 Espírito Santo | 0,9184 |
| 3 São Paulo | 0,9081 |
| 4 Minas Gerais | 0,8658 |
| 5 Goiás | 0,8306 |
| 6 Rio de Janeiro | 0,8109 |
| 7 Amapá | 0,7561 |
| 8 Rio Grande do Norte | 0,7513 |
| 9 Mato Grosso do Sul | 0,7309 |
| 10 Pernambuco | 0,7221 |
| 11 Paraná | 0,7102 |
| 12 Roraima | 0,7051 |
| 13 Piauí | 0,7009 |
| 14 Sergipe | 0,7007 |
| 15 Bahia | 0,6976 |
| 16 Pará | 0,6950 |
| 17 Maranhão | 0,6942 |
| 18 Rondônia | 0,6888 |
| 19 Paraíba | 0,6838 |
| 20 Rio Grande do Sul | 0,6809 |
| 21 Alagoas | 0,6746 |
| 22 Tocantins | 0,6672 |
| 23 Amazonas | 0,6561 |
| 24 Mato Grosso | 0,6477 |
| 25 Ceará | 0,6301 |
| 26 Santa Catarina | 0,6255 |
| 27 Acre | 0,6241 |

Source: CPS/FGV based on IBGE microdata

**RANKING: SCHOOL PERMANENCE
SCHOOL ATTENDANCE INDEX (lp)
7 TO 14 YEARS
Federal Units**

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,9603 |
| 1 Amazonas | 0,9741 |
| 2 Amapá | 0,9734 |
| 3 Rio de Janeiro | 0,9724 |
| 4 Tocantins | 0,9702 |
| 5 Sergipe | 0,9701 |
| 6 Santa Catarina | 0,9701 |
| 7 Roraima | 0,9686 |
| 8 Minas Gerais | 0,9679 |
| 9 Goiás | 0,9667 |
| 10 Acre | 0,9655 |
| 11 Rio Grande do Sul | 0,9650 |
| 12 Espírito Santo | 0,9644 |
| 13 Alagoas | 0,9636 |
| 14 Ceará | 0,9624 |
| 15 Mato Grosso do Sul | 0,9624 |
| 16 São Paulo | 0,9619 |
| 17 Paraná | 0,9614 |
| 18 Pará | 0,9611 |
| 19 Mato Grosso | 0,9600 |
| 20 Bahia | 0,9586 |
| 21 Paraíba | 0,9581 |
| 22 Pernambuco | 0,9562 |
| 23 Piauí | 0,9544 |
| 24 Rondônia | 0,9526 |
| 25 Rio Grande do Norte | 0,9491 |
| 26 Maranhão | 0,8815 |
| 27 Distrito Federal | 0,9730 |

Source: CPS/FGV based on IBGE microdata

**RANKING: SCHOOL PERI
AVERAGE LENGTH OF S
7 TO 14 YEARS
Federal Units**

| TOTAL BRAZIL |
|-----------------------|
| 1 Distrito Federal |
| 2 Espírito Santo |
| 3 São Paulo |
| 4 Minas Gerais |
| 5 Goiás |
| 6 Rio de Janeiro |
| 7 Amapá |
| 8 Rio Grande do Norte |
| 9 Mato Grosso do Sul |
| 10 Pernambuco |
| 11 Paraná |
| 12 Roraima |
| 13 Alagoas |
| 14 Sergipe |
| 15 Bahia |
| 16 Pará |
| 17 Maranhão |
| 18 Rondônia |
| 19 Paraíba |
| 20 Rio Grande do Sul |
| 21 Alagoas |
| 22 Tocantins |
| 23 Amazonas |
| 24 Mato Grosso |
| 25 Ceará |
| 26 Santa Catarina |
| 27 Acre |

Source: CPS/FGV based on IBGE microdata

1.3. Age Range: 0 to 6 years

RANKING: SCHOOL PERMANENCE PERMANENCE INDEX (Im*lp*lj)

0 TO 6 YEARS

Federal Units

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,2980 |
| 1 São Paulo | 0,3831 |
| 2 Rio de Janeiro | 0,3767 |
| 3 Santa Catarina | 0,3568 |
| 4 Distrito Federal | 0,3467 |
| 5 Espírito Santo | 0,3445 |
| 6 Paraná | 0,3342 |
| 7 Rio Grande do Norte | 0,3335 |
| 8 Minas Gerais | 0,3275 |
| 9 Sergipe | 0,2911 |
| 10 Ceará | 0,2751 |
| 11 Paraíba | 0,2724 |
| 12 Rio Grande do Sul | 0,2596 |
| 13 Mato Grosso do Sul | 0,2553 |
| 14 Pernambuco | 0,2552 |
| 15 Bahia | 0,2534 |
| 16 Piauí | 0,2506 |
| 17 Goiás | 0,2484 |
| 18 Roraima | 0,2333 |
| 19 Maranhão | 0,2233 |
| 20 Alagoas | 0,2218 |
| 21 Mato Grosso | 0,2092 |
| 22 Pará | 0,2018 |
| 23 Tocantins | 0,1672 |
| 24 Amazonas | 0,1653 |
| 25 Acre | 0,1642 |
| 26 Amapá | 0,1608 |
| 27 Rondônia | 0,1561 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE REGISTRATION INDEX (Im)

0 TO 6 YEARS

Federal Units

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,4016 |
| 1 Rio Grande do Norte | 0,5156 |
| 2 Rio de Janeiro | 0,4834 |
| 3 Santa Catarina | 0,4773 |
| 4 Ceará | 0,4619 |
| 5 São Paulo | 0,4483 |
| 6 Sergipe | 0,4464 |
| 7 Espírito Santo | 0,4215 |
| 8 Piauí | 0,4168 |
| 9 Paraíba | 0,4074 |
| 10 Minas Gerais | 0,4072 |
| 11 Pernambuco | 0,3985 |
| 12 Paraná | 0,3961 |
| 13 Distrito Federal | 0,3938 |
| 14 Bahia | 0,3931 |
| 15 Maranhão | 0,3767 |
| 16 Roraima | 0,3629 |
| 17 Alagoas | 0,3517 |
| 18 Pará | 0,3287 |
| 19 Rio Grande do Sul | 0,3233 |
| 20 Mato Grosso do Sul | 0,3188 |
| 21 Goiás | 0,3090 |
| 22 Mato Grosso | 0,3003 |
| 23 Acre | 0,2801 |
| 24 Tocantins | 0,2766 |
| 25 Amapá | 0,2676 |
| 26 Amazonas | 0,2674 |
| 27 Rondônia | 0,2371 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL DAY INDEX (lj)

0 TO 6 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,7804 |
| 1 Distrito Federal | 0,9175 |
| 2 São Paulo | 0,9006 |
| 3 Paraná | 0,8899 |
| 4 Espírito Santo | 0,8648 |
| 5 Rio Grande do Sul | 0,8435 |
| 6 Mato Grosso do Sul | 0,8426 |
| 7 Minas Gerais | 0,8386 |
| 8 Goiás | 0,8369 |
| 9 Rio de Janeiro | 0,8038 |
| 10 Santa Catarina | 0,7866 |
| 11 Mato Grosso | 0,7396 |
| 12 Paraíba | 0,7087 |
| 13 Rio Grande do Norte | 0,6949 |
| 14 Roraima | 0,6915 |
| 15 Rondônia | 0,6868 |
| 16 Bahia | 0,6772 |
| 17 Pernambuco | 0,6747 |
| 18 Sergipe | 0,6739 |
| 19 Pará | 0,6532 |
| 20 Alagoas | 0,6522 |
| 21 Maranhão | 0,6507 |
| 22 Piauí | 0,6362 |
| 23 Tocantins | 0,6357 |
| 24 Amazonas | 0,6346 |
| 25 Ceará | 0,6283 |
| 26 Amapá | 0,6258 |
| 27 Acre | 0,6081 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL ATTENDANCE INDEX (lp)

0 TO 6 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,9508 |
| 1 Amazonas | 0,9739 |
| 2 Rio de Janeiro | 0,9695 |
| 3 Sergipe | 0,9678 |
| 4 Alagoas | 0,9669 |
| 5 Acre | 0,9641 |
| 6 Goiás | 0,9604 |
| 7 Amapá | 0,9601 |
| 8 Distrito Federal | 0,9596 |
| 9 Minas Gerais | 0,9592 |
| 10 Rondônia | 0,9587 |
| 11 Bahia | 0,9520 |
| 12 Rio Grande do Sul | 0,9519 |
| 13 Tocantins | 0,9510 |
| 14 Mato Grosso do Sul | 0,9504 |
| 15 Santa Catarina | 0,9503 |
| 16 Pernambuco | 0,9490 |
| 17 São Paulo | 0,9489 |
| 18 Paraná | 0,9481 |
| 19 Ceará | 0,9480 |
| 20 Piauí | 0,9452 |
| 21 Espírito Santo | 0,9452 |
| 22 Paraíba | 0,9433 |
| 23 Mato Grosso | 0,9421 |
| 24 Pará | 0,9401 |
| 25 Rio Grande do Norte | 0,9309 |
| 26 Roraima | 0,9295 |
| 27 Maranhão | 0,9109 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERI AVERAGE LENGTH OF S

0 TO 6 YEARS

Federal Units

| TOTAL BRAZIL |
|------------------------|
| 1 Distrito Federal |
| 2 São Paulo |
| 3 Paraná |
| 4 Espírito Santo |
| 5 Rio Grande do Sul |
| 6 Mato Grosso do Sul |
| 7 Minas Gerais |
| 8 Goiás |
| 9 Rio de Janeiro |
| 10 Santa Catarina |
| 11 Mato Grosso |
| 12 Paraíba |
| 13 Rio Grande do Norte |
| 14 Roraima |
| 15 Rondônia |
| 16 Bahia |
| 17 Pernambuco |
| 18 Sergipe |
| 19 Pará |
| 20 Alagoas |
| 21 Maranhão |
| 22 Piauí |
| 23 Tocantins |
| 24 Amazonas |
| 25 Ceará |
| 26 Amapá |
| 27 Acre |

Source: CPS/FGV based on IBGE microdata

1.4. Age Range: 0 to 17 years

RANKING: SCHOOL PERMANENCE PERMANENCE INDEX (Im*lp*lj)

0 TO 17 YEARS

Federal Units

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,5478 |
| 1 Distrito Federal | 0,6856 |
| 2 São Paulo | 0,6641 |
| 3 Espírito Santo | 0,6472 |
| 4 Rio de Janeiro | 0,6246 |
| 5 Minas Gerais | 0,6211 |
| 6 Goiás | 0,5627 |
| 7 Rio Grande do Norte | 0,5377 |
| 8 Paraná | 0,5316 |
| 9 Mato Grosso do Sul | 0,5162 |
| 10 Sergipe | 0,5060 |
| 11 Santa Catarina | 0,5016 |
| 12 Rio Grande do Sul | 0,4958 |
| 13 Piauí | 0,4942 |
| 14 Paraíba | 0,4872 |
| 15 Pernambuco | 0,4848 |
| 16 Bahia | 0,4820 |
| 17 Roraima | 0,4729 |
| 18 Amapá | 0,4724 |
| 19 Ceará | 0,4630 |
| 20 Pará | 0,4539 |
| 21 Alagoas | 0,4518 |
| 22 Tocantins | 0,4432 |
| 23 Mato Grosso | 0,4387 |
| 24 Maranhão | 0,4341 |
| 25 Rondônia | 0,4293 |
| 26 Amazonas | 0,4233 |
| 27 Acre | 0,3931 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE REGISTRATION INDEX (Im)

0 TO 17 YEARS

Federal Units

| | % |
|-----------------------|---------------|
| TOTAL BRAZIL | 0,7379 |
| 1 Rio de Janeiro | 0,7885 |
| 2 Santa Catarina | 0,7864 |
| 3 Rio Grande do Norte | 0,7721 |
| 4 São Paulo | 0,7701 |
| 5 Ceará | 0,7577 |
| 6 Minas Gerais | 0,7469 |
| 7 Piauí | 0,7444 |
| 8 Sergipe | 0,7444 |
| 9 Espírito Santo | 0,7442 |
| 10 Paraná | 0,7434 |
| 11 Distrito Federal | 0,7353 |
| 12 Paraíba | 0,7330 |
| 13 Rio Grande do Sul | 0,7262 |
| 14 Bahia | 0,7214 |
| 15 Pernambuco | 0,7116 |
| 16 Mato Grosso do Sul | 0,7110 |
| 17 Maranhão | 0,7101 |
| 18 Roraima | 0,7038 |
| 19 Goiás | 0,6979 |
| 20 Alagoas | 0,6935 |
| 21 Tocantins | 0,6900 |
| 22 Mato Grosso | 0,6876 |
| 23 Pará | 0,6758 |
| 24 Amazonas | 0,6606 |
| 25 Rondônia | 0,6588 |
| 26 Amapá | 0,6563 |
| 27 Acre | 0,6512 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL DAY INDEX (lj)

0 TO 17 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,7759 |
| 1 Distrito Federal | 0,9623 |
| 2 Espírito Santo | 0,9060 |
| 3 São Paulo | 0,9006 |
| 4 Minas Gerais | 0,8620 |
| 5 Goiás | 0,8354 |
| 6 Rio de Janeiro | 0,8159 |
| 7 Mato Grosso do Sul | 0,7558 |
| 8 Paraná | 0,7469 |
| 9 Amapá | 0,7419 |
| 10 Rio Grande do Norte | 0,7388 |
| 11 Pernambuco | 0,7142 |
| 12 Rio Grande do Sul | 0,7099 |
| 13 Pará | 0,7020 |
| 14 Sergipe | 0,7012 |
| 15 Bahia | 0,7011 |
| 16 Roraima | 0,7002 |
| 17 Piauí | 0,6982 |
| 18 Paraíba | 0,6961 |
| 19 Maranhão | 0,6931 |
| 20 Rondônia | 0,6856 |
| 21 Alagoas | 0,6763 |
| 22 Mato Grosso | 0,6666 |
| 23 Tocantins | 0,6641 |
| 24 Santa Catarina | 0,6599 |
| 25 Amazonas | 0,6577 |
| 26 Ceará | 0,6387 |
| 27 Acre | 0,6253 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERMANENCE SCHOOL ATTENDANCE INDEX (lp)

0 TO 17 YEARS

Federal Units

| | % |
|------------------------|---------------|
| TOTAL BRAZIL | 0,9568 |
| 1 Amazonas | 0,9743 |
| 2 Rio de Janeiro | 0,9709 |
| 3 Amapá | 0,9702 |
| 4 Sergipe | 0,9694 |
| 5 Distrito Federal | 0,9690 |
| 6 Tocantins | 0,9671 |
| 7 Santa Catarina | 0,9665 |
| 8 Acre | 0,9653 |
| 9 Goiás | 0,9652 |
| 10 Minas Gerais | 0,9647 |
| 11 Alagoas | 0,9633 |
| 12 Rio Grande do Sul | 0,9618 |
| 13 Mato Grosso do Sul | 0,9606 |
| 14 Espírito Santo | 0,9599 |
| 15 Roraima | 0,9597 |
| 16 São Paulo | 0,9575 |
| 17 Paraná | 0,9575 |
| 18 Mato Grosso | 0,9572 |
| 19 Pará | 0,9568 |
| 20 Ceará | 0,9567 |
| 21 Paraíba | 0,9548 |
| 22 Pernambuco | 0,9539 |
| 23 Bahia | 0,9530 |
| 24 Piauí | 0,9509 |
| 25 Rondônia | 0,9505 |
| 26 Rio Grande do Norte | 0,9427 |
| 27 Maranhão | 0,8820 |

Source: CPS/FGV based on IBGE microdata

RANKING: SCHOOL PERI AVERAGE LENGTH OF S

0 TO 17 YEARS

Federal Units

| TOTAL BRAZIL |
|------------------------|
| 1 Distrito Federal |
| 2 Espírito Santo |
| 3 São Paulo |
| 4 Minas Gerais |
| 5 Goiás |
| 6 Rio de Janeiro |
| 7 Mato Grosso do Sul |
| 8 Paraná |
| 9 Amapá |
| 10 Rio Grande do Norte |
| 11 Pernambuco |
| 12 Rio Grande do Sul |
| 13 Pará |
| 14 Sergipe |
| 15 Bahia |
| 16 Roraima |
| 17 Piauí |
| 18 Paraíba |
| 19 Maranhão |
| 20 Rondônia |
| 21 Alagoas |
| 22 Mato Grosso |
| 23 Tocantins |
| 24 Santa Catarina |
| 25 Amazonas |
| 26 Ceará |
| 27 Acre |

Source: CPS/FGV based on IBGE microdata

d. Education Targets

“If we know WHERE to go, we can choose HOW to get there, thus the importance of targets. This study asks the question: WHY do we want to get there?”

We now look at the motivations of other actors in the educational process, aside from parents and their children. The creation of a system of educational targets proposed in the plan keeps the promise of motivating mayors and governors. A challenge to investing in education is that the investment's maturation often occurs in the long term, beyond the horizon of government mandates. Another difficulty of education policy is the fact that it is predominantly geared towards the population younger than the voting age. A previous study shows the existence of political business cycles in income transfers, which grows in electoral years for those above the voting age limit. These limitations suggest the active participation of civil society such as **Compromisso Todos pela Educação** and the imposition of targets with rewards towards the units that manage education networks through performance, as the projected plan aims to propose. It is necessary to leave behind the model with expense links and the irrelevance of scholastic performance in the distribution of public resources. If Bolsa Família demands scholastic performance from poor families why is that managers (and instructors) are excused from such demands?

The National System of Basic Education Evaluation (SAEB), the Prova Brasil and ENEM may provide local information of fundamental interest to authorities for managing the network of learning, as well as for mobilizing society towards the educational cause. We present below an example based on the grades of the Secondary Education National Exam (ENEM).

ENEM 2006 - Top 20 Schools in the Country (Private and Public)

| | Average |
|---|---------|
| Instituto Dom Barreto (Teresina-PI) | 74.71 |
| Colégio Vértice (São Paulo-SP) | 74.15 |
| Colégio Santo Agostinho (Rio de Janeiro-RJ) | 72.36 |
| Colégio de São Bento (Rio de Janeiro-RJ) | 72.06 |
| Colégio Santo Agostinho (Novo Leblon-RJ) | 71.79 |
| Colégio Bandeirantes (São Paulo-SP) | 70.89 |
| Colégio de Aplicação da UFV (Viçosa-MG) | 70.84 |
| Colégio Helyos (Feira de Santana-BA) | 70.58 |
| Colégio WR (Goiânia-GO) | 70.57 |
| Colégio Bernoulli (Belo Horizonte-MG) | 70.47 |
| Colégio Santo Inácio (Rio de Janeiro-RJ) | 70.29 |
| Colégio Loyola (Belo Horizonte-MG) | 70.23 |

| | |
|---|-------|
| Colégio Santo Antônio (Belo Horizonte-MG) | 70.09 |
| Escola Ipiranga (Petrópolis-RJ) | 70 |
| Colégio Aplicação da UFPE (Recife-PE) | 70 |
| Colégio União (Três Corações-MG) | 69.81 |
| Colégio Anchieta (Nova Friburgo-RJ) | 69.46 |
| Colégio Engenheiro Juarez de Siqueira Britto Wande (São José dos Campos-SP) | 69.34 |
| Colégio Equipe (Recife-PE) | 69.27 |
| Universidade Tecnológica Federal do Paraná (Curitiba-PR) | 69.26 |

Source: INEP/MEC 2006

Education Targets and Social Credit

V – Targets and Education Pact

I – Design for a System of Social Targets

I – Dynamic Aspects of a System of Social Targets

V – Creso Franco's Presentation – Director, Dept of Education, PUC-RJ

Managers, researchers and social area observers search for empirical evidence available to reach a new generation of public policies. A type of Holy Grail, which is never reached, but whose search leads to new conquests. The theme to be discussed here is not the definition nor the choice of a set of educational targets, but what are the possibilities of what we can (and should not) do with them, once established.

A characteristic of the Brazilian basic education system is the increasing decentralization of federal expenses. The decentralization of the Brazilian educational system was propelled by the 1988 Constitution, accompanied by the health system, and it has become more and more present in the income transfer policies, such as the Bolsa Família, since the creation of the poverty eradication fund by the National Congress in 2000. Decentralization is fundamental for financing social actions where they are more needed and where resources are more scarce.

We discuss different types of partnership among levels of government based on the classic principal-agent problem. The principal can be seen as the federal government, in search of the improvement of the educational system, passing out funds to the municipality, the agent who implements the social actions. A similar situation is found in the relationship of the states' federal governments.

In light of the Brazilian size and heterogeneity, it is impossible to observe from Brasília the specific needs of every corner in the country. The federal government has less information than the local government about the students' needs. Therefore it is understandable that the municipal and state governments be responsible for implementing education actions in each location. The federal government should establish partnerships with the municipalities or states, transferring resources and monitoring the

attained results. Usually, however, the State limits itself to carry out the analysis of the legality behind the use of the funds, demanding the fulfillment of constitutional ties. The most important analysis, that of measuring the social result effectively attained, tends not to be carried out. What we verify, in the best of situations, is whether the funds were employed as per the law.

Based on the model in Neri and Xerez (2003), we analyze the impact on the behavior of municipalities of three types of institutional environments. In the first place, the transfer of fixed federal funds, or unconditional. In this case, there is the displacement of educational investments carried out by the locale, similar to the crowding-out effect found in macroeconomic textbooks. In this case, the social concerns of the local power are provided by the central power. As we see, it is needed to stimulate a relationship of complement, not of substitution, of the actions between various levels of government.

In a second situation, called repeated focalization, transfers have always privileged the municipalities with the poorest education. The result obtained by the managers at these locations is worse than in the absence of additional federal transfers. We introduce a perverse incentive for local governments to maintain a group of delays and the poor quality of the educational system, so as to justify access to new resources in the future. This point does not refer to the recent Brazilian debate of whether it is desirable or not to focus social expenses, but about the better way in which to do so. The basic critique to repeated focalization at the level of indicators is not that the indicators are not correct, but that they are wrong. In this case, as more money is destined towards the poorest, the less money reaches the poorest. It is necessary to avoid the cycle of how worst is the administration, the better is the budget received.

Finally, there are contracts with clauses that establish a proportionality relationship between the value to be transferred and the social progress attained. What is established between the federal government and the municipality is somewhat similar to a services contract. In a realistic situation, first the municipality receives the money, then social performance is verified. It can be regarded as a *Social Credit* for the municipality to carry out certain advances drawn out in the contract. Following this, if the established targets are fulfilled, credit payment is withdrawn. If the targets are not fulfilled in a satisfactory manner, the limit of credit established by the federal government for the municipality is compromised.

This type of contract is already carried out between government and citizens in programs such as bolsa-escola and bolsa-familia. By adding a similar contract between governments, the system of conditional transfer distribution would become more consistent throughout time in its different levels, resulting in the flow of resources towards greater social returns. It is worthwhile to remember that the evaluation of advances is one of the few moments when potential results of the poorest will outdo those of others. For example, municipalities where half the children attend school can double the indicator, as opposed to one where 90% are already in school. Now this potential has to be fulfilled.

The main problem with the implementation of social credit schemes is related to the presence of shocks. The result obtained by the social protagonist depends on factors beyond their reach, since the result does not solely depend on their efforts and ability of implementation. As in the case of idiosyncratic shocks such as droughts, floods, and tsunamis, it is fundamental to create social security mechanisms. In

the case of aggregate shocks, such as a recession, due to their systemic non-insurable nature, it is fundamental to use schemes of relative evaluation. The creation of a system capable of performing international comparisons, such as the MDGs or the educational targets of Dakar, allows us to place each country within international norms. The system of incentives should be announced a priori and relative performance should be evaluated a posteriori. Everything works as a credit system where social projects' financial debt should be reduced facing social advances. The advantage of a social credit instrument is, if well developed, to attract better social actors and induce them to engage in better practices.

At present, the heart and veins of Brazilian educational politics are mechanisms of transfer of federal government resources to municipalities and states. Obviously, the spending of funds in these regions results in an improvement in local life. However, it is important to regard social politics through the creation of mechanisms that monitor social budget, not only to verify whether they are really employed in the pre-established areas, but also to evaluate that the measure is improving the population's situation. It is necessary to go beyond the analysis of accounts. It is not enough to know how much was invested; the measure of the result reached should be known, so as to open up the channels of public resources to the educational sphere in order to reach areas that offer the highest returns to society.

There is no doubt that the nucleus of social action should be the poorest. Nonetheless, those that relocate themselves for the emancipation of their needs should be particularly rewarded, for they will not be needing resources in the future. Future success should be rewarded, as opposed to solely rewarding past losses. Social credit mechanisms may be perceived as a conversion process of educational debt into monetary resources so as to create virtuous solution cycles for educational needs. We take as a measure of social debt of a given locale the quantity of resources needed for its educational needs to be supplied in a determined period of time. Each locale would have access to a cash flow when social indicators show that it is emancipating its respective social debt. In general, you can think that efficiency is not a comparative advantage in a poor society. However, one of the few advantages—perhaps the only one—in being poor is the relative capacity to prosper. For example, if 50% of the children are not going to school, the community can double the initial scenario, while if the initial point is 100% of children in school, there is no space for improvements. In the case of social credit, equality and efficiency walk hand in hand.

Many social programs are based in the transfer of federal government funds to states and municipalities with needy regions. Obviously, the expense in the regions results in the improvement of the local population's living conditions. However, what generally is not evaluated is whether the final result reached could have been better.

Conclusions

If we were to synthesize the main elements nowadays pursued in the design of innovation in social interventions—that is, what is IN in public policies—we would say: incentives, information and

infancy.³ Nations and parents who care for their children, since their most tender age, guarantee their future. In other words, it ends being more productive from the social point of view (as well as the fiscal one) to prevent rather than remediate, investing in education. Education constitutes the true cost of social opportunity—whatever the alternative to investment with a highest social return may be.

This research on education and the database provide three types of contribution: i) impacts of education at the individual level. The objective here is not only to inform policy managers and opinion makers, but to provide a basis for the average citizen in his/her decision-making. ii) motivational evidences of with whom should educational policies be the most concerned with. iii) discussion on the implications of policies, exploring certain desirable upgrades, in the incentive and in the demand for education—such as Bolsa-Familia—aside from supply programs—such as management systems based on incentives linked to performance, as recently released in the educational PAC.

³ Similarly, what is *out* in public policy also starts with *in*: inefficiency and inequity.

Annex:

As we have seen, educational policies should not be guided solely on the merit of equality, the policy's efficiency in transforming the lives of those who receive its benefits should be considered, as well as the labor change (and at what cost). In the case of public action, it is important still to act in areas where the social returns are greater than the private or individual, in function of externalities and the general transmission of education. We begin with international evidences that deal with aggregate impacts in education about growth, exports, mortality and longevity, among others.

a. School Externalities

The private decision of education does not include the impact that greater education of each individual may have on the learning ability not only of descendants, but that of other families, which would justify public action in addition to private. For example, Ricardo Paes de Barros has demonstrated that the average education of mothers in a given community has a strong explanatory power over the scholastic performance of children, even when controlled by the child's respective mother's educational level. In broader terms, Jere Berhman from the IDB shows that for each additional year of study, life expectancy increases two years, population growth decreases 0.26 percentage points (p.p.), exports increase 0.7 p.p. and per capita income growth increases 0.35 p.p. It is difficult to imagine investment, social or private, more rewarding than a child moving to the next grade.

b. Educational Mobility

The impact of parents' education in that of their children should be captured in the public policy decision as well as in the private decision. We synthesize some evidence from works in this area through the measurement of education mobility among generations. Educational inequality is transmitted through generations, in particular through the passage of schooling, or lack thereof, from father to son. Ferreira and Velloso (2005) show that the degree of education inequality transmission from parents to children is very high in Brazil (68%) when compared to that of the United States (30%). The degree of intergenerational mobility in education in Brazil is less than that observed in developed countries or in developing countries, with the exception of Colombia (70%). Another conclusion of the research shows that the education of parents performs an important role in the determination of their children's education level. The probability of a child continuing without education is of 33.85% when the father has not completed one year of study. For the children of parents with higher education, this percentage decreases to less than 1%, having the higher probability of repeating the performance of the previous generation (60.02%) as per Table 4.

Table 4

Probability of Child's Schooling Versus Parents (%)

| Child \ Father | No Schooling | Primary Education | Basic Education | Secondary Education | Higher Education |
|---------------------|--------------|-------------------|-----------------|---------------------|------------------|
| No Schooling | 33.85 | 18.49 | 5.65 | 4.20 | 1.08 |
| Primary Education | 2.78 | 15.67 | 15.15 | 22.00 | 11.59 |
| Basic Education | 1.38 | 4.07 | 13.71 | 28.78 | 24.44 |
| Secondary Education | 0.37 | 1.76 | 6.48 | 32.56 | 35.8 |
| Higher Education | 0.75 | 0.90 | 3.77 | 16.19 | 60.02 |

Source: Velloso and Ferreira (2003) based on PNAD 1996/IBGE

c. Education and Marriage

How many of marriage relations occur between people of the same educational level? How did this evolve throughout time? These questions can be relevant in order to determine the degree of inter-generational transmission of education inequality, which, as we saw, is an observable determinant relevant in income inequality. Raquel Fernandez' research, applied to a set of countries demonstrates that the higher the return rate of education in each country, the more likely it is that people of the same educational level intermarry, leading to greater inequality in the generation of offspring in these marriages.

We present below the educational diversity of marriages by studying the combination of determined characteristics such as religion, race, and age.

Education (Categories of Completed Years of Study):

| 2000 | | Head | | | | | Total of Spouses |
|--------|-----------------------|--------------|--------|--------|---------|------------|------------------|
| | | No education | 1 to 3 | 4 to 7 | 8 to 11 | 12 or more | |
| Spouse | No education | 6,42 | 2,98 | 2,14 | 0,48 | 0,04 | 12,05 |
| | 1 to 3 | 3,67 | 6,98 | 5,47 | 1,56 | 0,11 | 17,79 |
| | 4 to 7 | 2,72 | 6,45 | 16,46 | 7,04 | 0,57 | 33,25 |
| | 8 to 11 | 0,61 | 2,00 | 7,69 | 15,32 | 3,59 | 29,22 |
| | 12 or more | 0,03 | 0,13 | 0,61 | 2,48 | 4,45 | 7,70 |
| | Total of Heads | | 13,45 | 18,54 | 32,38 | 26,87 | 8,75 |

| 1970 | | Head | | | | | Total Spouses |
|--------|--------------------|--------------|--------|--------|---------|------------|---------------|
| | | No education | 1 to 3 | 4 to 7 | 8 to 11 | 12 or more | |
| Spouse | No education | 28,25 | 11,20 | 4,19 | 0,54 | 0,42 | 44,58 |
| | 1 to 3 | 6,63 | 13,70 | 5,34 | 0,62 | 0,36 | 26,65 |
| | 4 to 7 | 2,54 | 4,63 | 10,76 | 1,94 | 1,24 | 21,12 |
| | 8 to 11 | 0,29 | 0,39 | 1,00 | 1,05 | 1,14 | 3,87 |
| | 12 or more | 0,23 | 0,28 | 0,76 | 0,62 | 1,90 | 3,78 |
| | Total Heads | | 37,93 | 30,20 | 22,05 | 4,76 | 5,06 |

Obs: Without ignored

In 2000, 49.6% of marriages occurred among the same educational groups, against 56.7% in 1970. Aside from the better educational diversity that may be beneficial to educational equality (and that of income) of the next generations of society given as a whole. It is worthwhile to mention that there has also been an improvement in educational levels, for example, the mode (most frequent value) among all education combinations between head of households and spouses changed from people with no education in 1970 to couples that coincide in the range of 4-7 years of completed education in 2000.

d. Education and Proficiency

Aside from labor and health impacts, a central possibility of educational impact analysis arises from the study of proficiency among students that measures the level of learning at each grade studied. This is fundamental, but presents some measurement problems to be dealt with. A problem in this approach in Brazil is that our evaluation systems for those who are in school in certain specific grades. If, for example, children are more in school through the means of programs like bolsa-escola or bolsa-familia, or whether they achieve today, with more frequency, say, the fourth grade as a result of the easing of progression, independent of virtues and defects in these policies, an inter-temporal comparison of proficiency is harmed. Some studies demonstrate that the strong decrease in quality of teaching in Brazil observed since 1995 may be negatively biased by those who were previously excluded from the educational evaluation system, not allowing us to perform specific analyses of the theme. We are now capturing the proficiency of individuals who previously were not being evaluated.

Another limitation in this method of evaluating the quality of teaching only through student proficiency is the disregard of how useful certain knowledge is in practical terms. This involves subjective elements, such as the direct gain of citizenship through the mere act of studying and objective elements in people's lives. Another impact of educational policy already being analyzed refers to the changes observed in the insertion in the labor market and the job market's general conditions. We also consider the individual's return when leaving the education system, as per the analysis of learning impact on the individual's ability to be employed and his/her associated salary. [I](#) [S](#)

e. Return Rate of Education

The Brazilian return rate to education is extremely high, which should be an enormous incentive in the accumulation of human capital.⁴ A study by Fernando de Holanda Barbosa Filho and Samuel Pessoa (2006), based on the PNAD 2004, calculated the internal rate of return to education⁵ from

⁴ The average income of someone with no education is of R\$138 while that of someone with an undergraduate degree is R\$2,200.

⁵ Return rate that equals the present value of expenses of an additional year of education with the present value of benefits from this additional year. This study gives continuity to the analyses made in seminal studies by Carlos Langoni and Cláudio Moura Castro.

investments in the country's education, and signaled that i) investment in education in Brazil is extremely attractive, offering high rates of return; ii) the return rate of pre-school is superior to 17%; iii) that of secondary education is of 14% and iv) that of higher education was over 18%. However, according to Neri, the rate of return relevant to whom is deciding whether or not to study is not the rate observed a posteriori, but the rate a priori, which includes the probability of repetition. This means that, in truth, if the repetition rate is of 22%, for example, as it was in 2004, the relevant rate of return ends up being 12% and not 16%. Aside from this, the probability of finding a job increases with education. There is, therefore, a poverty trap where, in order to obtain higher returns, an individual must first invest, facing lower returns and higher risks. [P](#)

f. Plan for Development of Education

The "Educational PAC" announced by the Federal Government on March 2007 places the theme of central education at the core of the debate and public action through eleven central points, prioritizing: teachers through the creation of national wage floor (1) and access to the so-called Universidade Aberta do Brasil for recycling (2); schools through digital infra-structure (3) and access to electric energy and transportation [P](#) (4); school materials through its gratuitous distribution to all grades (5) and students, be they adults through the redefinition of the program Brasil Alfabetizado (6), be they children through the performance analysis of Provinha Brasil to correct deficiencies soon after alphabetization (7) and the Pro-Infancy program [S](#) (8). Two other points in the new proposal: the widening of the age range from 15 to 17 for those benefited by the conditionalities of Bolsa-Familia (9). Lastly, and perhaps most challenging, the incorporation of performance conditionalities in the transfer of resources from the federal government to states and municipalities (10) through the creation of the Educational Development Index based on the School Census and Prova Brasil at the school level [S](#) (11). The objective is not to discuss the merit of each of these points vis-à-vis the challenges and educational needs of the country. This is a broad and complex theme, focus of a seminar among specialists at FGV. [V](#)

APPENDIX: REGIONAL RANKINGS

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| b. Regions..... | 36 |
| c. Metropolitan Regions | 36 |

1. Ranking: School Permanence

1.5. Age Range: 00 to 17 years

a. Federal Units

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 17 YEARS
Federal Units

| <i>Federal Units</i> | <i>%</i> |
|-----------------------|-------------|
| TOTAL BRAZIL | 73.8 |
| 1 Rio de Janeiro | 78.85 |
| 2 Santa Catarina | 78.64 |
| 3 Rio Grande do Norte | 77.21 |
| 4 São Paulo | 77.01 |
| 5 Ceará | 75.78 |
| 6 Minas Gerais | 74.69 |
| 7 Piauí | 74.44 |
| 8 Sergipe | 74.44 |
| 9 Espírito Santo | 74.43 |
| 10 Paraná | 74.34 |
| 11 Distrito Federal | 73.54 |
| 12 Paraíba | 73.29 |
| 13 Rio Grande do Sul | 72.62 |
| 14 Bahia | 72.14 |
| 15 Pernambuco | 71.15 |
| 16 Mato Grosso do Sul | 71.1 |
| 17 Maranhão | 71.01 |
| 18 Roraima | 70.38 |
| 19 Goiás | 69.79 |
| 20 Alagoas | 69.35 |
| 21 Tocantins | 69 |
| 22 Mato Grosso | 68.76 |
| 23 Pará | 67.59 |
| 24 Amazonas | 66.06 |
| 25 Rondônia | 65.88 |
| 26 Amapá | 65.63 |
| 27 Acre | 65.11 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 17 YEARS
Federal Units

| <i>Federal Units</i> | <i>%</i> |
|-----------------------|--------------|
| TOTAL BRAZIL | 30.13 |
| 1 Distrito Federal | 64.45 |
| 2 Espírito Santo | 54.4 |
| 3 São Paulo | 54.17 |
| 4 Minas Gerais | 46.94 |
| 5 Rio de Janeiro | 40.2 |
| 6 Goiás | 39.17 |
| 7 Rio Grande do Norte | 25.6 |
| 8 Mato Grosso do Sul | 24.22 |
| 9 Amapá | 23.11 |
| 10 Paraná | 21.92 |
| 11 Pernambuco | 18.64 |
| 12 Sergipe | 17.72 |
| 13 Piauí | 17.53 |
| 14 Roraima | 16.74 |
| 15 Bahia | 16.66 |
| 16 Rio Grande do Sul | 16.55 |
| 17 Pará | 16.53 |
| 18 Maranhão | 16.08 |
| 19 Paraíba | 15.97 |
| 20 Alagoas | 13.07 |
| 21 Rondônia | 9.97 |
| 22 Amazonas | 9.35 |
| 23 Mato Grosso | 9.29 |
| 24 Tocantins | 9.01 |
| 25 Santa Catarina | 8.33 |
| 26 Ceará | 6.71 |
| 27 Acre | 4.12 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 17 YEARS
Federal Units

| <i>Federal Units</i> | <i>%</i> |
|------------------------|-------------|
| TOTAL BRAZIL | 2.32 |
| 1 Paraná | 5.38 |
| 2 Rondônia | 4.13 |
| 3 São Paulo | 3.71 |
| 4 Mato Grosso do Sul | 3.48 |
| 5 Santa Catarina | 3.44 |
| 6 Rio Grande do Sul | 3.4 |
| 7 Espírito Santo | 2.54 |
| 8 Rio de Janeiro | 2.36 |
| 9 Mato Grosso | 2.17 |
| 10 Distrito Federal | 2.16 |
| 11 Tocantins | 2.05 |
| 12 Minas Gerais | 1.97 |
| 13 Goiás | 1.91 |
| 14 Pernambuco | 1.67 |
| 15 Paraíba | 1.64 |
| 16 Bahia | 1.58 |
| 17 Rio Grande do Norte | 1.2 |
| 18 Sergipe | 1.12 |
| 19 Roraima | 0.88 |
| 20 Piauí | 0.74 |
| 21 Pará | 0.72 |
| 22 Ceará | 0.63 |
| 23 Maranhão | 0.45 |
| 24 Amazonas | 0.18 |
| 25 Amapá | 0.16 |
| 26 Alagoas | 0.16 |
| 27 Acre | 0.00 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 17 YEARS
Regions

| <i>Regions</i> | <i>%</i> |
|---------------------|-------------|
| TOTAL BRAZIL | 73.8 |
| 1 Southeast | 76.62 |
| 2 South | 74.61 |
| 3 Northeast | 72.81 |
| 4 Center | 70.31 |
| 5 North | 66.9 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 17 YEARS
Regions

| <i>Regions</i> | <i>%</i> |
|---------------------|--------------|
| TOTAL BRAZIL | 30.13 |
| 1 Southeast | 49.8 |
| 2 Center | 31.68 |
| 3 South | 16.88 |
| 4 Northeast | 15.61 |
| 5 North | 13.73 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 17 YEARS
Regions

| <i>Regions</i> | <i>%</i> |
|---------------------|-------------|
| TOTAL BRAZIL | 2.32 |
| 1 South | 4.19 |
| 2 Southeast | 2.96 |
| 3 Center | 2.27 |
| 4 Northeast | 1.12 |
| 5 North | 0.87 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 17 YEARS
Metropolitan Regions

| <i>Metropolitan Regions</i> | <i>%</i> |
|-----------------------------|-------------|
| TOTAL BRAZIL | 73.8 |
| 1 Ceará | 78.75 |
| 2 Rio de Janeiro | 78.07 |
| 3 Pernambuco | 77.9 |
| 4 São Paulo | 77.37 |
| 5 Minas Gerais | 77.3 |
| 6 Bahia | 77.21 |
| 7 Paraná | 76.28 |
| 8 Pará | 73.6 |
| 9 Distrito Federal | 73.54 |
| 10 Rio Grande do Sul | 71.46 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 17 YEARS
Metropolitan Regions

| <i>Metropolitan Regions</i> | <i>%</i> |
|-----------------------------|--------------|
| TOTAL BRAZIL | 30.13 |
| 1 Distrito Federal | 64.45 |
| 2 São Paulo | 47.03 |
| 3 Minas Gerais | 43.19 |
| 4 Rio de Janeiro | 40.04 |
| 5 Bahia | 26.74 |
| 6 Pernambuco | 23.88 |
| 7 Pará | 23.5 |
| 8 Rio Grande do Sul | 18.23 |
| 9 Paraná | 17.89 |
| 10 Ceará | 11.66 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 17 YEARS
Metropolitan Regions

| <i>Metropolitan Regions</i> | <i>%</i> |
|-----------------------------|-------------|
| TOTAL BRAZIL | 2.32 |
| 1 Paraná | 6.57 |
| 2 São Paulo | 4.1 |
| 3 Rio Grande do Sul | 3.57 |
| 4 Rio de Janeiro | 2.46 |
| 5 Minas Gerais | 2.33 |
| 6 Bahia | 2.27 |
| 7 Distrito Federal | 2.16 |
| 8 Pará | 1.83 |
| 9 Ceará | 1.45 |
| 10 Pernambuco | 1.33 |

Source: CPS/FGV based on IBGE microdata.

1.6. Age Range: 15 to 17 years

a. Federal Units

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 15 TO 17 YEARS

| Federal Units | | % |
|------------------------|-------|--------------|
| TOTAL BRAZIL | | 81.93 |
| 1 Rio de Janeiro | 88.39 | |
| 2 São Paulo | 86.96 | |
| 3 Distrito Federal | 86.17 | |
| 4 Amapá | 84.81 | |
| 5 Santa Catarina | 84.04 | |
| 6 Amazonas | 83.77 | |
| 7 Rio Grande do Sul | 82.38 | |
| 8 Sergipe | 82.26 | |
| 9 Roraima | 81.77 | |
| 10 Minas Gerais | 81.5 | |
| 11 Goiás | 80.74 | |
| 12 Rio Grande do Norte | 80.54 | |
| 13 Paraíba | 80.54 | |
| 14 Tocantins | 80.47 | |
| 15 Piauí | 79.84 | |
| 16 Paraná | 79.82 | |
| 17 Bahia | 79.65 | |
| 18 Ceará | 79.51 | |
| 19 Espírito Santo | 79.23 | |
| 20 Alagoas | 78.54 | |
| 21 Maranhão | 78.04 | |
| 22 Mato Grosso do Sul | 77.07 | |
| 23 Rondônia | 76.59 | |
| 24 Pará | 75.98 | |
| 25 Mato Grosso | 75.95 | |
| 26 Acre | 75.83 | |
| 27 Pernambuco | 75.64 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 15 TO 17 YEARS

| Federal Units | | % |
|------------------------|-------|--------------|
| TOTAL BRAZIL | | 37.22 |
| 1 Distrito Federal | 79.25 | |
| 2 São Paulo | 59.15 | |
| 3 Espírito Santo | 58.97 | |
| 4 Minas Gerais | 54.27 | |
| 5 Rio de Janeiro | 51.74 | |
| 6 Goiás | 48.83 | |
| 7 Amapá | 40.53 | |
| 8 Pará | 31.96 | |
| 9 Mato Grosso do Sul | 31.44 | |
| 10 Rio Grande do Norte | 30.41 | |
| 11 Piauí | 28.87 | |
| 12 Bahia | 26.00 | |
| 13 Maranhão | 25.65 | |
| 14 Sergipe | 25.54 | |
| 15 Paraná | 24.33 | |
| 16 Pernambuco | 24.21 | |
| 17 Paraíba | 23.54 | |
| 18 Alagoas | 20.77 | |
| 19 Rio Grande do Sul | 18.75 | |
| 20 Roraima | 18.59 | |
| 21 Amazonas | 17.12 | |
| 22 Ceará | 14.39 | |
| 23 Tocantins | 13.99 | |
| 24 Mato Grosso | 11.53 | |
| 25 Rondônia | 9.74 | |
| 26 Acre | 9.01 | |
| 27 Santa Catarina | 5.49 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 15 TO 17 YEARS

| Federal Units | | % |
|------------------------|------|-------------|
| TOTAL BRAZIL | | 1.41 |
| 1 Rondônia | 4.57 | |
| 2 Espírito Santo | 2.56 | |
| 3 Rio de Janeiro | 2.19 | |
| 4 Rio Grande do Sul | 2.08 | |
| 5 Mato Grosso | 1.99 | |
| 6 Distrito Federal | 1.96 | |
| 7 Sergipe | 1.88 | |
| 8 São Paulo | 1.65 | |
| 9 Piauí | 1.63 | |
| 10 Paraná | 1.61 | |
| 11 Pará | 1.6 | |
| 12 Goiás | 1.49 | |
| 13 Rio Grande do Norte | 1.46 | |
| 14 Minas Gerais | 1.31 | |
| 15 Mato Grosso do Sul | 1.09 | |
| 16 Amapá | 1.07 | |
| 17 Bahia | 1.07 | |
| 18 Tocantins | 1.06 | |
| 19 Santa Catarina | 1.06 | |
| 20 Pernambuco | 1.00 | |
| 21 Paraíba | 0.78 | |
| 22 Ceará | 0.66 | |
| 23 Roraima | 0.6 | |
| 24 Maranhão | 0.37 | |
| 25 Amazonas | 0.15 | |
| 26 Acre | 0.00 | |
| 27 Alagoas | 0.00 | |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 15 TO 17 YEARS

| Regions | | % |
|---------------------|-------|--------------|
| TOTAL BRAZIL | | 81.93 |
| 1 Southeast | 85.45 | |
| 2 South | 81.73 | |
| 3 Center | 80.04 | |
| 4 Northeast | 78.95 | |
| 5 North | 78.48 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 15 TO 17 YEARS

| Regions | | % |
|---------------------|-------|--------------|
| TOTAL BRAZIL | | 37.22 |
| 1 Southeast | 56.58 | |
| 2 Center | 40.16 | |
| 3 North | 24.75 | |
| 4 Northeast | 23.66 | |
| 5 South | 18.00 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 15 TO 17 YEARS

| Regions | | % |
|---------------------|------|-------------|
| TOTAL BRAZIL | | 1.41 |
| 1 Southeast | 1.69 | |
| 2 South | 1.67 | |
| 3 Center | 1.55 | |
| 4 North | 1.46 | |
| 5 Northeast | 0.9 | |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 15 TO 17 YEARS

| Metropolitan Regions | | % |
|----------------------|-------|--------------|
| TOTAL BRAZIL | | 81.93 |
| 1 Rio de Janeiro | 89.47 | |
| 2 Minas Gerais | 89.09 | |
| 3 São Paulo | 88.82 | |
| 4 Paraná | 87.1 | |
| 5 Ceará | 86.46 | |
| 6 Bahia | 86.28 | |
| 7 Distrito Federal | 86.17 | |
| 8 Pará | 84.41 | |
| 9 Pernambuco | 83.08 | |
| 10 Rio Grande do Sul | 81.99 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 15 TO 17 YEARS

| Metropolitan Regions | | % |
|----------------------|-------|--------------|
| TOTAL BRAZIL | | 37.22 |
| 1 Distrito Federal | 79.25 | |
| 2 São Paulo | 53.53 | |
| 3 Rio de Janeiro | 51.17 | |
| 4 Minas Gerais | 50.65 | |
| 5 Pará | 43.08 | |
| 6 Bahia | 41.17 | |
| 7 Pernambuco | 34.66 | |
| 8 Ceará | 24.76 | |
| 9 Rio Grande do Sul | 22.3 | |
| 10 Paraná | 19.11 | |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 15 TO 17 YEARS

| Metropolitan Regions | | % |
|----------------------|------|-------------|
| TOTAL BRAZIL | | 1.41 |
| 1 Pará | 4.29 | |
| 2 Rio de Janeiro | 2.6 | |
| 3 Rio Grande do Sul | 1.99 | |
| 4 Distrito Federal | 1.96 | |
| 5 São Paulo | 1.93 | |
| 6 Minas Gerais | 1.87 | |
| 7 Pernambuco | 1.02 | |
| 8 Bahia | 1.01 | |
| 9 Paraná | 0.99 | |
| 10 Ceará | 0.97 | |

Source: CPS/FGV based on IBGE microdata.

1.7. Age Range: 07 to 14 years

a. Federal Units

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 07 TO 14 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 97.07 |
| 1 Santa Catarina | 98.69 |
| 2 São Paulo | 98.47 |
| 3 Distrito Federal | 98.45 |
| 4 Rio de Janeiro | 98.05 |
| 5 Rio Grande do Sul | 97.9 |
| 6 Mato Grosso do Sul | 97.78 |
| 7 Espírito Santo | 97.66 |
| 8 Roraima | 97.53 |
| 9 Minas Gerais | 97.41 |
| 10 Piauí | 97.33 |
| 11 Paraná | 97.3 |
| 12 Rio Grande do Norte | 97.19 |
| 13 Ceará | 97.04 |
| 14 Goiás | 96.99 |
| 15 Paraíba | 96.69 |
| 16 Amapá | 96.68 |
| 17 Tocantins | 96.68 |
| 18 Mato Grosso | 96.16 |
| 19 Sergipe | 96.08 |
| 20 Maranhão | 95.77 |
| 21 Bahia | 95.67 |
| 22 Pernambuco | 95.33 |
| 23 Amazonas | 95.32 |
| 24 Alagoas | 95.11 |
| 25 Pará | 94.6 |
| 26 Rondônia | 94.33 |
| 27 Acre | 92.77 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 07 TO 14 YEARS

| Federal Units | % |
|-----------------------|--------------|
| TOTAL BRAZIL | 40.21 |
| 1 Distrito Federal | 90.66 |
| 2 Espírito Santo | 76.33 |
| 3 São Paulo | 74.87 |
| 4 Minas Gerais | 64.15 |
| 5 Goiás | 55.03 |
| 6 Rio de Janeiro | 50.23 |
| 7 Amapá | 37.74 |
| 8 Rio Grande do Norte | 35.73 |
| 9 Mato Grosso do Sul | 30.46 |
| 10 Pernambuco | 26.96 |
| 11 Paraná | 24.54 |
| 12 Roraima | 24.5 |
| 13 Piauí | 23.69 |
| 14 Sergipe | 23.31 |
| 15 Maranhão | 22.33 |
| 16 Pará | 22.1 |
| 17 Bahia | 21.9 |
| 18 Paraíba | 19.48 |
| 19 Rio Grande do Sul | 18.62 |
| 20 Alagoas | 17.55 |
| 21 Rondônia | 14.78 |
| 22 Amazonas | 13.32 |
| 23 Tocantins | 13.01 |
| 24 Mato Grosso | 10.08 |
| 25 Ceará | 7.03 |
| 26 Acre | 5.58 |
| 27 Santa Catarina | 5.32 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 07 TO 14 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 1.09 |
| 1 Rondônia | 6.15 |
| 2 Tocantins | 3.23 |
| 3 Paraná | 2.27 |
| 4 Pernambuco | 2.14 |
| 5 Mato Grosso do Sul | 1.53 |
| 6 Rio de Janeiro | 1.46 |
| 7 Bahia | 1.45 |
| 8 Espírito Santo | 1.4 |
| 9 Mato Grosso | 1.38 |
| 10 Rio Grande do Sul | 1.19 |
| 11 Roraima | 1.12 |
| 12 Distrito Federal | 1.11 |
| 13 Rio Grande do Norte | 1.04 |
| 14 São Paulo | 0.99 |
| 15 Santa Catarina | 0.97 |
| 16 Sergipe | 0.87 |
| 17 Goiás | 0.87 |
| 18 Piauí | 0.85 |
| 19 Paraíba | 0.77 |
| 20 Minas Gerais | 0.58 |
| 21 Pará | 0.37 |
| 22 Ceará | 0.28 |
| 23 Maranhão | 0.21 |
| 24 Alagoas | 0.17 |
| 25 Amazonas | 0.05 |
| 26 Acre | 0.00 |
| 27 Amapá | 0.00 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 07 TO 14 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 97.07 |
| 1 Southeast | 98.07 |
| 2 South | 97.83 |
| 3 Center | 97.14 |
| 4 Northeast | 96.08 |
| 5 North | 94.84 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 07 TO 14 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 40.21 |
| 1 Southeast | 67.6 |
| 2 Center | 42.73 |
| 3 Northeast | 20.81 |
| 4 North | 19.03 |
| 5 South | 18.06 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 07 TO 14 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 1.09 |
| 1 South | 1.56 |
| 2 Center | 1.37 |
| 3 Northeast | 1.00 |
| 4 Southeast | 0.98 |
| 5 North | 0.89 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 97.07 |
| 1 São Paulo | 98.48 |
| 2 Distrito Federal | 98.45 |
| 3 Minas Gerais | 98.38 |
| 4 Paraná | 98.23 |
| 5 Rio de Janeiro | 97.96 |
| 6 Rio Grande do Sul | 97.66 |
| 7 Pernambuco | 97.28 |
| 8 Ceará | 96.96 |
| 9 Bahia | 96.63 |
| 10 Pará | 96.11 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 40.21 |
| 1 Distrito Federal | 90.66 |
| 2 São Paulo | 62.55 |
| 3 Minas Gerais | 58.38 |
| 4 Rio de Janeiro | 50.5 |
| 5 Bahia | 34.27 |
| 6 Pernambuco | 31.09 |
| 7 Pará | 29.65 |
| 8 Rio Grande do Sul | 18.9 |
| 9 Paraná | 16.28 |
| 10 Ceará | 11.59 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 1.09 |
| 1 Paraná | 2.55 |
| 2 Rio de Janeiro | 1.59 |
| 3 Bahia | 1.25 |
| 4 Distrito Federal | 1.11 |
| 5 Minas Gerais | 1.08 |
| 6 São Paulo | 1.07 |
| 7 Rio Grande do Sul | 0.79 |
| 8 Ceará | 0.63 |
| 9 Pernambuco | 0.62 |
| 10 Pará | 0.28 |

Source: CPS/FGV based on IBGE microdata.

1.8. Age Range: 00 to 06 years

a. Federal Units

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 06 YEARS

| Federal Units | % |
|-----------------------|--------------|
| TOTAL BRAZIL | 40.16 |
| 1 Rio Grande do Norte | 51.56 |
| 2 Rio de Janeiro | 48.34 |
| 3 Santa Catarina | 47.73 |
| 4 Ceará | 46.2 |
| 5 São Paulo | 44.84 |
| 6 Sergipe | 44.64 |
| 7 Espírito Santo | 42.16 |
| 8 Piauí | 41.68 |
| 9 Paraíba | 40.74 |
| 10 Minas Gerais | 40.72 |
| 11 Pernambuco | 39.85 |
| 12 Paraná | 39.61 |
| 13 Distrito Federal | 39.38 |
| 14 Bahia | 39.32 |
| 15 Maranhão | 37.67 |
| 16 Roraima | 36.28 |
| 17 Alagoas | 35.16 |
| 18 Pará | 32.87 |
| 19 Rio Grande do Sul | 32.34 |
| 20 Mato Grosso do Sul | 31.87 |
| 21 Goiás | 30.9 |
| 22 Mato Grosso | 30.02 |
| 23 Acre | 28.01 |
| 24 Tocantins | 27.65 |
| 25 Amapá | 26.76 |
| 26 Amazonas | 26.74 |
| 27 Rondônia | 23.71 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 06 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 13.79 |
| 1 Distrito Federal | 27.82 |
| 2 São Paulo | 25.5 |
| 3 Espírito Santo | 23.92 |
| 4 Rio de Janeiro | 20.98 |
| 5 Minas Gerais | 20.1 |
| 6 Paraná | 17.01 |
| 7 Goiás | 14.91 |
| 8 Santa Catarina | 14.07 |
| 9 Rio Grande do Sul | 12.53 |
| 10 Mato Grosso do Sul | 11.96 |
| 11 Rio Grande do Norte | 10.99 |
| 12 Paraíba | 7.92 |
| 13 Roraima | 7.57 |
| 14 Sergipe | 7.2 |
| 15 Mato Grosso | 7.2 |
| 16 Pernambuco | 6.01 |
| 17 Bahia | 5.6 |
| 18 Alagoas | 4.38 |
| 19 Maranhão | 3.99 |
| 20 Rondônia | 3.86 |
| 21 Piauí | 3.64 |
| 22 Pará | 3.63 |
| 23 Ceará | 2.22 |
| 24 Amazonas | 1.97 |
| 25 Amapá | 1.73 |
| 26 Tocantins | 1.48 |
| 27 Acre | 0.57 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 06 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 4.32 |
| 1 Paraná | 11.69 |
| 2 São Paulo | 8.2 |
| 3 Santa Catarina | 8.19 |
| 4 Mato Grosso do Sul | 7.36 |
| 5 Rio Grande do Sul | 7.16 |
| 6 Minas Gerais | 4.19 |
| 7 Espírito Santo | 3.99 |
| 8 Rio de Janeiro | 3.64 |
| 9 Distrito Federal | 3.44 |
| 10 Goiás | 3.39 |
| 11 Mato Grosso | 3.27 |
| 12 Paraíba | 3.15 |
| 13 Bahia | 2.00 |
| 14 Pernambuco | 1.43 |
| 15 Rondônia | 1.29 |
| 16 Rio Grande do Norte | 1.25 |
| 17 Ceará | 1.06 |
| 18 Sergipe | 1.05 |
| 19 Tocantins | 0.99 |
| 20 Maranhão | 0.78 |
| 21 Pará | 0.74 |
| 22 Roraima | 0.73 |
| 23 Amazonas | 0.34 |
| 24 Alagoas | 0.2 |
| 25 Piauí | 0.14 |
| 26 Acre | 0.00 |
| 27 Amapá | 0.00 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 06 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 40.16 |
| 1 Southeast | 44.27 |
| 2 Northeast | 41.08 |
| 3 South | 38.55 |
| 4 Center | 31.96 |
| 5 North | 29.98 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 06 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 13.79 |
| 1 Southeast | 23.24 |
| 2 South | 14.64 |
| 3 Center | 13.72 |
| 4 Northeast | 5.26 |
| 5 North | 3.09 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 06 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 4.32 |
| 1 South | 9.18 |
| 2 Southeast | 6.17 |
| 3 Center | 3.74 |
| 4 Northeast | 1.38 |
| 5 North | 0.61 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: SCHOOL ATTENDANCE
% ATTENDING SCHOOL OR DAYCARE
 00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 40.16 |
| 1 Pernambuco | 51.47 |
| 2 Ceará | 50.69 |
| 3 Bahia | 49.2 |
| 4 Rio de Janeiro | 46.35 |
| 5 São Paulo | 45.35 |
| 6 Minas Gerais | 44.64 |
| 7 Paraná | 42.37 |
| 8 Pará | 39.79 |
| 9 Distrito Federal | 39.38 |
| 10 Rio Grande do Sul | 31.39 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 4 HOURS PER DAY
 00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 13.79 |
| 1 Distrito Federal | 27.82 |
| 2 São Paulo | 24.48 |
| 3 Rio de Janeiro | 20.87 |
| 4 Minas Gerais | 20.21 |
| 5 Paraná | 19.45 |
| 6 Rio Grande do Sul | 15.37 |
| 7 Bahia | 10.46 |
| 8 Pernambuco | 9.59 |
| 9 Pará | 5.99 |
| 10 Ceará | 4.34 |

Source: CPS/FGV based on IBGE microdata.

RANKING: SCHOOL ATTENDANCE
% ATTENDING MORE THAN 6 HOURS PER DAY
 00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 4.32 |
| 1 Paraná | 14.47 |
| 2 São Paulo | 8.96 |
| 3 Rio Grande do Sul | 8.04 |
| 4 Minas Gerais | 4.15 |
| 5 Bahia | 4.14 |
| 6 Rio de Janeiro | 3.53 |
| 7 Distrito Federal | 3.44 |
| 8 Ceará | 2.8 |
| 9 Pará | 2.57 |
| 10 Pernambuco | 2.36 |

Source: CPS/FGV based on IBGE microdata.

2. Ranking: Reasons for Not Attending School

2.1 Age Range: 00 to 17 years

a. Federal Units

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 00 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 1.43 |
| 1 Minas Gerais | 2.27 |
| 2 Pernambuco | 2.21 |
| 3 Rio Grande do Sul | 2.16 |
| 4 Goiás | 1.8 |
| 5 Bahia | 1.79 |
| 6 Alagoas | 1.72 |
| 7 Rondônia | 1.59 |
| 8 Acre | 1.55 |
| 9 Sergipe | 1.46 |
| 10 Paraná | 1.44 |
| 11 Pará | 1.28 |
| 12 Rio Grande do Norte | 1.24 |
| 13 Paraíba | 1.19 |
| 14 Ceará | 1.15 |
| 15 Santa Catarina | 1.15 |
| 16 Mato Grosso | 1.12 |
| 17 Espírito Santo | 1.09 |
| 18 São Paulo | 1.08 |
| 19 Maranhão | 1.07 |
| 20 Rio de Janeiro | 1.02 |
| 21 Distrito Federal | 1.02 |
| 22 Mato Grosso do Sul | 1.00 |
| 23 Tocantins | 0.76 |
| 24 Piauí | 0.69 |
| 25 Amazonas | 0.66 |
| 26 Roraima | 0.49 |
| 27 Amapá | 0.48 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 00 TO 17 YEARS

| Federal Units | % |
|------------------------|------------|
| TOTAL BRAZIL | 4.9 |
| 1 Mato Grosso do Sul | 7.99 |
| 2 Roraima | 7.94 |
| 3 Acre | 7.84 |
| 4 Pernambuco | 7.13 |
| 5 Rio Grande do Sul | 6.86 |
| 6 Piauí | 6.79 |
| 7 Espírito Santo | 6.6 |
| 8 Tocantins | 6.24 |
| 9 Rondônia | 6.12 |
| 10 Amazonas | 5.88 |
| 11 Bahia | 5.76 |
| 12 Pará | 5.36 |
| 13 Maranhão | 5.31 |
| 14 Paraná | 5.25 |
| 15 Minas Gerais | 4.95 |
| 16 São Paulo | 4.42 |
| 17 Mato Grosso | 4.41 |
| 18 Goiás | 4.29 |
| 19 Rio Grande do Norte | 4.28 |
| 20 Distrito Federal | 4.1 |
| 21 Sergipe | 3.99 |
| 22 Alagoas | 3.9 |
| 23 Santa Catarina | 3.54 |
| 24 Amapá | 3.1 |
| 25 Ceará | 3.04 |
| 26 Rio de Janeiro | 2.71 |
| 27 Paraíba | 2.34 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 00 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 8.78 |
| 1 Minas Gerais | 12.39 |
| 2 Paraná | 12.28 |
| 3 Mato Grosso | 11.86 |
| 4 Rio Grande do Sul | 11.35 |
| 5 Mato Grosso do Sul | 11.35 |
| 6 Tocantins | 10.97 |
| 7 São Paulo | 9.9 |
| 8 Pará | 9.32 |
| 9 Espírito Santo | 8.7 |
| 10 Rondônia | 8.5 |
| 11 Santa Catarina | 8.3 |
| 12 Pernambuco | 7.95 |
| 13 Paraíba | 7.65 |
| 14 Bahia | 7.56 |
| 15 Distrito Federal | 7.49 |
| 16 Rio de Janeiro | 7.43 |
| 17 Goiás | 7.19 |
| 18 Alagoas | 7.14 |
| 19 Rio Grande do Norte | 6.77 |
| 20 Ceará | 6.71 |
| 21 Piauí | 4.9 |
| 22 Sergipe | 4.67 |
| 23 Maranhão | 4.21 |
| 24 Acre | 2.98 |
| 25 Roraima | 2.27 |
| 26 Amapá | 2.11 |
| 27 Amazonas | 2.1 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 00 TO 17 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 1.43 |
| 1 South | 1.66 |
| 2 Northeast | 1.51 |
| 3 Southeast | 1.38 |
| 4 Center | 1.3 |
| 5 North | 1.11 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 00 TO 17 YEARS

| Regions | % |
|---------------------|------------|
| TOTAL BRAZIL | 4.9 |
| 1 North | 5.67 |
| 2 South | 5.5 |
| 3 Center | 5.08 |
| 4 Northeast | 5.04 |
| 5 Southeast | 4.36 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 00 TO 17 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 8.78 |
| 1 South | 11.06 |
| 2 Southeast | 10.05 |
| 3 Center | 9.23 |
| 4 Northeast | 6.72 |
| 5 North | 6.54 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 00 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 1.43 |
| 1 Paraná | 5.46 |
| 2 Rio Grande do Sul | 4.61 |
| 3 Pará | 3.28 |
| 4 Pernambuco | 2.96 |
| 5 São Paulo | 2.77 |
| 6 Bahia | 2.59 |
| 7 Rio de Janeiro | 2.48 |
| 8 Minas Gerais | 2.3 |
| 9 Ceará | 1.55 |
| 10 Distrito Federal | 1.05 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 00 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|------------|
| TOTAL BRAZIL | 4.9 |
| 1 Pará | 2.15 |
| 2 Rio Grande do Sul | 1.88 |
| 3 Distrito Federal | 1.8 |
| 4 Pernambuco | 1.63 |
| 5 Rio de Janeiro | 1.36 |
| 6 São Paulo | 1.34 |
| 7 Minas Gerais | 1.29 |
| 8 Bahia | 1.12 |
| 9 Ceará | 0.77 |
| 10 Paraná | 0.5 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 00 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 8.78 |
| 1 Pernambuco | 8.97 |
| 2 Rio Grande do Sul | 7.64 |
| 3 Distrito Federal | 6.92 |
| 4 Ceará | 6.48 |
| 5 Bahia | 5.74 |
| 6 Pará | 5.58 |
| 7 Minas Gerais | 5.45 |
| 8 Paraná | 4.96 |
| 9 São Paulo | 4.2 |
| 10 Rio de Janeiro | 4.09 |

Source: CPS/FGV based on IBGE microdata.

2.2 Age Range: 15 to 17 years

a. Federal Units

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 15 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 4.11 |
| 1 Acre | 7.81 |
| 2 Paraná | 6.31 |
| 3 Pernambuco | 5.9 |
| 4 Santa Catarina | 5.85 |
| 5 Mato Grosso | 5.37 |
| 6 Sergipe | 5.11 |
| 7 Goiás | 5.11 |
| 8 Minas Gerais | 5.1 |
| 9 Mato Grosso do Sul | 5.02 |
| 10 Espírito Santo | 4.87 |
| 11 Rio Grande do Sul | 4.71 |
| 12 Rio Grande do Sul | 4.36 |
| 13 Alagoas | 4.34 |
| 14 Bahia | 4.13 |
| 15 Rio Grande do Norte | 3.89 |
| 16 Pará | 3.87 |
| 17 Amazonas | 3.59 |
| 18 Paraíba | 3.5 |
| 19 São Paulo | 3.03 |
| 20 Piauí | 3.00 |
| 21 Rondônia | 2.79 |
| 22 Rio de Janeiro | 2.78 |
| 23 Maranhão | 2.77 |
| 24 Tocantins | 2.11 |
| 25 Roraima | 1.2 |
| 26 Distrito Federal | 1.05 |
| 27 Amapá | 0.97 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 15 TO 17 YEARS

| Federal Units | % |
|-----------------------|-------------|
| TOTAL BRAZIL | 2.01 |
| 1 Acre | 4.99 |
| 2 Maranhão | 4.06 |
| 3 Pará | 3.17 |
| 4 Roraima | 3.1 |
| 5 Rio Grande do Sul | 3.09 |
| 6 Rio Grande do Norte | 2.92 |
| 7 Piauí | 2.72 |
| 8 Rondônia | 2.63 |
| 9 Goiás | 2.55 |
| 10 Amapá | 2.44 |
| 11 Mato Grosso do Sul | 2.4 |
| 12 Espírito Santo | 2.31 |
| 13 Bahia | 2.28 |
| 14 Pernambuco | 2.22 |
| 15 Mato Grosso | 2.19 |
| 16 Minas Gerais | 2.11 |
| 17 Alagoas | 2.05 |
| 18 Distrito Federal | 1.8 |
| 19 Sergipe | 1.61 |
| 20 Tocantins | 1.59 |
| 21 Ceará | 1.5 |
| 22 Paraná | 1.48 |
| 23 Santa Catarina | 1.42 |
| 24 Paraíba | 1.36 |
| 25 São Paulo | 1.32 |
| 26 Rio de Janeiro | 1.23 |
| 27 Amazonas | 1.18 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 15 TO 17 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 8.15 |
| 1 Rondônia | 13.76 |
| 2 Piauí | 12.53 |
| 3 Pernambuco | 12.53 |
| 4 Mato Grosso | 11.73 |
| 5 Mato Grosso do Sul | 10.92 |
| 6 Ceará | 10.45 |
| 7 Pará | 10.31 |
| 8 Tocantins | 10.29 |
| 9 Alagoas | 9.81 |
| 10 Espírito Santo | 9.74 |
| 11 Rio Grande do Norte | 9.73 |
| 12 Paraíba | 9.73 |
| 13 Paraná | 9.28 |
| 14 Minas Gerais | 9.25 |
| 15 Maranhão | 9.22 |
| 16 Bahia | 8.88 |
| 17 Acre | 7.41 |
| 18 Roraima | 7.35 |
| 19 Distrito Federal | 6.92 |
| 20 Rio Grande do Sul | 6.75 |
| 21 Goiás | 6.7 |
| 22 Amazonas | 6.22 |
| 23 São Paulo | 5.72 |
| 24 Sergipe | 5.64 |
| 25 Amapá | 5.16 |
| 26 Santa Catarina | 4.96 |
| 27 Rio de Janeiro | 4.49 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 15 TO 17 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 4.11 |
| 1 South | 5.6 |
| 2 Center | 4.2 |
| 3 Northeast | 4.19 |
| 4 North | 3.65 |
| 5 Southeast | 3.61 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 15 TO 17 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 2.01 |
| 1 North | 2.68 |
| 2 Northeast | 2.33 |
| 3 Center | 2.24 |
| 4 South | 2.08 |
| 5 Southeast | 1.55 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 15 TO 17 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 8.15 |
| 1 Northeast | 10.01 |
| 2 North | 9.27 |
| 3 Center | 8.77 |
| 4 South | 7.35 |
| 5 Southeast | 6.61 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1) 15 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 4.11 |
| 1 Paraná | 5.46 |
| 2 Rio Grande do Sul | 4.61 |
| 3 Pará | 3.28 |
| 4 Pernambuco | 2.96 |
| 5 São Paulo | 2.77 |
| 6 Bahia | 2.59 |
| 7 Rio de Janeiro | 2.48 |
| 8 Minas Gerais | 2.3 |
| 9 Ceará | 1.55 |
| 10 Distrito Federal | 1.05 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY) 15 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 2.01 |
| 1 Pará | 2.15 |
| 2 Rio Grande do Sul | 1.88 |
| 3 Distrito Federal | 1.8 |
| 4 Pernambuco | 1.63 |
| 5 Rio de Janeiro | 1.36 |
| 6 São Paulo | 1.34 |
| 7 Minas Gerais | 1.29 |
| 8 Bahia | 1.12 |
| 9 Ceará | 0.77 |
| 10 Paraná | 0.5 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2) 15 TO 17 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 8.15 |
| 1 Pernambuco | 8.97 |
| 2 Rio Grande do Sul | 7.64 |
| 3 Distrito Federal | 6.92 |
| 4 Ceará | 6.48 |
| 5 Bahia | 5.74 |
| 6 Pará | 5.58 |
| 7 Minas Gerais | 5.45 |
| 8 Paraná | 4.96 |
| 9 São Paulo | 4.2 |
| 10 Rio de Janeiro | 4.09 |

Source: CPS/FGV based on IBGE microdata.

2.3 Age Range: 07 to 14 years

a. Federal Units

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

07 TO 14 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 0.27 |
| 1 Alagoas | 0.7 |
| 2 Acre | 0.67 |
| 3 Maranhão | 0.64 |
| 4 Pernambuco | 0.63 |
| 5 Sergipe | 0.54 |
| 6 Bahia | 0.45 |
| 7 Pará | 0.36 |
| 8 Goiás | 0.33 |
| 9 Paraíba | 0.31 |
| 10 Ceará | 0.27 |
| 11 Paraná | 0.27 |
| 12 Rio Grande do Sul | 0.27 |
| 13 Rondônia | 0.26 |
| 14 Minas Gerais | 0.22 |
| 15 Mato Grosso | 0.22 |
| 16 Amazonas | 0.2 |
| 17 Amapá | 0.19 |
| 18 Espírito Santo | 0.19 |
| 19 São Paulo | 0.16 |
| 20 Tocantins | 0.1 |
| 21 Rio Grande do Norte | 0.1 |
| 22 Rio de Janeiro | 0.07 |
| 23 Santa Catarina | 0.07 |
| 24 Roraima | 0.00 |
| 25 Piauí | 0.00 |
| 26 Mato Grosso do Sul | 0.00 |
| 27 Distrito Federal | 0.00 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

07 TO 14 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 1.08 |
| 1 Acre | 3.07 |
| 2 Pará | 2.19 |
| 3 Amazonas | 1.94 |
| 4 Rondônia | 1.84 |
| 5 Sergipe | 1.74 |
| 6 Bahia | 1.48 |
| 7 Amapá | 1.45 |
| 8 Alagoas | 1.4 |
| 9 Piauí | 1.39 |
| 10 Pernambuco | 1.39 |
| 11 Rio Grande do Norte | 1.35 |
| 12 Mato Grosso | 1.31 |
| 13 Maranhão | 1.29 |
| 14 Tocantins | 1.23 |
| 15 Mato Grosso do Sul | 1.19 |
| 16 Roraima | 1.12 |
| 17 Rio de Janeiro | 1.09 |
| 18 Minas Gerais | 1.02 |
| 19 Goiás | 1.00 |
| 20 Ceará | 0.97 |
| 21 Espírito Santo | 0.94 |
| 22 Paraná | 0.88 |
| 23 Rio Grande do Sul | 0.87 |
| 24 Paraíba | 0.85 |
| 25 São Paulo | 0.61 |
| 26 Distrito Federal | 0.49 |
| 27 Santa Catarina | 0.14 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

07 TO 14 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 0.92 |
| 1 Rondônia | 1.94 |
| 2 Pernambuco | 1.79 |
| 3 Paraíba | 1.54 |
| 4 Bahia | 1.54 |
| 5 Pará | 1.47 |
| 6 Alagoas | 1.31 |
| 7 Mato Grosso | 1.31 |
| 8 Acre | 1.26 |
| 9 Amazonas | 1.17 |
| 10 Piauí | 1.17 |
| 11 Ceará | 1.14 |
| 12 Maranhão | 1.07 |
| 13 Tocantins | 1.05 |
| 14 Rio Grande do Norte | 1.04 |
| 15 Paraná | 1.03 |
| 16 Espírito Santo | 0.94 |
| 17 Goiás | 0.92 |
| 18 Minas Gerais | 0.9 |
| 19 Sergipe | 0.76 |
| 20 Amapá | 0.73 |
| 21 Santa Catarina | 0.69 |
| 22 Distrito Federal | 0.68 |
| 23 Rio Grande do Sul | 0.67 |
| 24 Mato Grosso do Sul | 0.51 |
| 25 Roraima | 0.45 |
| 26 Rio de Janeiro | 0.41 |
| 27 São Paulo | 0.29 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

07 TO 14 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 0.27 |
| 1 Northeast | 0.44 |
| 2 North | 0.31 |
| 3 South | 0.23 |
| 4 Center | 0.18 |
| 5 Southeast | 0.16 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

07 TO 14 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 1.08 |
| 1 North | 2.07 |
| 2 Northeast | 1.31 |
| 3 Center | 1.04 |
| 4 Southeast | 0.82 |
| 5 South | 0.72 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

07 TO 14 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 0.92 |
| 1 North | 1.37 |
| 2 Northeast | 1.36 |
| 3 Center | 0.91 |
| 4 South | 0.82 |
| 5 Southeast | 0.5 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 0.27 |
| 1 Bahia | 0.46 |
| 2 São Paulo | 0.31 |
| 3 Pará | 0.28 |
| 4 Paraná | 0.26 |
| 5 Pernambuco | 0.25 |
| 6 Ceará | 0.21 |
| 7 Rio Grande do Sul | 0.11 |
| 8 Minas Gerais | 0.00 |
| 9 Rio de Janeiro | 0.00 |
| 10 Distrito Federal | 0.00 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 1.08 |
| 1 Pará | 2.14 |
| 2 Ceará | 1.39 |
| 3 Rio de Janeiro | 1.27 |
| 4 Rio Grande do Sul | 1.21 |
| 5 Pernambuco | 0.96 |
| 6 Bahia | 0.88 |
| 7 Paraná | 0.62 |
| 8 Minas Gerais | 0.54 |
| 9 Distrito Federal | 0.49 |
| 10 São Paulo | 0.45 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

07 TO 14 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 0.92 |
| 1 Bahia | 0.97 |
| 2 Minas Gerais | 0.72 |
| 3 Pernambuco | 0.71 |
| 4 Distrito Federal | 0.68 |
| 5 Ceará | 0.67 |
| 6 Rio Grande do Sul | 0.57 |
| 7 Paraná | 0.44 |
| 8 Rio de Janeiro | 0.41 |
| 9 São Paulo | 0.31 |
| 10 Pará | 0.28 |

Source: CPS/FGV based on IBGE microdata.

2.4 Age Range: 00 to 06 years

a. Federal Units

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

00 TO 06 YEARS

| Federal Units | % |
|------------------------|-------------|
| TOTAL BRAZIL | 1.57 |
| 1 Minas Gerais | 3.54 |
| 2 Rio Grande do Sul | 3.48 |
| 3 Rondônia | 2.71 |
| 4 Pernambuco | 2.4 |
| 5 Bahia | 2.3 |
| 6 Distrito Federal | 2.17 |
| 7 Goiás | 2.01 |
| 8 Alagoas | 1.73 |
| 9 Rio de Janeiro | 1.43 |
| 10 Pará | 1.25 |
| 11 Rio Grande do Norte | 1.25 |
| 12 São Paulo | 1.24 |
| 13 Paraíba | 1.14 |
| 14 Tocantins | 0.99 |
| 15 Sergipe | 0.79 |
| 16 Maranhão | 0.78 |
| 17 Roraima | 0.73 |
| 18 Amapá | 0.59 |
| 19 Ceará | 0.59 |
| 20 Paraná | 0.5 |
| 21 Espírito Santo | 0.48 |
| 22 Piauí | 0.42 |
| 23 Acre | 0.29 |
| 24 Mato Grosso | 0.28 |
| 25 Mato Grosso do Sul | 0.23 |
| 26 Santa Catarina | 0.1 |
| 27 Amazonas | 0.06 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

00 TO 06 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 11.17 |
| 1 Mato Grosso do Sul | 20.14 |
| 2 Roraima | 17.32 |
| 3 Rio Grande do Sul | 17.16 |
| 4 Pernambuco | 16.35 |
| 5 Piauí | 15.95 |
| 6 Espírito Santo | 15.94 |
| 7 Tocantins | 14.94 |
| 8 Acre | 14.6 |
| 9 Rondônia | 13.41 |
| 10 Paraná | 13.3 |
| 11 Bahia | 12.76 |
| 12 Amazonas | 12.06 |
| 13 Minas Gerais | 11.7 |
| 14 São Paulo | 10.82 |
| 15 Maranhão | 10.76 |
| 16 Pará | 9.93 |
| 17 Santa Catarina | 9.45 |
| 18 Mato Grosso | 9.45 |
| 19 Distrito Federal | 9.25 |
| 20 Goiás | 9.2 |
| 21 Rio Grande do Norte | 8.49 |
| 22 Sergipe | 7.85 |
| 23 Alagoas | 7.64 |
| 24 Ceará | 6.54 |
| 25 Rio de Janeiro | 5.61 |
| 26 Amapá | 5.04 |
| 27 Paraíba | 4.68 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

00 TO 06 YEARS

| Federal Units | % |
|------------------------|--------------|
| TOTAL BRAZIL | 19.09 |
| 1 Paraná | 29.48 |
| 2 Minas Gerais | 29.42 |
| 3 Rio Grande do Sul | 28.63 |
| 4 Mato Grosso do Sul | 26.24 |
| 5 Mato Grosso | 25.54 |
| 6 Tocantins | 24.2 |
| 7 São Paulo | 24.18 |
| 8 Santa Catarina | 20.73 |
| 9 Rio de Janeiro | 18.3 |
| 10 Espírito Santo | 18.24 |
| 11 Pará | 17.97 |
| 12 Distrito Federal | 15.49 |
| 13 Goiás | 15.17 |
| 14 Bahia | 14.36 |
| 15 Rondônia | 14.32 |
| 16 Paraíba | 14.22 |
| 17 Pernambuco | 13.26 |
| 18 Alagoas | 12.74 |
| 19 Rio Grande do Norte | 12.11 |
| 20 Ceará | 11.96 |
| 21 Sergipe | 8.9 |
| 22 Piauí | 5.87 |
| 23 Maranhão | 5.64 |
| 24 Acre | 3.41 |
| 25 Amapá | 2.41 |
| 26 Roraima | 2.19 |
| 27 Amazonas | 1.58 |

Source: CPS/FGV based on IBGE microdata.

b. Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

00 TO 06 YEARS

| Regions | % |
|---------------------|-------------|
| TOTAL BRAZIL | 1.57 |
| Rio Grande do Sul | |
| 1 Southeast | 1.83 |
| 2 South | 1.57 |
| 3 Northeast | 1.51 |
| 4 Center | 1.32 |
| 5 North | 0.98 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

00 TO 06 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 11.17 |
| 1 North | 11.03 |
| 2 Northeast | 10.98 |
| 3 Southeast | 10.37 |
| 4 South | 13.97 |
| 5 Center | 11.5 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

00 TO 06 YEARS

| Regions | % |
|---------------------|--------------|
| TOTAL BRAZIL | 19.09 |
| 1 South | 27.25 |
| 2 Southeast | 24.2 |
| 3 Center | 19.89 |
| 4 Northeast | 11.72 |
| 5 North | 11.37 |

Source: CPS/FGV based on IBGE microdata.

c. Metropolitan Regions

RANKING: REASONS FOR NOT ATTENDING SCHOOL INCOME AND LABOR (DEMAND 1)

00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|-------------|
| TOTAL BRAZIL | 1.57 |
| 1 Rio Grande do Sul | 6.77 |
| 2 Minas Gerais | 5.73 |
| 3 Bahia | 4.53 |
| 4 Pará | 3.2 |
| 5 Distrito Federal | 2.17 |
| 6 Pernambuco | 2.00 |
| 7 São Paulo | 1.93 |
| 8 Rio de Janeiro | 1.67 |
| 9 Paraná | 0.93 |
| 10 Ceará | 0.55 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL ACCESS (SUPPLY)

00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 11.17 |
| 1 Paraná | 15.28 |
| 2 Rio Grande do Sul | 14.21 |
| 3 São Paulo | 12.9 |
| 4 Pará | 11.8 |
| 5 Distrito Federal | 9.25 |
| 6 Minas Gerais | 6.49 |
| 7 Ceará | 5.98 |
| 8 Rio de Janeiro | 5.38 |
| 9 Bahia | 4.42 |
| 10 Pernambuco | 4.1 |

Source: CPS/FGV based on IBGE microdata.

RANKING: REASONS FOR NOT ATTENDING SCHOOL DOES NOT WANT (DEMAND 2)

00 TO 06 YEARS

| Metropolitan Regions | % |
|----------------------|--------------|
| TOTAL BRAZIL | 19.09 |
| 1 Rio Grande do Sul | 33.57 |
| 2 Minas Gerais | 30.69 |
| 3 Paraná | 28.71 |
| 4 São Paulo | 20.83 |
| 5 Rio de Janeiro | 17.11 |
| 6 Pará | 15.95 |
| 7 Distrito Federal | 15.49 |
| 8 Bahia | 13.92 |
| 9 Pernambuco | 12.92 |
| 10 Ceará | 9.38 |

Source: CPS/FGV based on IBGE microdata.