

****Education Policies - Marcelo Neri**

The “pobrem” of Education

The Educational Development Plan (PDE), whose name remembers the National Development Plan (PND) from the times of the military regime, which had nothing to do with education – our need to accelerate the education in Brazil was and still is alarming. An article of Naércio Menezes, showed the low level of learning in private schools in Brazil compared to other not so flattering experiences. Such comparison reminded me of David Lam, a demographer who, by contrasting the levels of education in Brazil to that of South Africa, inadvertently discovered that white Brazilians had one year of education less than the South-African black. The situation in the Brazilian school, be it in its quality, be it in its quantity, without mentioning equity, lags a century behind. PDE places basic education at the top of national priorities, in a moment when various initiatives such as the All for Education Commitment point in the same direction. I don't discuss here the ways proposed by the plan to get there – even more so because the plan's philosophy does not define fixed routes, but reinforces navigation instruments and the incentive structures to get there. Overall, the plan has little flaws and an adequate philosophy, emphasizing childhood, information and incentives as elements to fight our educational inefficiencies and inequities.

I discuss here only the direction of basic education: Initially, we analyze to what extent each educational level reaches the poorest people. For instance, how the lowest income groups benefit from public education or public university. The next step is to precise the return to educational action as perceived by the citizen, poor, middle-class or elite. We show the public and private costs for each educational level, besides how they affect the insertion into the labor market. The equity ranking shows that lower school levels are more pro-poor than the higher ones. For each Real spent on average with each Brazilian post-graduate student, zero reaches the poor, while in the other extreme of the educational spectrum, 1.9 reais reach the poorest through adult literacy classes. From the 5th grade (11 years old) to the 9th grade – the so called fundamental school - (15 years old), 1.57 reais reach the poor for each Real spent on each Brazilian student, while 63 cents reach the poor in the high school and only 7 cents in the university. This means that the fundamental school has 22.5 times the capacity to reach the poor than graduate schools. As expected, in all levels of learning, public provision of education is more pro poor than the private one. In particular, in private high school, 9 cents reach the poor for each real per Brazilian student, closely to the public university index; which is consistent with the Idea that private school students are approved in public universities. Emphasis on fundamental education is much more pro poor than the federal concern with the public university. In order to make a decision to continue in school to attain higher educational levels, the individual's criterion would be whether the increase in earnings from work before retiring will overcome the direct disbursement costs and the opportunity costs of studying instead of working. In the case of public managers, they have to consider the external benefits from a higher educational level, as well as the costs related to public expenditure. According to the Ministry of Education (MEC), the annual public expenditure for each student enrolled in the fundamental school was R\$ 1,359 in 2004; and for each student enrolled in the high school it was R\$ 399. The yearly expenditure per student enrolled in university was around ten times as high: R\$ 10,139. These numbers constitute a relative reference to the different costs observed in public education. Obviously, educational policy should not be guided only by equity or costs. It should also assess its capacity to change the life of a person receiving the educational benefit. Otherwise, a poor school with low quality teachers and for poor people could be

deemed as destiny, which is not the case. We now look at the premium the individual receives when leaving school, through the analysis of the impact of learning on the person's capacity to get a job and earn a salary. Educational hierarchy reflects itself in the labor market. Example: from R\$ 322 salary of illiterate up to R\$ 1,682 of post-grads. Similarly, the rate of occupation between the extremes of the educational spectrum goes from 60.7% for those with less than one year of schooling, to 81.5% of those who have been to post-graduate school. Even when comparing people with the same sociodemographic features – like sex, age, location, etc. – a graduate's salary is 540% higher than the illiterate's; and the former change of occupation is 308% higher. The regularity with which higher levels of schooling present labor inclusion is impressive. Educational hierarchy mirrors itself in the labor ranking. The part of the educational premium to be owned privately should be financed more by credit and less by donation. Obviously, in the calculation it is important to go beyond the pragmatism of private income generation, since more schooling has impact on other elements that produce externalities, such as economic growth, fertility, crime rates, among others.

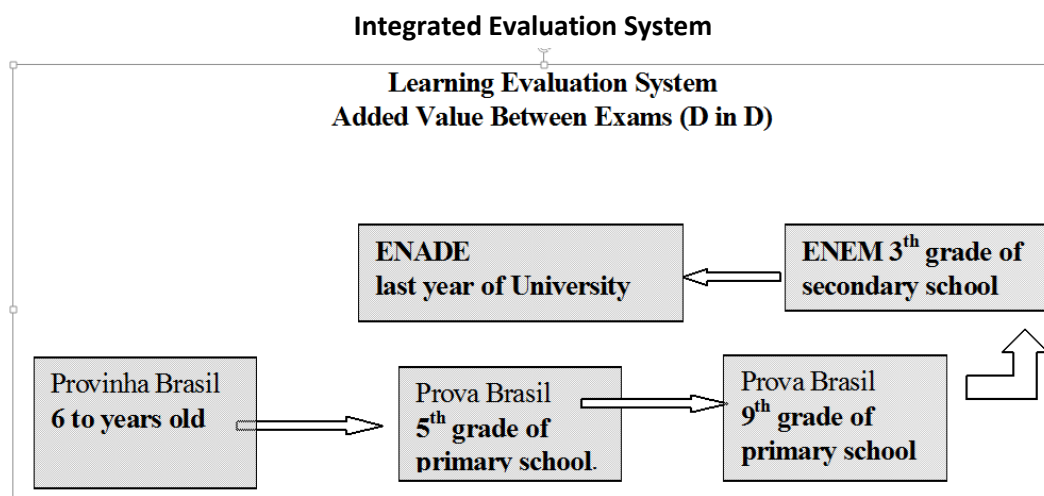
Educational Challenges and Differences

The creation of an education target system is a historical reference not only in the education areas, but also in other public policy sectors. The health sector has announced its intention to pursue performance targets in public hospitals, for instance. I am supportive of the Ministry of Education's target system. I have advocated the adoption of social targets since 1999. I think that the system represents an unprecedented opportunity, and maybe the only one in decades, to recover part of our educational lag. The perfect evaluation system is an utopia, a type of Holy Grail, which is never found but whose search leads to improvements. The target system is based on a indicator of educational quality, the Basic Education Development Index (IDEB). The indicator is based on the repetition and drop-out rates as well as the results from Prova Brasil (national exams) in each city and town in the country, which will inform the decision on the federal resource transfers to mayors in the area of education. The government establish targets and should condition the allocation of resources to the adoption of specific measures by the municipal authorities and the improvement of each municipal performance in the IDEB. Adhesion to the program is optional. Municipalities who adhere to the program will have to implement some actions, under the direct guidance of the government's experts. This action in practice corrects the current model of educational expenditure according to the 1988 Constitution by considering school performance in the distribution of public resources. In my view, the rationale should focus less on determining fixed educational paths to each municipal authority within the PDE – even because there are formidable logistic problems in this action – and more on providing the more general motivation, targets and navigation instruments to all mayors. The challenge is making the electoral market more sensitive to the cause of quality education. The active participation by the civil society, international organizations like UNESCO and governments should be in tune with ordinary challenges. Core actors in each one of these categories have agreed on the All for Education agreement, suggesting a unique moment for the coordination and acceleration of educational efforts. The education features in the conversations of young people, teachers and parents in the light of data from each school. Only when the true main stakeholders debate the problems of their schools the battle against the worst quality education in Brazil will begin to be won. The simple and intuitive system of educational targets that rates schools from 1 to 10, like IDEB, holds the promise of motivating all agents involved from the young pupil and his/her parents, to mayors and governors. Performance measurement indicators, however, should be manipulation-proof, which is not an easy task in a country well known for its loopholes. IDEB is concerned with the dilemmas in its

conception: if the school artificially accelerates the progression of its students to increase their IDEB, it will drop its proficiency, as Prova Brasil will attest. This trade off between speed and quality has to be well balanced in order to maximize the IDEB. This may seem like an obsession and it may be so, but the index should point in the right direction without throwing away valuable opportunities. It may not be a coincidence that some managers have focused on the acceleration of school flows right after the PDE was announced. This may be a first sign of the IDEB's capacity to change public managers' actions. In order to ensure that we reach our aim of an education of quality in its multiple dimensions, the education agenda cannot be under the influence of illegitimate interests. A first difficult but feasible issue to be addressed is the total inclusion of those out of school into the IDEB as a way to hold accountable the public schools networks for these children and attributing the fair weight of such issue in the index. This should be done by including the stock of students who were and remain out of school according to household surveys. Otherwise, there could have been an incentive to mayors and governors to keep a marginal population out of the system in order to keep their IDEB. In the USA, families are usually inquired when their children are found out of school, which consists of a relevant social control. In this aspect, the Census population count in the smallest Brazilian towns combined to the projections based on the IBGE Census should also be included in the general index. Another suggestion is consider changes in enrolments vis a vis the whole population. It would include transfers between schools and system in the school flow index of the IDEB. In other words, people move from one school to another. This change is possible to be implemented using the School Census, which access individual school records through time and across schools. For example, in some schools a tougher approval criterion is adopted in the second grade of secondary school in order to single out the worst students so that the school can rate well in university entry scores. A student who has studied in a school and the remainder in another should have his knowledge added value divided pro rata by his time in each school. This Salomon-like logic that shares the performance according to the study period gives credit to the lawful school, that which has taught and encouraged the students. It is fundamental to close spaces where results are cooked. Similarly, it is common for courses preparing students for university entry to hire the best students in initial grades to have a good performance in the university entry. I do not forget my most brilliant college friend wearing the t-shirt from a high profile university prep course, having access to a driver and a scholarship on the grounds of his potential to produce grades fiercely shown in the newspapers. I do not have anything against this advertisement as long as it is not deceiving. The right sign is fundamental for the efficient working of the educational activity, be it private or public. In this aspect, the IDEB means an enormous advance in terms of transparency. The basic principles of a new system should be established *a priori*, before its implementation in order to avoid asymmetric complaints on the part of losers that may be affected by the inevitable adjustments that a 10-year-old educational target may undergo. It is necessary to choose a general philosophy of evaluation and result rewards, applying it to each level of teaching and integrate it into a single system. Following this line of argument, why not apply IDEB rationality to ENEM and ENADE? Tests that assess students from secondary school and universities, respectively. Firstly, IDEB's grade will be made individual for each student with the changes brought about by the Ministry of Education in the Prova Brasil and the School Census, just like in ENEM and ENADE. In the opposite direction, we should use the IDEB rationality for correcting the grades by evasion flows, repetition and transfers in the evaluation of the highest school years. Finally, the two Prova Brasil applied to the 4th and 8th grades assess the students' universe, in contrast with the random sample adopted by the ENADE and the volunteer option of the ENEM. In ENADE's case, the difference between a student's grade in the last year of high school and the first year at university is assessed. It

is not a pure addition of value because the first year grade is contaminated in a double sense: by the knowledge acquired in the course's first year and by the capacity of the university to alter the results. For instance, the school may throw a party to the freshmen on the eve of the first ENADE exam. In this sense, it would be better to define the entry grade before the entry in the university, away from the school that is interested in pushing the grade down to underestimate the student's initial stock of knowledge. But why not apply ENEM to all students and replace it by the first ENADE exam? Another ENEM for all advantage is to improve the information content available for labor market, that is, what will create incentives to its universal coverage in a virtuous circle. As the individual exam, it should allow students to do it again in order to eliminate the risks from a bad exam day. This grade does not have to be included in the school's index, because the law of large numbers smooths out these idiosyncratic variations. Some may legitimately question the exam's style and content, but there is nothing stopping organizations from creating other seals of educational quality with other contents and evaluation styles, as with English proficiency exams, such as Cambridge, etc. IDEB has taken the first step in this direction and should be followed by others. An ENEM for all can also be useful for other public policies. Granting an extra reward to those finishing high school, discussed within the *Bolsa Família* grant, may benefit from an external evaluation, thus diminishing the potential tensions between teachers and students as in a conditionality system. MIT's Poverty Lab studies show that teachers tend to bias their evaluation criteria when there are conditionalities and rewards at stake. The core points here are the virtues in contracting this conditionality evaluation, taking the tension out from the teacher-student relationship, while also increasing the evaluation's accuracy. Before being called an elitist for advocating the poor's right to receive resources attached to their grades, I also defend here the difference in grades observed between the start and end of the school cycle, which is a proxy of the knowledge added by the school and whose progress possibility is pro poor by nature. Schools must be assessed for their capacity to add value to the students' knowledge, because this is their most important function. In other words, we are talking about learning movies and not knowledge snapshots. One of the few instances where it is advantageous to be little educated is in the capacity to learn. Learning is measured by the comparison between the results attained through time, with adjustments to get comparable flows. If the learning evaluation system is based on added value and its turning into greater financial flows to units, public and private resources in society will tend to migrate to the best returns measured according to educational displacements. Another important point we borrow from the regulation literature is that the distribution of results must be based on the comparison of performance among units, the so called yardstick competition. Relative performance measures are information and aggregate shock-proof as will certainly occur until the date for the IDEB's target improvement in 2021, just one year before Brazil's independency bicentennial anniversary. According to MEC, the goal is to take the Brazilian IDEB to the level of OECD countries, which currently coincide with the level of Brazilian private schools. That is, the challenge is to reduce the lag of the Brazilian system as a whole to less than 15 years. If a target system wants to distribute resources *a priori*, it should combine the motivation and simplicity of an *a priori* system as announced, with an *a posteriori* evaluation system that effectively measures the results. In short, evaluating schools for the effect knowledge value added and compare it to the group of students is equivalent, in truth, to the standard solution of evaluation empirical analysis of difference in difference, which we propose here. The necessary condition for such system is that the evaluation of all levels of learning converge to methodologies with TRI – Answer to Item Theory that allows comparing grades and their universal and individual characteristics such as those used in SAT, GRE and GMAT exams done in the US. I speak of an integrated system that would go beyond the recently announced *Provinha Brasil* (

for 6 to 8 year-olds). The two *Prova Brasil* (for the 4th and 8th grades), the ENEM (for the last year of high school) and ENADE share the same properties so that we can compare apples and oranges in the added value measure obtained at each school level. An integrated system for the Evaluation of Learning Relative Value added in between exams (D in D) should be universal, individualized and comparable. Evaluating the relative difference in learning indicates the way for diversity and intra-school cooperation. If the issue is to measure the learning capacity offered by schools, they will tend to mix students from different levels of knowledge in their groups. Certainly more than in a system based on final pictures of knowledge. All we want in a country with our degree of diversity and educational inequality is to mix students from different family backgrounds within educational institutions. It would turn our school into a space for the joint learning in the interest of all, and not into a space of race or class hatred. With a view to improving the global performance of our schools, students may engage in a cooperative game in each school with the following motto: each one for the education of all and all for the education of one.



Motives for school evasion

Amongst the reasons why people are not in school, 85.6% are related to the lack of demand against 12.9% of problems with the supply of education. The lack of intrinsic interest represents 50.5% of evasion. The need to increase income represents 35.1% of the evasion. School evasion is worse when the aggregate work opportunity is combined with the individual income deprivation. Countries and parents who look after their children and teenagers enable their own future. It is crucial to educate the population about the importance of education. Even if we win all the battles to adopt the best educational practices, we lose the war in case these practices are not supported by the students and their parents actions. They are the actors who, at last, will ensure the success of public policies. Here, we seek to understand the reasons directly reported by people for not being in school. It is not enough to perceive the good aspects of the educational policies, such as equity and efficiency. It is also necessary to understand how this information reaches people and how they transform this information into decisions. PNAD's education supplements show the reasons why those kids aged up to 17 years old are out of school, while also providing the focus and design for policies based on the needs and perceptions of those who make the decision to go, or not, to school. Heuristically, we hope to provide these perceptions and motivations of the ordinary citizen, and also to managers and analysts alike. The social rate of return to education implies the opportunity costs of a teenager studying instead of working, as well as wage premiums and direct private or public costs of education.

The literature calculates rates of return of 15% per year of study, which is at a much higher level than the cost of financing of the Brazilian government – who should expand it. The internal rate of return to education, which is relevant for the parents and kids decisions, is even higher because it excludes the public costs of education and includes other private benefits from education, beyond income earned in the labor market. For instance, our researches indicate that 95% of the improvement in the perceived health occur as a direct effect of education if we keep income constant. That is, there is an enormous private gain beyond the labor market to be derived from the decision to pursue more education. In this sense, high school evasion constitutes a paradox. If education has such a high private rate of return, why do Brazilians invest so little in it? A first answer to the paradox is that the higher education premiums on health and income will only be observed in the mid-life and old age, which are far away in the planning horizon of the young person deciding about education. In 2006, 2.7% of those between 10 and 14 years old were out of school, growing to 17.8% for those between 15 and 17 years old, had it not been for the repetition rates, where we focus our debate. This age bracket has the biggest obstacles in terms of aversion to school and represents the moment when the factors of labor attraction begin. We present the objective evidence of some subjective aspects associated with school evasion. We propose to study the causes of evasion along three basic lines, namely: the myopia or ignorance of public policy managers, who restrict the supply of educational services; the intrinsic lack of interest of parents and students about the supply of education, be it for its perceived low quality or their ignorance and myopia about education's potential impacts. A third line is the income or credit market restrictions that stop people from enjoying the high returns of education in the long term. Let's see: i) difficult access to school (12.9%); ii) need to work and generate income (35.0%). iii) lack of interest (50.5%). iv) other reasons (1.5%). Valid answers taken at face value suggest that the three groups of reasons explain the near totality of answers. Just 1.52% of teenagers who do not attend school do so for other reasons. Two elements related to the lack of demand for education are worth highlighting as they respond for 85.58% of the reasons against 12.91% of the alleged supply deficiencies. With regard to demand, the lack of interest, maybe due to ignorance about the benefits of education, represents 50.5% whereas the need to work and earn some income represents 35.08%. This last motivation would be consistent with the liquidity constraints faced by the youngster and their families. Therefore, policies to loosen this restriction are recommended, such as the supply of educational credit, concession of scholarships or conditional cash transfers. However, this kind of policy would have, according to data, a limited potential to reach youngsters between 15 and 17 years old out of school. The attractiveness of school must be enhanced. The evolution in relation to the previous two years reveals a reduction of the population in this age group, according to PNAD, from 10.7 million to 10.4 million, as a result of the demographic transition which explains the increasing easiness with which secondary education's universal coverage will be offered. In terms of motivation components, there is a slight decrease in the school evasion rates from 18.1% in 2004 to 17.8% in 2006. There was an increase in the lack of demand from 45.2% to 50.5%; whereas the importance of the income restrictions grows markedly from 22.8% in 2004 to 35.1% in 2006. The 3 warmer labor market in the period, coupled with the absence of income conditionalities for people between 16 and 17 years old, may explain this result. A relevant contrast among the subjective elements results from the identity of the questionnaire respondent. In other words, whether it was the teenager himself who answered about school evasion or whether it was someone else from the household, typically, his mother. The youngsters themselves would provide 25.7% of the answers related to education. The rate of evasion of youngsters is 67.7% larger than others (26.1% versus 15.6%). This suggests that these teenagers are more present at home than at school (thus they have a lesser probability of

attending it). Restrictions aside, it is worth investigating the composition of the reasons for school evasion as given by the youngster himself who was at home answering the questionnaire. The reasons related to insufficient supply are smaller in the perception of the youngster between 15 and 17 years old than in the perception of other members of the household (7.93% against 11.4% of the remaining members), just as the lack of demand due to lack of interest in education (33.9% against 42.46%). The original level of disaggregation of the answers from all respondents helps to explain the details surrounding this perception of lack of supply: 48.5% of it is due to a disability or incapacity of the youngsters pointing to a shortage of inclusive or special schools. Also within the issue of supply difficulties is the lack of vacancies or schools nearby that account for 30.3%. The lack of documentation or transport problems are limited to 21.2% of the reasons associated with the lack of school supply. The insufficient demand for education is less directly associated with the need to generate income in the short term and more so with a lack of vision about the return in the longer term. This lack of interest (50.4%) is divided in: did not want to attend (84.8%); has graduated or reached the desired grade (13.92%), parents or responsible person did not want them to attend (1.24%). Just as in the case of income generation, the direct influence of parents on the evasion seems small here. The teenager is out of school above all because he does not want the kind of school that is out there. Low income teenagers – Of the 3.12 million people aged between 15 and 17 years old, 30% have per capita income lower than R\$ 100 monthly, which is the *Bolsa Familia* eligibility criteria. Their school evasion rate is 23.3% while the 20% richest rate is 5.8%. Nonetheless, the evasion for income restriction is 422% larger amongst the poorest. Between 2004 and 2006, we observe an absolute reduction of 20.7% in the reasons for lack of supply and 13.7% in terms of lack of interest in education, while at the same time there was an increase of 27.2% in the absolute evasion of the poor due to lack of income. One of the difficulties of the population between 16 and 17 years old between 2004 and 2006 is that they were outside the age group benefited by the educational conditionalities of the *Bolsa familia*. School evasion is worse when work opportunity is coupled with income deprivation.

Parental misfortunes, lost childhoods

A household survey reveals that in times of accelerated economic growth, children are more likely to drop out of school, as the rate of child labor and failure to conclude the school year increase, and as a result, the child has to take the same courses again. Paradoxically, the same phenomenon occurs when parents lose their jobs. In this case, the repetition and dropout rates are 21% and 23% (respectively) greater than for families who have not experienced an income loss. Underage labor increases when it is combined with hunger and the possibility of meeting this need. This occurs to poor children in wealthy regions or to children of unemployed parents during economic booms. An eminent economist quantified the social costs of macroeconomic fluctuations, pointing out how much each individual would be willing, on average, to contribute so that booms and recessions cycle effects would be eradicated: one Big Mac per year! A low value, as in the US case considered, where hypothetically, the state would not only try, but also succeed in cushioning all macro instability. The problem is that during a recession—for example, the Great Depression of the '30s—average income does not fall to levels close to zero, whereas in reality, individual income may be reduced to nothing. In crises, many suffer a little, while few suffer a lot. This increases the price of a hamburger to a hungry person. There are multiple limitations in aggregated analyses. The micro level analysis allows us to measure not only the costs of instability, but also its consequences. The reality of an American teenager working at a fast food restaurant or of Brazilians involved in the production of export goods, such as shoes or orange juice—both devotedly studied in the US—differs from that of a child selling gum at the stoplight. It is

imperative to consider these situations heterogeneity. Despite our long history, there have been few studies on the permanent social costs of instability. Therefore, we approach the long-run effects of macroeconomic instability. In particular, the impact of parental income shocks on human capital accumulation variables (such as dropout rates, repetition rate, and child labor) is significant. A life cycle can be divided into three phases: in the first, the child study and doesn't work, then studies but also works, so as to entirely leave childhood in the last phase, by working and not studying. Which would be the effects of parental misfortunes on a child's early entry in the adult world? Data from a household survey collected at short-time intervals was used to estimate the impacts of a change in parents' situation on the child's time allocation between work and study. The analysis is restricted to households in the six major metropolitan areas during the last two decades formed by a father, a mother and at least one child between the ages of ten and fifteen. The main variables are dynamic impulse and answer estimations, that is: on one side, parental income shocks and on the other, the probability of a child abandoning school, retaking the year and/or starting to work. We explore events controlled by the child's characteristics (gender, age, if the child is behind in school), the parents' characteristics (education and income) and other temporal and regional variables. In short, we compare children in observable and identical situations. The results suggest that the adverse parental income shocks are positively correlated to dropout and repetition rates. The respective chances of these events occurring to children whose parents have suffered an income loss are 21% and 23% higher than those who have not shown a shift in parental status. However, the results do not present a significant relation between the parents' job loss and the child beginning to work. On the other hand, when working with the shock variable considering the parents' initial income level, we find a significant impact in the three lowest initial income quintiles. Meaning only the poorer children tend to enter the labor market when faced with parental misfortune. Results from aggregated analysis differ from individual data, already mentioned: in macroeconomic booms, underage labor reaches its peak and academic performance declines. The year of the Cruzado's boom, 1986, was the peak in underage labor, school dropouts and repetition. This result seems to show that the better opportunities, associated to macroeconomic expansion, can be harmful to the child's future. Data regarding child labor, repetition and school dropout rates allow two levels of analysis about their main economic determinants. Microeconomic variables, such as the parents' educational level, indicate the extent of the needs to be supplied by early employment, leading to dropping out and being held back in school. At the macroeconomic level, represented not only by boom periods, as well as by regional developments, the pressure exerted by the growing demand for child labor, prevalent in the metropolitan regions of São Paulo and Porto Alegre is revealed. In short, the worst child-related performance occurs when need is met with opportunity: poor children from wealthy regions or children whose parents are unemployed during booms. In these cases, the chances of the child sacrificing her future are greater, as hunger combines with the possibility of working for a meal. The PNAD/IBGE offers us an insight into the problem at the national level allowing us to differentiate rural from urban circumstances: in rural areas, 36% of children between the ages of ten and fourteen were working. In urban areas, 8% were working. During the last two decades, on average, there have been twice more boys working than girls; 90% of individuals coming from poor households did not finish high school, and 74% did not complete fourth grade. In poorer groups, 45% are less than sixteen years old. Concurrently as enrollment rates are high in Brazil, the attained educational level progresses slowly due to the irregular academic attendance (many absentees), the high repetition and dropout rates (of 13% and 8.9% respectively). In accordance to PNAD, 15% of all children in this age range were working—although there has been a two-percentage points decrease since 1995.