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The State of the Youth: Prisons, Drugs and Car Crashes

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The State of the Youth: Prisons, Drugs and Car Crashes

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ABSTRACT

By virtue of the volume and nature of their attributions, including secondary school as well as problem-areas such as security and traffic, the Brazilian states are the ultimate responsible entities for young people. This study argues in favour of granting greater freedom for the states to define their own public policy parameters to deal with local features and to increase the degree of learning about such actions at the national level. In empirical terms, the study assesses the impacts of new laws, such as the new traffic code (from the joint work with Leandro Kume, EPGE/FGV doctor's degree student) and traces the statistics for specific questions like drugs, violence and car accidents. The findings show that these questions produce different results for young men and women.The main characters in these dramas are young single males, suggesting the need for more distinguished public policies according not only to age, but also by gender. The study also reveals that the magnitude of these problems changes according to the youth's social class. Prisons concern poorer men (except for the functional illiterate) while fatal car accidents and the confessed use of drugs concern upper-class boys.

[1] I would like to thank the excellent research support provided by Luisa Carvalhaes, Samanta Reis, ,André Neri, Carolina Bastos, Paloma Carvalho, Ana Calçada and Gabriel Buchmann. Ana Beatriz Andari did most of the translation from Portuguese into English. All remainning errors are my sole responsability.

TABLE OF CONTENTS

1. Introduction

2. Portraits from the Prisons

- **2.1 Profile of Brazilian inmates**
- **2.2 Prison's risk factors – national sample**
- **2.3 Crime and Punishment in Rio**
- **2.4 Teenage Pregnancy**

3. Elite Drugs

4. Car Crashes

- **4.1 Men behind the steering wheel: a Constant hazard.**
- **4.2 Effects of the new Brazilian Traffic Code**

5 . Conclusions

- **5.1 Characterizing the youth**
- **5.2 Youth problems**
- **5.3 The State of the Youth**

Appendices A – Bivariate Tabulations

Appendices B – Econometric Exercises

1. Introduction

“States are ultimately responsible for the youth, given their accumulation of attributions including secondary school and problem-areas such as security and traffic”.

It is not written anywhere in the Brazilian Constitution, but States are the main guardians of the youth. In the same way as municipalities look after the interests of the children, including vaccination and primary school, as the federal government takes care of the social security and disabled people, the States are the tutors of the youth by their attributions. The constitutional responsibilities of the States include: education (secondary school) and problem-areas related to the youth such as security (violence and drugs) and traffic (accidents) see the research website http://www3.fgv.br/ibrecps/edj/eng/index.htm,.

The youth are a real mystery, not only in the eyes of the state and their parents, but also to themselves. During teenage years, the child makes a transition into adult life, ideally from school to work, which co-exist in the individual’s daily life. In the short period of the youth, some obstacles come up associated with sex, drugs, violence – when the youngsters may get lost or lose their life. As a consequence, standard human development measures such as life expectancy, school attendance rate and income among others that have evolved for the population in general, present different trajectories in the case of young people. Violence, unemployment, and car accidents, ever present in the news, are areas where we have clearly evolved as a society. The objective of this research is to discuss some obscure aspects of this trajectory like life in prisons, the use of drugs, and deaths by car accidents, using household surveys as the searchlight in providing a north for the actions of the State, or as we argue here, of the states. The results we found show completely different degrees of such issues for men and women. The main characters in this drama are young single males implying the need for distinguished policies according to age and gender. The magnitude of each problem changes according to the young male’s social class. Prisons concern poor young males, while fatal car accidents and drug consumption concern elite males. We will begin with the former.

2. Portraits from Prison

2.1 Inmate profile

"The profile of Brazilian inmates can be described as: a young single male, with some but not much education, native, without a religion or a follower of alternative sects."

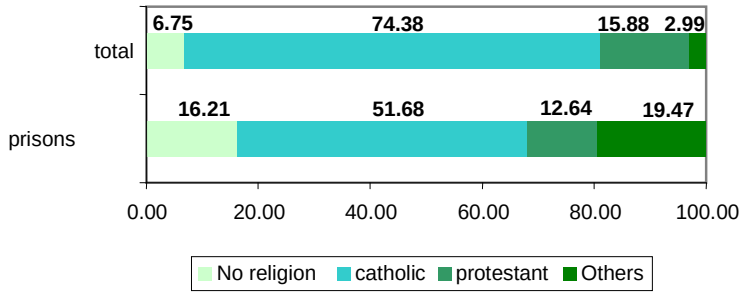
One of the worst issues in Brazilian social reality is violence, as the polls from the last ten years reveal. As unemployment, also leading the polls, violence problems have the form and shape of our youth. We have traced a comparative portrait of the adult population and of the imprisoned population with 95981 people, based on the most recent IBGE census. The Centre for Social Policies had previously released similar data for Sao Paulo and Rio de Janeiro, whose results are confirmed by the Ministry of Justice prison census statistics (NERI 2003[2]). Although we remain restricted to the census questionnaire, the advantage of identifying the prisons' census sectors is to enable a comparison between inmates and the adult population on the same basis. Just as in the case of the confessed drug consumer's portrait, this direct statistical contrast cannot be achieved through a sample or administrative survey. Once more, the objective here is to inform civil society about the profile of the imprisoned population in order to enhance public policies tackling crime.

We can summarize the profile of inmates as follows: men, young, afro-descendant, single, with low educational level, without religion or a follower of alternative sects. We shall begin by addressing religious values, which are at the centre of the discussions about schools' curriculum. Among inmates, 51,68% are Catholic and 12,64% protestants, while 74,38% and 15,88% of the Brazilian adult population are Catholic and Protestant. The most striking fact regarding religious beliefs is the existence of other non-catholic, protestant or African-Brazilian creeds: 19,47% have alternative religious beliefs against 2,99% of the country's adult population. Another – expected – difference is the large presence of people

[2] http://www3.fgv.br/ibrecps/EDJ/referencia/gc252a.pdf

without religion: 16,21% in prisons, 2,5 times larger than the figure for the general adult population, 6,75%.

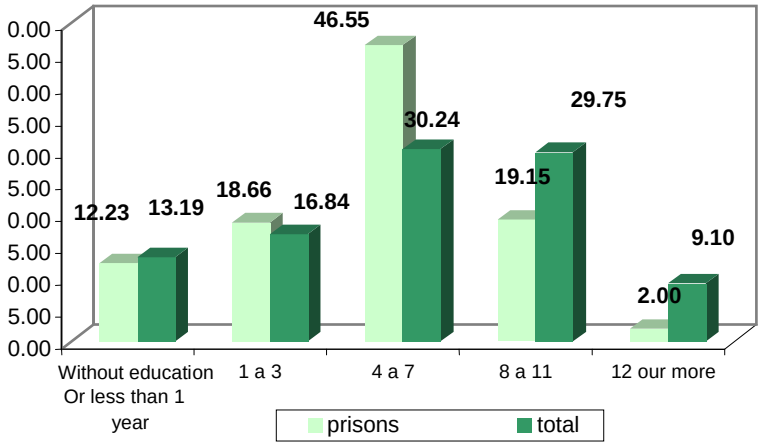
Percentage by religion



Source. CPS/IBRE/FGV from IBGE microdata

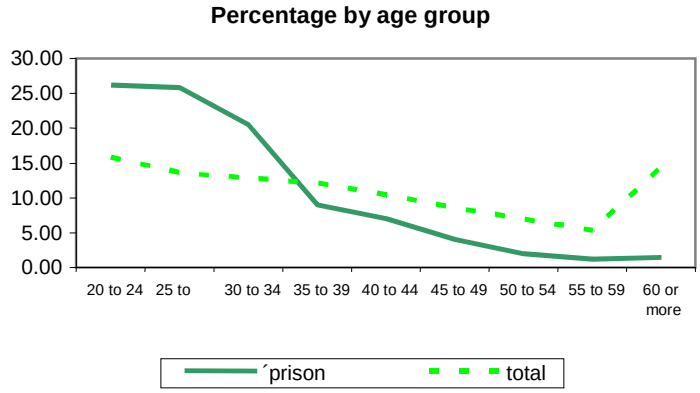
The majority of inmates have low educational level, 77,44% of them have not attended primary school against 60,27% of the total population. Conversely, the proportion of illiterates in prisons is a little higher than among the total population: 13,19% against 12,23%. The most marked difference in the educational profile concerns the higher share of inmates with secondary school (46,55% against 30,24% of the total population) while the proportion is the opposite at the top of the education distribution.

Percentage by schooling completed grades

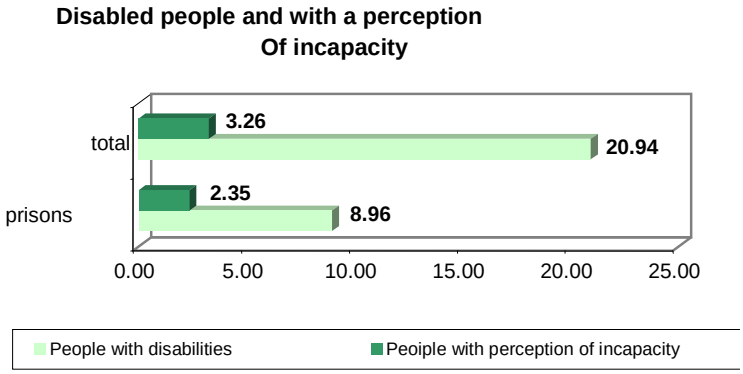


Source. CPS/IBRE/FGV from IBGE microdata

Young people are the majority in prisons: 51,96% are between 20 and 29 years old against 29,52% of the Brazilian population. Following the age trend, the share of single inmates is 79,10%, while it is 24,12% of the total adult population, that is, there are almost 3,3 times more single inmates. People with some kind of disability are under-represented in the prison population (8,96%) compared to the State level (20,94%) because the youth factor predominates despite the risks of criminal activities.

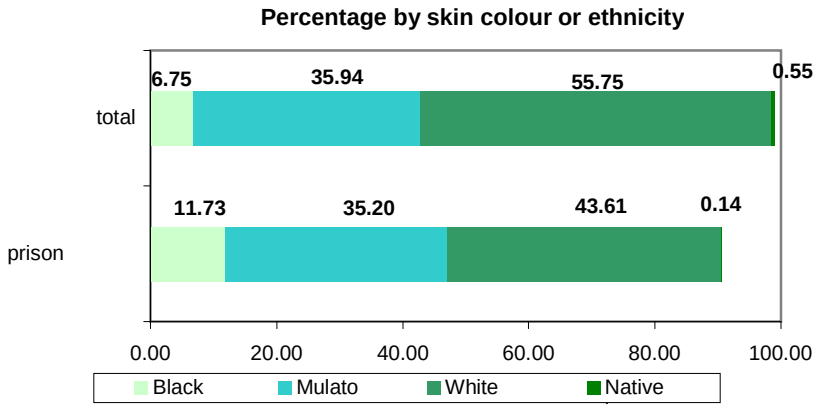


Source. CPS/IBRE/FGV from IBGE microdata

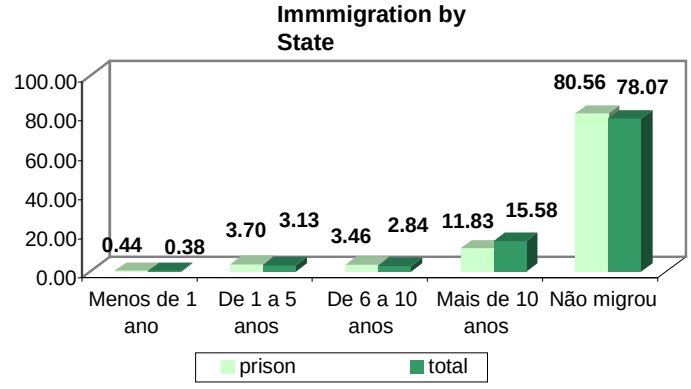


Source. CPS/IBRE/FGV from IBGE 2000 microdata

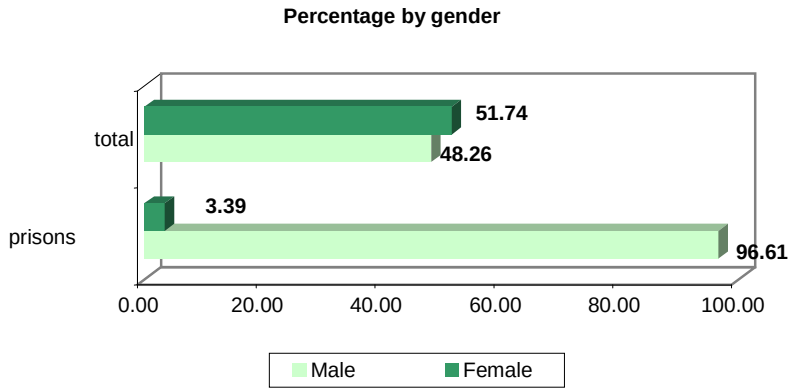
Afro-descendants represent 46,93% of the prison population against 42,69% in the country. Around 80,56% of the Young inmates are native to the State where they live, against 78,07% of the total ensemble of Brazilians. Men form the absolute majority of prisons: 96,61% against 48,26% of the adult population, standing out amongst all factors.



Source. CPS/IBRE/FGV from IBGE 2000 microdata



Source. CPS/IBRE/FGV from IBGE 2000 microdata



Source. CPS/IBRE/FGV from IBGE 2000 microdata

2.2 Prison risk factors –National sample

"The likelihood of an individual with all adverse features to be imprisoned is 0,69%. If this individual at maximum risk was a woman, this likelihood would have dropped to 0.14%. In other words, in terms of criminality determinants, the variable gender is the most fundamental."

Such as in the case of drug consumers, risk factors associated with each individual being or not imprisoned were isolated, comparing people with the same features, except for one. For instance: we compare men and women with equal attributes, discounting the fact that women, on average, have more education than men among other characteristics. This exercise confirms that the main risk factor is gender. Men have 5.16 times more chance of being imprisoned than women, all things equal. In second place, miles away, is their marital status. Being single is an important risk factor, 91.7% higher than the others. Single men may be more prone to accepting risks for not having established families, which in some way limits the social costs imposed to relatives.

Being a migrant comes up next, with 62,6% more chance, followed by age, as people aged between 18 and 35 years old have 46,3% more chance of being imprisoned than older people. Education-wise, those with up to 6 years of schooling have 29,7% more

chance of being in jail than the more educated population. Assuming atheism as a risk factor, the chances of a person without a religious belief being in prison is 23,4% higher than a person with a religion. The least important factor is race, 10%. The reader is invited to visiting the website www.fgv.br/cps and calculate how the combination of these risk factor impact the chance of an individual being imprisoned – which could help select the target group of preventive public policies. For instance, synthesizing the effect of all adverse factors in one indicator, the probability of an individual with all adverse features – that is, a men, single, with low educational levels, etc. – being in prison is of 0.69%. Nevertheless, if this was applied to a woman, the probability would fall to 0.14%. Therefore, in terms of criminality determinants the gender variable is paramount.

Please see the simulator to check the probability of an individual being in prison, similar to the disclosure about drug consumption from the last section in http://www3.fgv.br/ibrecps/edj/presidiario_eng/index.htm

2.3 Crime and Punishment in Rio

In this section we focus on the municipality of Rio de Janeiro where have isolated the risk factors that lead people to perpetrate criminal activities, besides calculating the opportunity costs related to imprisonment in terms of hindering their income generation potential by using multivariate exercises.

The risk factors presented to the population can be seen by logistics regressions, where we assess the chances of an individual being or not imprisoned comparing people with similar features, except for one. This statistics is called odds ratio, and derives from the exponential of parameters estimated for each category of the logistic regression, such as gender, education, marital status, age, religious belief, migration and race. For example, through bivariate analysis we have not been able to capture the real effect of the gender variable in terms of being or not imprisoned, once women are under-represented among inmates and while they are better educated than men, only through multiavariate analysis we have been able to separate the two effects (education and gender) comparing women and men with the same remaining attributes.

The exercise shows that the main risk factor is gender, as men have 5 times more chances of being imprisoned than women, considering all remaining features the same. Next, is the educational level, as people with up to 6 years of schooling have 2,4 times more chances of being imprisoned than the more educated population.

Being single, can also be considered an important risk factor, with greater chances of being imprisoned compared to the single population. Maybe this is explained by the fact that the single population is more prone to taking risks, as they have not got constituted families. On the other side, this situation is less socially costly because these people do not have dependents. It is worth noting that the age effect has been isolated in this situation with the insertion of variable in this model. The information per age shows that people aged between 18 and 35 years old have 70% chance of being imprisoned compared to their seniors.

As we have seen in the same exercise for the National level, not having a religion is one of the features of the imprisoned population, making this a risk factor, the chances of a person not having religious beliefs and being in prison is 38% bigger than its complement, exposing thus a side of the crisis of values in contemporary society.

Among the risk factors the less important are migration and ethnicity. The chances of being imprisoned is 37% larger among natives than for migrating population, contrary to what is supposed about those people who migrate and commit criminal activities in Rio de Janeiro. And, lastly, the chances of afro descendants are 34% larger than for non-afro.

Summing up all these factors into one indicator, the probability of an individual with all these features being imprisoned is 5%, 27 times more than that observed in the non-controlled exercise.

Risk Factors

	Odds Ratio		
	Conditional	Non Conditional	Population (%)
Men	5,216	35,0764	96,67
Up to 6 years of schooling	2,368	4,4974	66,28
Single	1,833	7,7659	85,88
Between 18 and 35 years old	1,706	5,1014	76,69
Not having religious	1,378	4,1390	35,33
Native	1,369	2,0264	79,69
Afro descendants	1,343	3,1665	67,70

Source: CPS/FGV processing CENSO/IBGE microdata.

It is also possible to assess the socio-demographic determinants of criminal activities. The international literature on criminality emphasizes the impact of unemployment and less the impact of poverty. We verify these relations from the analysis of the effects of inmates' features that have reached precarious states as poverty and unemployment. We present in the next graphs simulations of the distribution of probabilities of the inmate population in Rio, given their attributes having reached precarious states such as poverty and unemployment. These data are for comparative effects placed next to the total population aged over 18 years old. Otherwise, let us see: a) the average probability of an inmate coming from a poor family, that is with an income below 79 reais per month is 16,3%, or virtually twice as much as the population over 18, 8,44%. The distribution of probability of poverty dominates for the Cariocas (inhabitants of Rio de Janeiro). B) The average probability of unemployment among the two universes is 14.7% against 9.53%. The difference in the probability is greater in the case of poverty than

for unemployment, which may indicate the effect of inequality, also cited in specialized literature.

The next step was to simulate the opportunity costs of a carioca inmate, that is, how much income he would generate to his family in case he was working. We have priced it at market rates, the attributes of the inmate (gender, education age, etc) using optimistic hypothesis, such as: they find a job and have fair wages in relation to their attributes, that is, we have discarded the existence of any kind of discrimination of segmentation in the job market in relation to those who left the prison. It is important to note that we consider other kinds of discrimination such as race, gender, religious beliefs, etc. As a measure of comparison, we estimated the income of unemployed, occupied, poor workers and those living in slums, following the same methodology.

The average income from work applied to the Carioca inmate is around R$ 337, a bit more over half the carioca income and 30% smaller than for the unemployed. Including other sources, the inmate has an increase of 3% in his income, inferior to the additions observed in other groups, increasing further the distance between them.

Income - Work (R$)

	Imputed Incomes		
	Inmate	Carioca	Unemployed
Mean	337	600	483
Median	276	463	390

Source: CPS/FGV processing CENSO/IBGE microdata.

We present next the behaviour of labor earnings in the same groups as before, following some income percentiles. We have decided to apply income to cariocas to make them comparable to other groups, the values being estimated according to the population features.

Income - All Sources (R$)

	Imputed Incomes		
	Inmate	Carioca	Unemployed
Mean	384	726	537
Median	276	532	419

Source: CPS/FGV processing CENSO/IBGE microdata.

Confronting them, we have found the inmates in a unfavourable situation and the biggest income differences in the percentiles above the median. The maximum income of the inmate is R$ 1814,00, thus inferior to the unemployed and cariocas in 38% and 27%, respectively.

All Income Sources Distribution (R$)

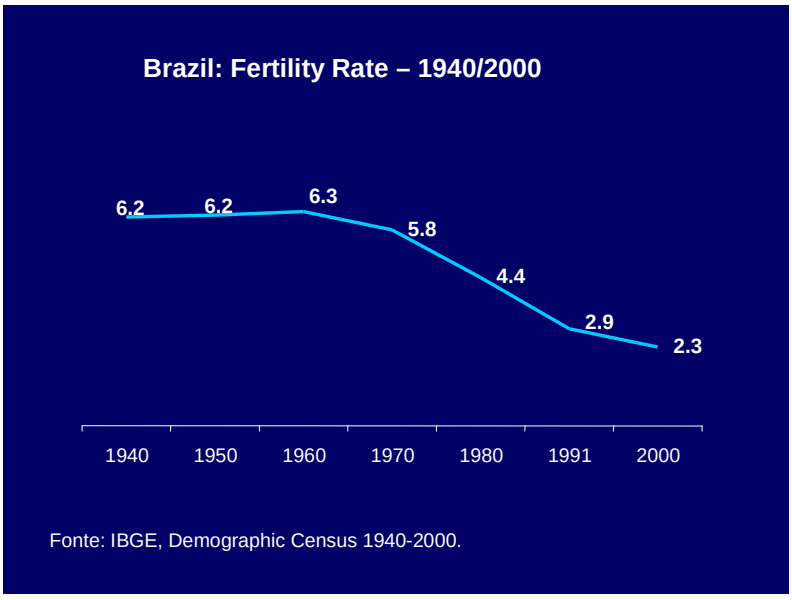
	Imputed Incomes		
	Inmate	Carioca	Unemployed
Income Percentiles			
100% Max	2862	4545	3740
99%	1305	2936	2172
95%	851	1939	1332
90%	618	1495	1018
75% Q3	401	912	646
50% Median	276	532	419
25% Q1	200	341	284
10%	160	234	199
5%	141	191	164
1%	109	129	116
0% Min	100	66	68

Source: CPS/FGV processing CENSO/IBGE microdata.

2.4 Teenage Pregnancy

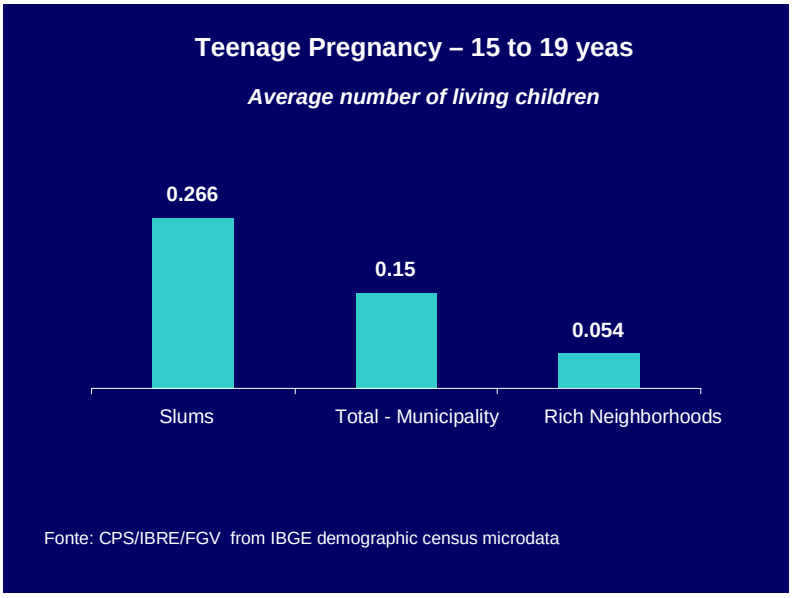
“The female counterpart of the young single male’s predisposition to committing crimes is the teenage pregnancy”.

Steven Levitt, the author of the best-seller Freakonomics has caused some shock when he revealed that the main cause of criminality reduction in American states in the mid-1990s was the abortion law promulgated two decades before. The idea is so simple as it is politically incorrect, as many times life is (although we do not like this): the fact that the law diminishes the birth of undesired children from poor single women has generated a reduction in the supply of criminals two decades later! In Brazil, the female counterpart of the young single male predisposition to commiting crimes is the teenage pregnancy, which rose from 7,97% to 9,1% between 1980 and 2000, while the fertility rate for all age groups fell from 4.4 to 2.3 children per woman.



In particular, while the fertility rate among women aged between 40 to 45 years old who live in Rio slums is twice as much as those living in high income neighborhoods, the rate for teenagers in slums is 5 times higher that in high income areas (0,27 per girl aged

between 15 and 19 against 0,054, respectively). We ‘d rather not, but we can’t avoid this issue: if Brazil does not revolutionize the reproductive education of her youngsters, we will be sowing more and more tragedies like last week’s, and the week before that, and so on.

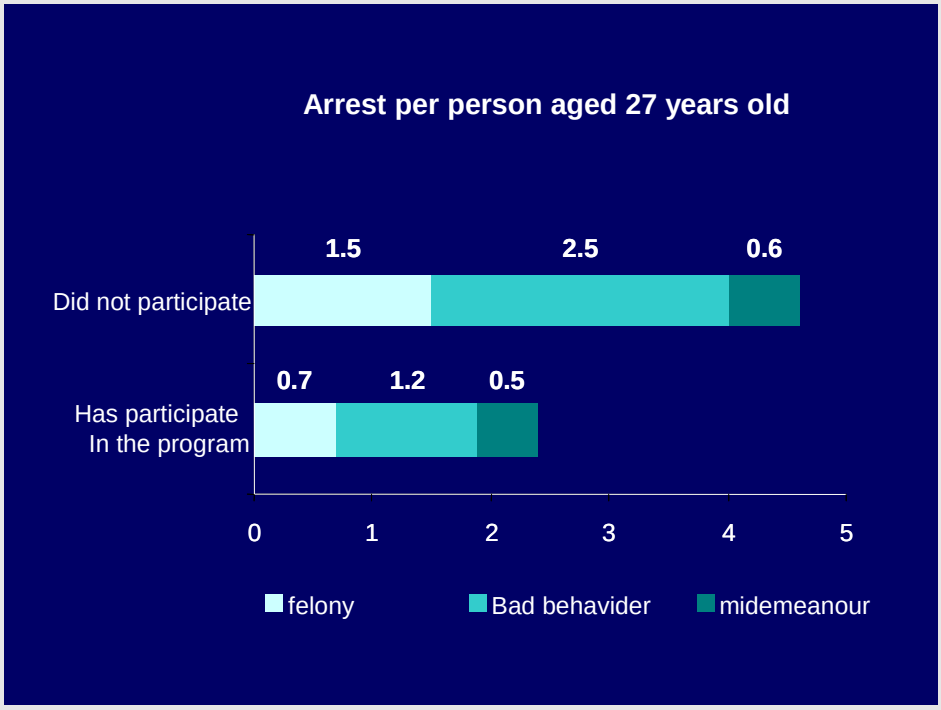


Maybe it was not in vain that Dr. Drauzio Varella has recently focused on the diffusion of reproductive education on a global scale in his recent series “Filhos deste Solo” (Children of this Soil) – after depicting the most humane portrait of the Sao Paulo prison reality in the classic *Estação Carandiru*, which also gave origin to a beautiful film with the same name. Attached, we present the teenage pregnancy ranking in various locations in Brazil.

http://www4.fgv.br/cps/simulador/retratosdocarcere/apresentacao/10a14_Sumario_maes_idade.htm.

Children Education and Crime Prevention

A research launched by the Center for Social Policies containing data about infancy shows the importance of education in the first years of an individual's life. International evidence demonstrates that early childhood education constitutes, probably the best existing social investment. The lower the age for receiving educational investment, the higher the return to the individual and society. Heckman & Cunha show that children who attended nurseries (0 to 3 years of age) and pre- and primary school (4 to 6 years of age) have had higher income and lower imprisonment likelihood (see the graph below), lower teenage pregnancy rates and lower dependence on state income transfers.



In short, this section has drawn a comparative portrait between the Brazilian adult population and the imprisoned population. The website presents a tool which simulates the probability of a person becoming imprisoned based on his features, allowing for a comparison between the determining factors of the criminal activity. Generally, the inmate profile is single, male, aged between 20 and 29 years old with low educational attainment. Another part of the study follows the international literature on criminal activities which empathizes the impact of unemployment and inequality, with less focus on poverty. Finally, the study questions if the female counterpart to the young male tendency to criminal activities would be the growing teenage pregnancy rates.

3. The Elite's Drugs[3]

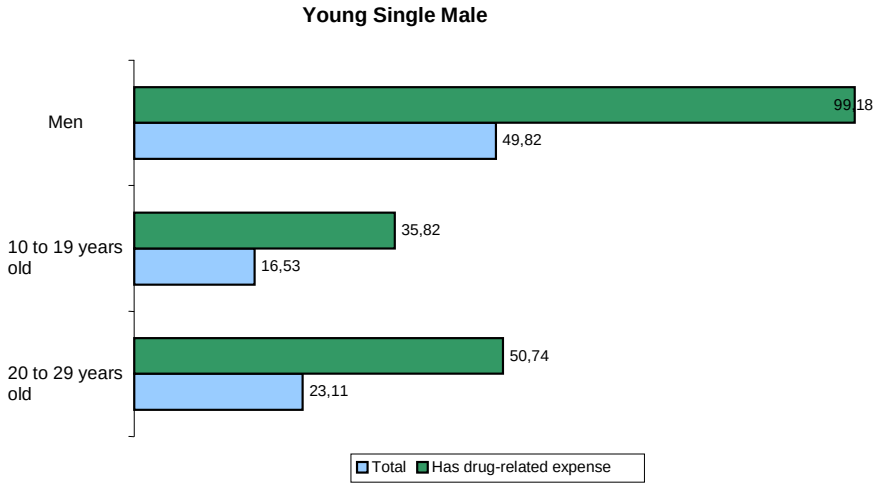
In economic terms, the film "Tropa de elite" ("Elite Squad") presents the vision from the coercive power, the police, about the demand for drugs in the same way as the film "City of God" has delved into the vision of the drug supply by the dealers themselves.[4] Although it encompasses new aspects such as the daily routine of an elite troop, the true innovation of the film is to unravel the demand for drugs in the retail market. We approach this aspect in this part of the research, using the results from the last Pesquisa de Orçamentos Familiares (POF) (Family Budget Survey) from IBGE. One initial observation is that, given the expected high rate of non-answers regarding drug consumption among the 182 thousand interviewees (for obvious reasons, despite the statistical confidentiality of the survey), the data must be interpreted as the result of the interaction between two factors, namely drug-related expenses and the tendency to declare them. In other words, it is impossible here to separate the importance of drug consumption from its disclosure. Nevertheless, the disclosure about drug consumption is meaningful because it admits to an illegal act, apart from being precisely a function of the sample size and statistical quality provided by the excellent work of IBGE. The estimated econometric model of the factors relating to the event in question demonstrates this point, be it for the accuracy of the estimates, be it for its adherence – in terms of the signs that are expected from an economic and sociological intuition that is implicit in the film. The other available statistics relating to police occurrences and drug apprehension capture the consumption frustrated by police action, both in the retail and wholesale markets. They are even more indirect as a result from the interaction between the intentions of someone in Brazil or abroad – since we are part of the international traffic route – to consume drugs, the efficiency of dealers and consumers in perpetrating the illicit act and the investigative efficiency of police forces, which changes according to its location. Statistics concerning the consumption disclosure is

[3] This part of the research derived from a challenge proposed by the FGV President, Mr. Carlos Ivan Simonsen Leal, following the issues raised in the recent film "Tropa de Elite" (Elite Squad).

[4] The boy who became a photographer and not a drug dealer. The note "Cidade de Deus: O Reassentamento' compares the living conditions there with the big slums from Rio. http://www.fgv.br/ibre/cps/artigos/Conjuntura/2004/Cidade%20de%20Deus%20o%20Reassentamento_março%20de%202004_RCE.pdf

not only complementary but the only one available on the retail side, while also comprising the whole national territory, including rural areas in the North region, thus helping to draw the profile of the Brazilian illicit drug consumer who discloses such information. The declarations in the survey are restricted to 4 types of drugs, namely cannabis, cannabis cigarettes, either spray and cocaine – 0.06% of the population who spend on average 45,77 reais a month at today's prices. The adopted strategy was to compare the participation of people with the same socio-demographic characteristics as the declared consumers with the respective share of the group in the total population. As a result, we capture those who are over-represented in the universe of confessed drug consumers vis-à-vis the remaining Brazilians.

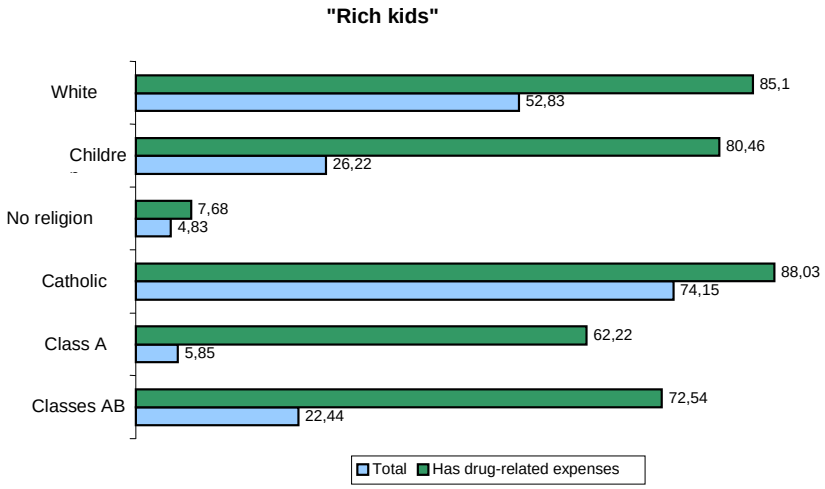
The profile of the confessed drug consumer, as with other problems, is of a young single male: 86% are between 10 and 29 years old against 39% of the total population, and 99% are male or 49,82% in the total population.



Source: CPS/IBRE/FGV from IBGE 2003 microdata

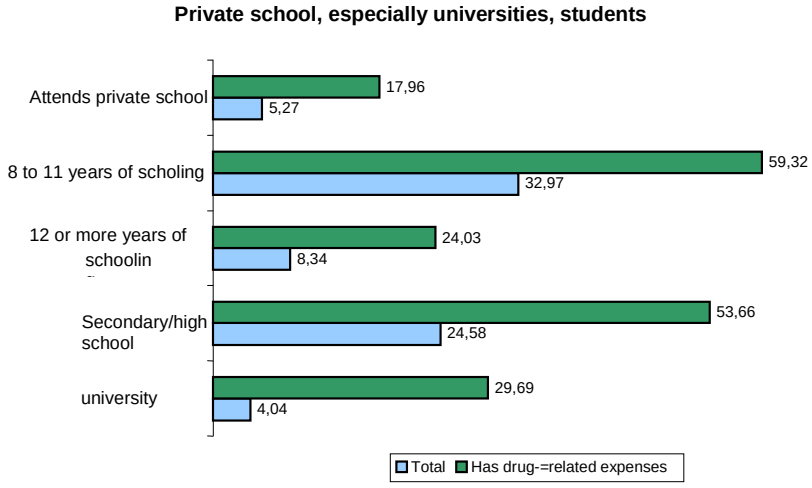
Whites represent 85% against 53% of the total population from the top class (62% against 5,8% of the population). Drugs are then confirmed as a luxury item for upper-class households. In 68% of those households that admit to the consumption of drugs, it is also admitted that they consume the foodstuff they want, against 25% of the population. Consistent with the "rich kid" picture, 80% of the consumers are the children in the

households (as opposed to the head of the household or spouses, etc) against 26% of the total population.



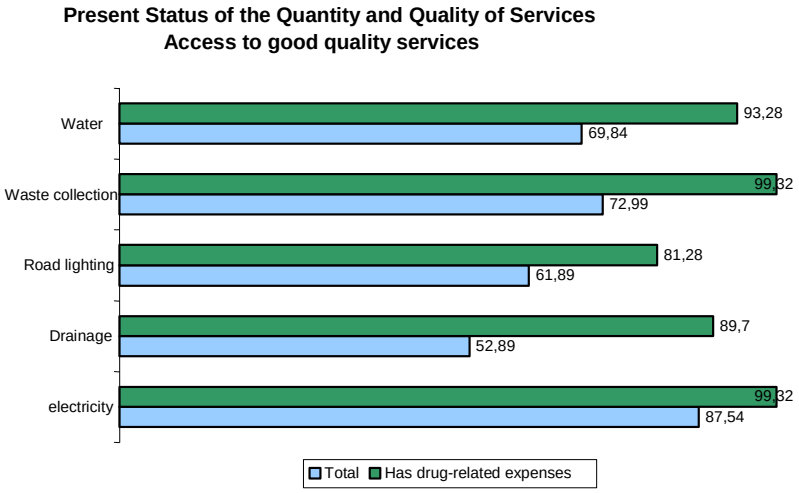
Source: CPS/IBRE/FGV from IBGE 2003 microdata

Also consistent with the film images, 30% of them attend university against 4% of the population, although 54% of users are still in secondary or high school. In any case, the proportion of users attending private schools or universities is more than 3 times larger than in the total population.

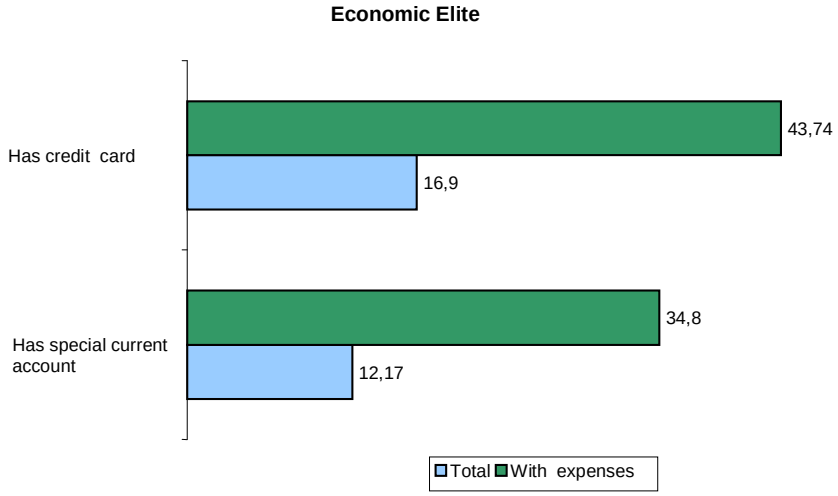


Source: CPS/IBRE/FGV from IBGE 2003 microdata

This identification of drug consumers as the economic elite is confirmed by the access of confessed drug consumers' households to high quality public services: water (93% against 70%), waste collection (99% against 73%), road lighting (81% against 62%), electricity (99% against 88%) and drainage (90% against 53%). The higher access to special credit limits (44% against 16,9%) confirms the upper-class profile of the confessed drug consumer.

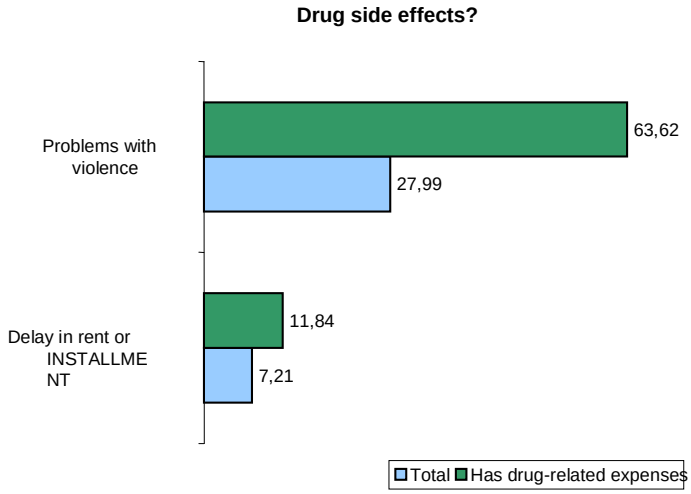


Source: CPS/IBRE/FGV from IBGE 2003 microdata



Source. CPS/IBRE/FGV fromIBGE 2003 microdata

One of the two exceptions to this upper-class picture, which could be interpreted as a side effect of drug consumption, is the delay in paying bills (such as rent) that can be higher for the economic elite. Contrastingly, the perception of violence is higher (64%) in areas close to the homes of confessed users, while it reaches 28% for the whole population. In general, given its economic freedom, there is a small share of the elite living closer to violent areas. We take this cue to approach now the drugs supply side.



Source. CPS/IBRE/FGV fromIBGE 2003 microdata

4. Car Crashes [5]

“Four times more men than women die in car accidents, a function of the statistics for higher income young males”.

This section is thus divided in two parts, the first of which traces a literature review and a profile of the car accident victims. In the second section, we introduce the new Brazilian Traffic Law from January 1998 as a laboratory for studying the effects of changes in legislation and penalties on the behaviour of drivers. We advocate the concession of greater freedom for each State to define their own laws, which could not only be fitter to the local needs, but also work as useful experiments to improve the analysis of the causes of problems and the effectiveness of specific actions.

4.1 Young male drivers: a constant hazard

“Men are more prone to accidents because they need to commute to work, but they are less sensitive to the rigid traffic law than women”

Every year there are on average 750 thousand car accidents in Brazil causing 28 thousand deaths and other thousands of injuries. This reality is not very different from the rest of the world. In the USA, 42 thousand people died last year in car accidents. In 2005, with 36,6 thousand deads, car accidents were the second largest cause of deaths in Brazil for exogenous causes, ranking only after homicides. In 2003, R$ 5,3 billions were spent in the country because of car accidents, according to the Instituto de Pesquisa Econômica Aplicada (IPEA), Departamento Nacional de Trânsito (DENATRAN) and the Agência Nacional de Transportes Públicos (ANTP). The average cost per person including productivity loss, health care, removal and transportation is approximately R$ 1 thousand,

[5] This section is based on the study by Leandro Kume and Marcelo Neri - see the complete version http://www3.fgv.br/ibrecps/EDJ/FCT_NovoCodigodeTransito.pdf
"rebel without a cause" was the second of the three films that James Dean started before dying tragically. The feature film had a cold feet reputation because, besides Dean, Nick Adams also died tragically (he was one of the member of the gang in the film and star of the series "The Rebel") from an overdosis in 1968. Sal Mineo was murdered in 1976 and Natalie Wood drowned in 1981.

R$ 36,3 thousand an R$ 270,1 thousand for all cases including unharmed, injured and fatal victims respectively.

The economic literature about car accidents is still very incipient in Brazil, focusing mainly the car insurance market. There is not a study about the incentives to risk exposure in traffic for drivers or pedestrians. Besides, there is no study in international literature that tackles the differences of the effects of the changes introduced by the new law on the deaths from car accidents per gender. Fatal accidents per gender is fundamental in the Brazilian case.

The causes of fatal car accidents are related to the form and frequency with which people travel, which are in turn related to the types of transport for traveling from home to work – whose main features are present in the microdata of the Pesquisa Nacional de Amostras a Domicílio (PNAD), namely: if the person works at home or out; the time of traveling for those who work outside the home; if the person works using cars; if the person works as a driver,etc as an indication of their degree of exposure to car accidents. We calculated the traffic deaths and the co-relatedcoefficients based on the above-mentioned route and job nature variables. The proportion of the population who travels more than one hour to go to work is 0,6; who works in vehicles 3,14; who is a driver 4,9. As expected, the negative effect to the share of the population who works at home -0,93. The coefficients present the expected signs with high statistical meaning, confirming the strict relationship between the length of the route to and the traffic mortality rate.

Contrary to the saying “women drivers are a Constant hazard”, the analysis about the incidence of fatal car accidents per gender indicates rates that are 4 times higher for men, in the period between 1992 and 2004. Consistent with the mentioned co-relations, opening route and nature of the job variables per gender indicates a lower exposure of women to traffic. The share of women working at home is c. 5 times larger than men’s (12,3% against 2,4%). Conversely, the share of the female population who travels for more than an hour to work is far less (4,7% against 8,3%), the same happens with the share of the population who works in vehicles (2,5% against 0%) or who is a professional driver (2,5% contra 0%). All of it is preceded by the smaller participation of adult women in the job market and by a larger rate of female unemployment. A possible explanation for this clear difference between genders in car accidents would be the smaller female exposure to

transport. Another explanation would be the smaller relative incidence of serious accidents amongst those who travel. The introduction of the new Brazilian Traffic Law could help to distinguish between exposure and attitude effects.

4.2 Effects of the new Brazilian Traffic Law

"The new Brazilian Traffic Law has significantly reduced deaths from car accidents in Brazil in at least 5,8%. Rates have fallen twice more for women than for men."

Presumably, new laws that affect the incentives to the way people drive their cars may alter the death rates and associated costs. Some of the mains causes of car accidents with injuries or deaths are amenable to regulation such as the use of the safety belt, insurance against accidents, speed and attention when driving, excessive consumption of alcohol, among others. Cohen e Deheja (2004), for example, based on panel data for USA States between 1970 and 1998, present evidence that reducing the drivers' responsibility has a positive impact on the death rate of car accidents. The authors have used as a laboratory the changes in traffic laws for some states that reduced the responsibilities of drivers in car accidents. Other important works in the area relate the following to fatal accidents: consumption of alcohol (Levitt e Porter, 2001), the compulsory use of the safety belt (Loeb, 1995; Levitt e Porter, 1999; Cohen e Einav, 2003), the law obliging the driver to an insurance against accidents (Keeton, e Kwerel, 1984; Cummins, Phillips e Weiss, 2001; Cohen e Deheja, 2004).

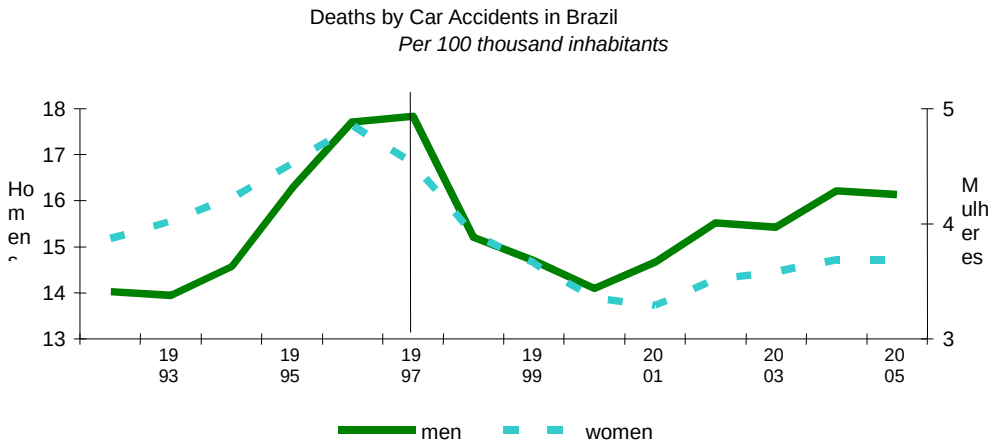
The new Brazilian Traffic Law became effective in January 1998 in all national territory, to replace the old 1966 law. The new law aims to instill discipline on drivers as well as pedestrians through tougher penalties. All in all, the value of traffic fines increased significantly to more than 100% in some cases. Some infractions have been defined as crimes, such as the act of driving drunk or without a license. For the pedestrian to cross the road out of the crossing has become a penalty. The requirements to obtaining a driving license have also become more rigid. Besides, the introduction of the new rules has been accompanied by a public awareness campaign in all major media. The objective of the new

traffic code is to affect the incentives to drivers and pedestrians not to expose themselves to risks and, in consequence, to positively affect the car accident rates.

We have been able to identify the effect of the new traffic code on car accident deaths through a database disaggregated by gender. Apart from increasing the freedom in the analysis of the effect of the new code on the deaths by car accident, it is possible to infer if this effect is higher amongst men or women, identifying different attitudes. Or even to verify if there is any difference in the traffic mortality rates between genders controlled for attributes such as age, educational level, etc. Finally, given the legal requirement of vehicle registration, data have less sub-reporting biases than homicide data.

The advantage of this kind of study is that the new Brazilian Traffic Law can be considered an exogenous factor for empirical purposes, since it was preceded by years of intense debates and discussion in Congress. Therefore, there would not be inverse causality between the mortality rates in traffic and the sanction of the new Brazilian Traffic Law. This study avoids such biases from variable endogeneity that impregnate other studies focusing on the various factors that influence risk exposure in traffic.

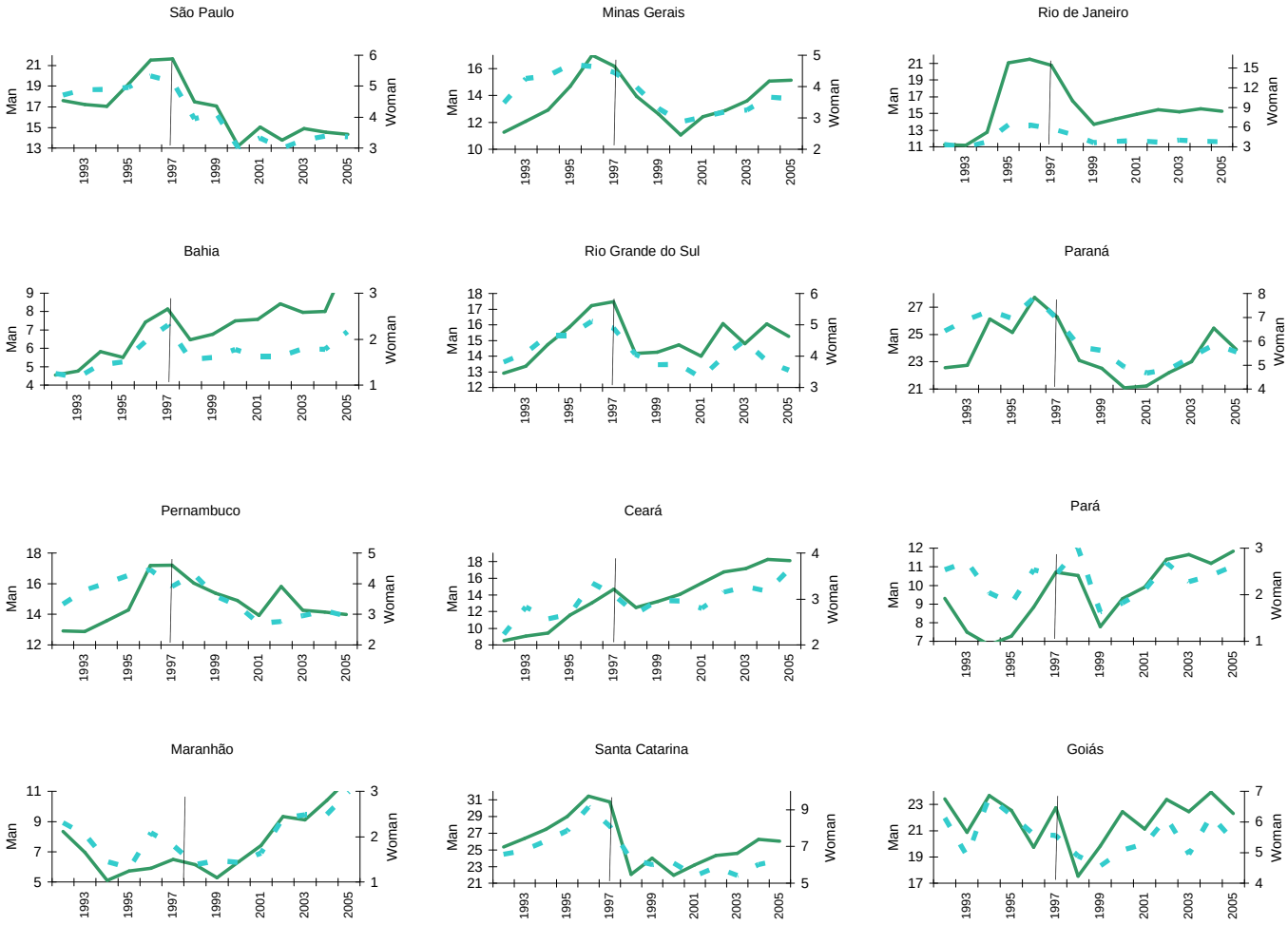
Based on Graphic 1, it is possible to observe that the number of car accident deaths by each 100 thousand inhabitants, used here as the basic measure of fatalities, increased continuously before the new Brazilian Traffic Law for both sexes. The evolution in time of the accidents by gender is revealing. Male rates increased from 14,0 to 17,8 between 1992 and 1997 while the female rate increased from 3,8 yo 4,5. After the new code, the number of car accident deaths dropped to 14 to men in 2000 and 3,2 to women in 2001. In the meantime, the relative decrease in male mortality, 20.8%, was smaller than the female rate, 28,9%, despite the effect of the greater exposure following the increasing female participation in the job market. Following the crowding out effect after the introduction of the new code, the mortality rates increase again from a lower level. The ascending trend of car accident's death rates presents a smaller curve than during the old law period, but it also suggests a loss of effectiveness of the new traffic rules.



Source. CPS/IBRE/FGV microdata **from DATASUS/MS**

This change in the trajectory of car accident's death rates - which derived from the introduction of the new Brazilian Traffic Law, represented by the vertical line in the long period before the new code, except for small variations - is clear for both genders, notably in the largest States, according to the graphs organized by population.

Deaths by Car Accidents in Brazil – per State



Source. CPS/IBRE/FGV microdata from DATASUS/MS

What's more, the number of car accident deaths for men is always substantially higher than for women in all years for all 27 Brazilian States. The States with higher and with lower relative incidence of traffic deaths are respectively, Roraima and Bahia. The three most populous States in Brazil, Minas Gerais, Rio de Janeiro and São Paulo, present intermediate rates between 10 and 15 deaths per 100 thousand inhabitants, with a clear decrease after the introduction of the new Brazilian Traffic Law. In the Federal District, traffic deaths had already fallen before the new code as a result of the increase in fines, installation of radars, among other measures. Conversely, traffic deaths in Piaui and Tocantins, which were relatively stable, increased after the new law was introduced.

In short, fatalities in traffic are seen as a direct product of the intensity in transportation and the demand of risk that is assumed when driving, which depends on the perception about the expected returns such as, for example, time gains from increased speed in traffic as opposed to the greater risks associated to accidents and fines. The introduction of the new Brazilian Traffic Law would shift the balance of private decision-making, which can be considered an exogenous event from an empirical perspective given the time lag until the law was finally promulgated,. The initial project was conceived in the Congress where it left in 1993 to be sanctioned by the Senate. The new traffic code was promulgated in December 1997, becoming effective in the following month, concomitantly to an intense public awareness campaign. The use of the new traffic code as an experiment to measure the sensitivity of individual to tougher traffic penalties thus is adequate. We found evidence that the new traffic code significantly reduced traffic deaths in Brazil in at least 5,8%. This represents more than 26,3 thousand saved lives, apart from an economy of R$ 71 billion, referring to loss of productivity, health care, removal and transportation between 1998 and 2004 – without counting the emotional costs and expenses incurred by the injured. This result shows how tougher laws associated to effective monetary fines can have significant effects in the incentives for individual to take better care of their own lives. Data shows that women are less exposed to accidents in traffic because they travel less to work, but that they are also more sensitive to tougher traffic laws than men – which would indicate differences in attitudes among the sexes. The decrease in the female traffic death rates (controlled) after the new code was almost twice larger than male's. Moreover, it was possible to verify that 4 times more men die than women today in car accidents as a

function of the contribution of young males' statistics. Estimates indicate that an increase of 1% in the proportion of men between 15 and 29 years old is responsible for more 0,30 traffic deaths per 100 thousand inhabitants. These results enlist young males as the main target for educational and investigate actions in traffic, as they are the targets in the case of actions against crimes. An interesting corollary would be to distinguish if the target should be high income young males, or low income ones, in order to capture the "rich kid driver" effect and design adequate legislation to the problem – for instance, by introducing fines according to income: such as fines for serious faults proportional to the parents' income tax or the vehicle tax. In any case, contrary to the skepticism that abounds in the case of public safety actions, the present results indicate that new actions such as the new traffic code may save lives - although the ascendant trend of fatal accidents in last years suggest the increasing and worrying flexibility in the enforcement of the recent traffic laws.

Impact of the NTC

Dependent Variable: Deaths in Traffic per 100 thousand people

Variable	(1)	(2)	(3)	(4)	(5)	(6)
NCT	-1.34**	-1.92***	-1,81***	-1,19**	-1,26**	-1.25**
	(0.52)	(0.50)	(0,51)	(0,54)	(0,53)	(0.53)
Homem	12.3***	11.7***	12,0***	12,1***	12,3***	12.3***
	(0.25)	(0.38)	(0,38)	(0,38)	(0,40)	(0.40)
NCT*Homem		1.16**	1,15**	0,84*	0,97*	0.99*
		(0.50)	(0,50)	(0,49)	(0,51)	(0.51)
Idade15a29						0.10
						(0.16)
TxUrb			0,14***	0,14***	0,12***	0.13***
			(0,04)	(0,04)	(0,04)	(0.04)
TxEmp				-0,56***	-0,58***	-0.57***
				(0,19)	(0,19)	(0.19)
Estudo8					0,11	0.11
					(0,07)	(0.7)
Constant	0.88*	1.19**	-12,4***	-10,9**	-11,4**	-8.87
	(0.49)	(0.51)	(4,47)	(4,44)	(4,42)	(5.80)
Trend	0.24***	0.24***	0,14*	0,17**	0,04	0.04
	(0.06)	(0.069)	(0,07)	(0,07)	(0,11)	(0.11)
Fixed Effect	Sim	Sim	Sim	Sim	Sim	Sim
R^2	0.83	0.83	0.83	0.83	0.83	0.83
Observations	702	702	702	702	702	702

Em parenteses os respectivos desvios-padrões. ***, ** e * representam significância ao nível de a 1%, 5% e 10% respectivamente. Correção robusta dos desvios-padrões.

Impact of Gender and Age

Dependent Variable: Deaths in Traffic per 100 thousand people

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NCT	-1.32**	-1.30**	-1.81***	-1.20**	-1.72***	-1.81***	-1.21**
	(0.53)	(053)	(0.50)	(0.53)	(0.50)	(0.50)	(0.52)
Homem	12.3***	2.23	2.59	3.76	4,13	2,59	3,15
	(0.25)	(4.38)	(4.40)	(4.41)	(0.44)	(4.52)	(4.53)
NCT*Homem			1.02**		1.04**	1.18**	0.89*
			(0.51)		(0.50)	(0.53)	(0.51)
Idade15a29	-0.08	-0.19	-0.19	-0.20	-0.20	-0.23	-0.20
	(0.16)	(0.15)	(014)	(0.15)	(0.15)	(0.15)	(0.14)
Homem*Idade15a29		0.35**	0.32**	0.31**	0.28*	0.34**	0.32**
		(0.15)	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)
TxUrb				0.13***	0.13***	0.11**	0.11**
				(0.04)	(0.04)	(0.04)	(0.04)
TxEmp							-0.56***
							(0.19)
Estudo8						0.13*	0.14**
						(0.07)	(0.07)
Constant	3.03	6.63	6.83	-5.90	-5.77	-5.47	-4.84
	(4.99)	(4.53)	(4.51)	(5.37)	(5.44)	(5.37)	(5.37)
Trend	0.24***	0.23**	0.23***	0.14***	0.14**	0.00	0.00
	(0.06)	(0.06)	(0.06)	(0.04)	(0.07)	(0.11)	(0.11)
Fixed Effect	Sim	Sim	Sim	Sim	Sim	Sim	Sim
R^2	0.83	0.83	0.83	0.83	0.83	0.83	0.84
Observations	702	702	702	702	702	702	702

Em parenteses os respectivos desvios-padrões. ***, ** e * representam significância ao nível de a 1%, 5% e 10% respectivamente. Correção robusta dos desvios-padrões.

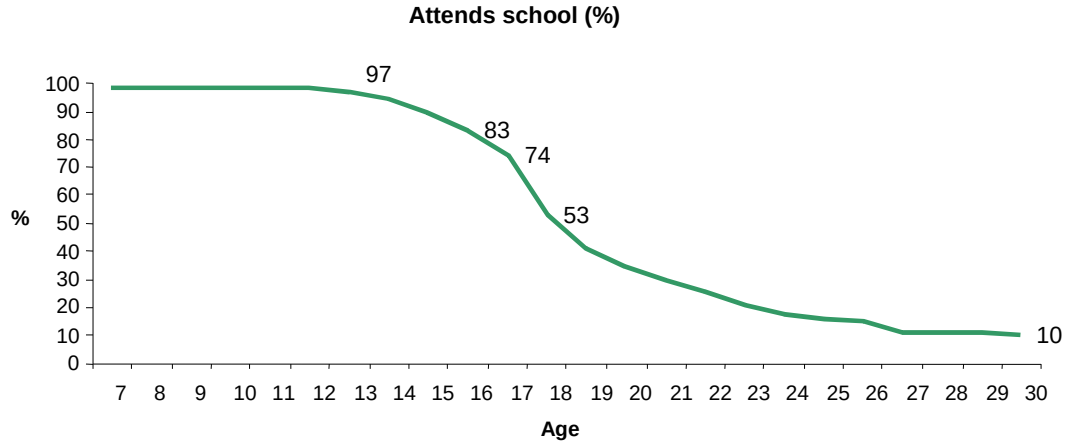
State Experiments, National lessons

Recently, the senior management of Detran RJ have aired their skepticism about the effects of an increase in the value of fines, which had been frozen since 2000, for its weak effectiveness in fighting car accidents, whose main perpetrators/victims are young people from the upper class – hence little sensitive to "spicier" fines. This section demonstrates that for each 10% increase in "rich kids" (young males aged between 20 and 29 years old with more than 8 years of schooling) in the population, deaths increase 3%. On the other side, with the introduction of the new Brazilian Traffic Law in 1998, the number of deaths among men fell from 17,8 to 15,21 for each 100 thousand inhabitants. In Rio, the decrease is higher: from 20,8 to 16,51. The instant drop of 21% shows that some laws work in Rio but they lose effectiveness later on. The problem is that the new code increased both the fines and the so-called alternative penalties (loss of points in license; increased criminalization of faults, etc) so it is not possible to know who is right: a) Denatram; b) Detran RJ; c) both of them; or d) none of them. In our opinion, the ideal solution would be to let Rio keep its current fines and evaluate the impacts, in a type of controlled experiment. Brazil is used to promulgating national-level laws, without testing them at the State level, contrary to the US for instance. As a result, we may make mistakes affecting all national territory and learn very little from our mistakes and achievements. In this sense, we defend the concession of greater freedom for the States to promulgate their own laws in areas where the diversity is great between different States and the related knowledge is scarce.

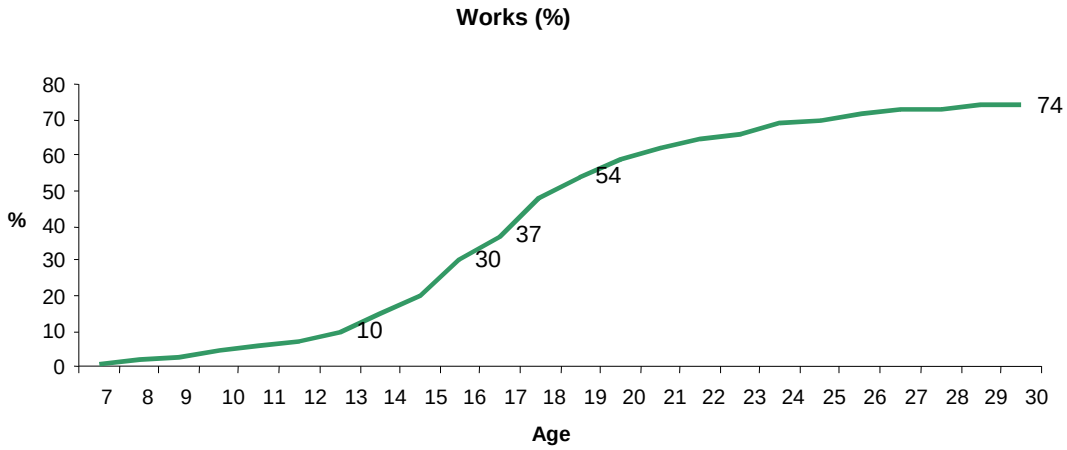
5 . Conclusions

5.1 The Youth

Youth is that intermediate phase in life, as in a grey área marked by the child's transition into adult life, ideally from school to work. The graphs show this transition capturing the phase beginning with the first infancy until 30 years old. For instance, when children turn 13 years old (teenagers in the USA) - some cultures make a rite of passage to adolescence – the proportion of those attending school is 97% falling to 74% when they are 17 years old, when the rate falls more to 53% at 18 years of age and from there it falls slowly to 10% at 30 years of age. The share of pre-adolescents who work follows the inverse trend: 10% at 13 years old; 37% at 17; from there it slows down and then increases again to 54% at 18. Afterwards, it drops slowly to 74% when they are 30 years old.

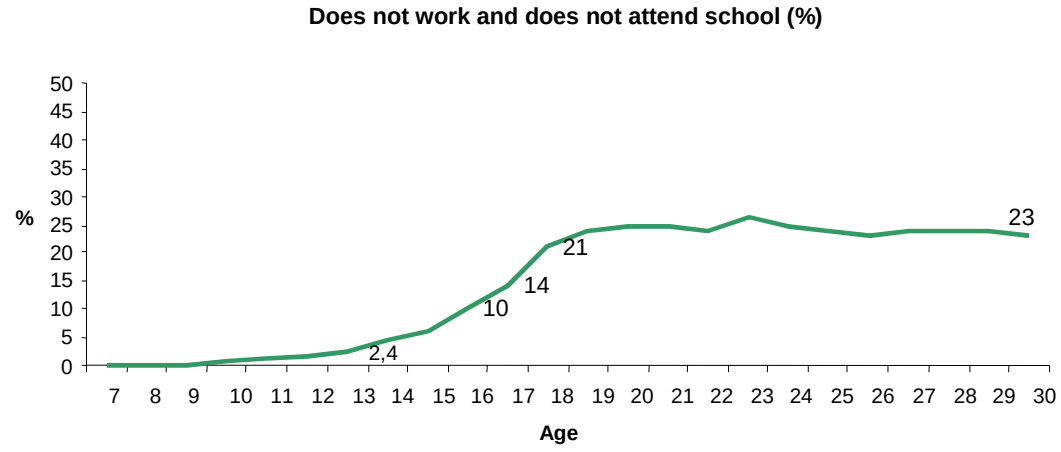


Source: CPS/IBRE/FGV from PNAD/IBGE 2006 microdata



Source: CPS/IBRE/FGV from PNAD/IBGE 2006 microdata

In this sense, when teenagers turn 18, half are students (53%) and half are workers (54%). Obviously, we need to consider the fact that many of them study and work, while others neither study nor work, in this process where school prevails according to the age, but work predominates in their routine. The share of those who neither work nor study is only 2,4% at 13 years of age, growing markedly until 17 years of age, when it grows even more towards the next year to 21%, becoming stable at this point reaching 23% only at 30 years of age. That is, during the phase that comprises the beginning of adolescence until they reach the age of consent, the number of inactive people work and study-wise grows.



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Source: CPS/IBRE/FGV from PNAD/IBGE 2006 microdata

In the short period between childhood and adult life, some obstacles may arise in relation to sex, drugs and violence when the youth may get lost or even lose their lives. Household surveys like PNAD and Census, both from IBGE, helps us to qualify and quantify these events through direct questions about how many sons and daughters they have had and how many of those are alive. This gender distinction plays a fundamental role in the precocious mortality rate. In the case of the youngest child, further questions are asked concerning the date of birth, with the aim of inferring their age. We have opted for this late information because it allows for a greater control of the studied events. Beyond this general information, we have also opted for selecting a group of women aged between 40 and 50 years old after the birth peak that happens until they are 35 years old – reducing the effects of child mortality, which do not interest us in this study apart from attributing greater uniformity (and meaning) to the data.

Few events are sadder than when a mother loses her youngest child, especially when they are aged between 40 to 50 years old, thus inverting the natural chain of life events. This issue will be at the centre of our concern now (obs: the appendix present detailed statistics). Chances are 36% smaller for the youngest to be alive if he is male, presenting a decreasing trend in relation to the mother's age. When looking at the mother's educational attainment, chances are positive (2,3 times larger for those with over 12 years of schooling). In regional terms, the chances of finding a living youngest are smaller in the slums (17% smaller) and rural areas (8% smaller than in urban areas). In metropolitan areas, it is 14% bigger. Among the States, only 2 have chances that are statistically meaningful at 95%, greater than Sao Paulo: both in the South Region (Rio Grande do Sul with 7% and Santa Catarina with 19%)

Logistic Regression - Mothers aged between 40 and 50 years old

Youngest born child still alive

Parameter	Category	sig	Conditional Odds ratio
Intercept		**	.
filhosex	Man	**	0.64
filhosex	Woman		1.00
IDADE	Age	**	0.95
IDADE2	Age2	**	1.00
cor	Asian	**	1.25
cor	Ignored		4524744.16
cor	Indígenous	**	0.64
cor	Mulato	**	0.82
cor	Black	**	0.67
cor	Zwhite		1.00
edu	1 to 3 years of schooling	**	0.80
edu	4 to 7 years of schooling	**	1.04
edu	8 to 11 years of schooling	**	1.51
edu	12 to more years of schooling	**	2.29
edu	ZNo instruction	**	0.70
edu	Ignored		1.00
RFPC	Income	**	1.00
favela	Slum	**	0.83
favela	ZNo Slum		1.00
NEW	Metropolitan	**	1.14
NEW	Rural	**	0.92
NEW	Urban		1.00
chavuf	AC	**	0.58
chavuf	AL	**	0.82
chavuf	AM	**	0.96
chavuf	AP		1.02
chavuf	BA	**	0.74
chavuf	CE	**	0.44
chavuf	DF		1.00
chavuf	ES	**	0.76
chavuf	GO	**	0.83
chavuf	MA	**	0.46
chavuf	MG	**	0.89
chavuf	MS	**	0.97
chavuf	MT	**	0.77
chavuf	PA	**	0.69
chavuf	PB	**	0.47
chavuf	PE	**	0.55
chavuf	PI	**	0.52
chavuf	PR	**	0.88
chavuf	RJ	**	0.89
chavuf	RN	**	0.47
chavuf	RO	**	0.93
chavuf	RR		0.98
chavuf	RS	**	1.07
chavuf	SC	**	1.19
chavuf	SE	**	0.70

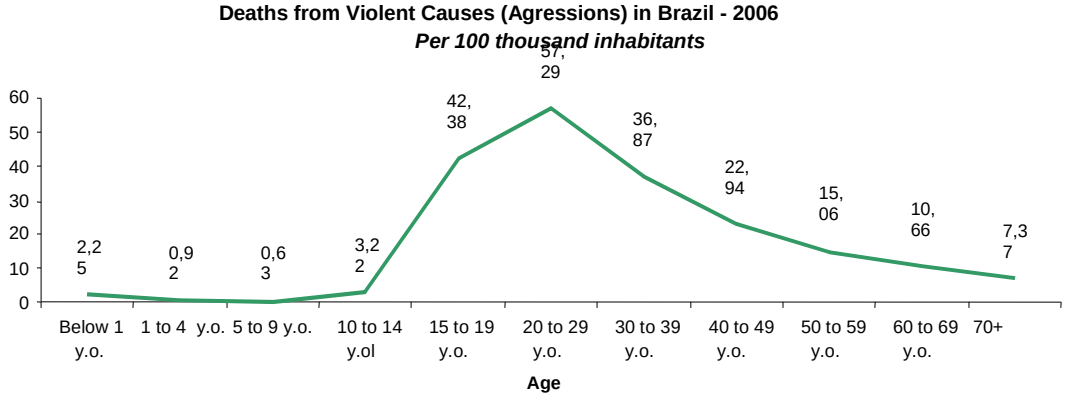
Parameter	Category	sig	Conditional Odds ratio
chavuf	TO	**	0.63
chavuf	ZZZSP		1.00

** statistically significant at the trust level of 90% . ** statistically significant at the trust level of 90% 95%*
Source: CPS/IBRE/FGV from PNAD/IBGE microdata

We will replicate the previous model considering only mothers who are 40 to 50 years old, adding an interactive term (gender x inhabitants of the slum – see appendix b.3).The results show that not only men and slum inhabitants present a higher precocious mortality rate, but also that the interaction of these two factors is significant. This points out to an important focus for the policies fighting the causes and consequences of violence.

5.2 Youth Problems

When seeking the specific causes behind the increase in youth morbidity, aggressions arise first, as the graph below illustrates, per age group.



Source: CPS/IBRE/FGV from **DATASUS/MS data**

The table below shows that the morbidity level per 100 thousand inhabitants is 10 times bigger for men (23,65) than for women (2,1) reaching the highest level from 10 to 40 years old, peaking between 15 and 19 years old at 99,3 thousand for each 100 thousand (both genders). That is, almost one per 1,000 young people per year, which can be

considered a civil war toll, as it is commonly referred to in the press because during the war young people death rate is the highest.

Violent Death (Agression) in Brazil
Per 100 thousand inhabitants

	Total	Men	Women
TOTAL	25,77	23,65	2,10
Below 1 year old	2,25	1,90	1,93
1 to 4 years old	0,92	0,53	0,37
5 a 9 anos	0,63	2,37	0,89
10 to 14 years old	3,22	***40,86***	2,83
15 to 19 years old	42,38	***99,30***	6,56
20 to 29 years old	57,29	***27,75***	2,63
30 to 39 years old	36,87	17,78	2,06
40 to 49 years old	22,94	9,65	0,91
50 to 59 years old	15,06	5,70	0,84
60 to 69 years old	10,66	3,75	0,69
70+	7,37	11,68	1,35

Source: CPS/IBRE/FGV from DATASUS 2005/MS data

The second cause of precocious deaths is car accident that affects more men than women, according to the table below:

Car Accident Deaths in Brazil
Per 100 thousand inhabitants

	Total	Men	Women
TOTAL	19,83	16,14	3,69
Below 1 year old	3,20	10,34	6,61
1 to 4 years old	4,08	4,20	2,52
5 a 9 anos	4,67	4,01	1,84
10 to 14 years old	5,78	13,80	4,04
15 to 19 years old	17,30	***45,39***	8,05
20 to 29 years old	28,91	***18,32***	2,88
30 to 39 years old	25,72	***18,12***	3,28
40 to 49 years old	24,74	13,32	2,87
50 to 59 years old	23,08	11,53	3,61
60 to 69 years old	24,66	11,69	5,15
70+	29,93	9,16	2,72

Fonte: CPS/IBRE/FGV a partir dos dados do DATASUS 2005 /MS

The mortality peak from car accidents is also reached between 15 and 19 years old (45,39 per each 100 thousand inhabitants; once more for both genders).

The objective of this study was (i) to approach the issues that carry the features of the young single male, such as drug consumption, car accidents (upper-class, well-to-do young males) and imprisonment (bottom-class young, essentially males), and (ii) to treat the associated factors in an integrated way.

As the profile of the prison inmate and of the drug consumer above, the profile of the car accident victim is of a young single male. The difference is that, in the first case, victims have low income and in the last two cases, high income. Hormones do not belong to a social class, only their outward expression changes.

One of the two exceptions in this picture of the economic elite that could be interpreted as a side effect to the drug consumption, such as delay in paying bills such as rent and mortgage - higher amongst the economic elite and also with a symbolic weight in the drug universe - is the greater occurrence of violence close to the confessed drug consumer: 64% live in violent neighborhoods against 28% of the population.

This research reveals that the profile of the Brazilian prison inmate is of a male (96% are men and 52% are between 20 and 29 years old), single (79%) with some but not much education (21% have 8 o more years of study). The probability of the individual with all adverse features to be imprisoned is 0.69%. If this individual at maximum risk was a woman the probability would fall to 0.14%. That is, in terms of criminality determinants , the gender variable is the most fundamental. The female counterpart of the young single male predisposition to criminal activities is teenage pregnancy.

We use the introduction of the new Brazilian traffic code in January 1998 as a laboratory to study the effects of the changes in the legislation and in the associated penalties on the behaviour of drivers. Men are more exposed to accidents because they travel to work more than women, but they are less sensitive to tougher traffic laws than women. The new traffic code has significantly reduced traffic deaths in Brazil in at least 5,8% - the rate has fallen twice more for women than for men.

5.3 the State of the Youth

The results found show completely different degrees in these issues for men and women. The main characters in this drama are young single male, suggesting the need for distinguished policies according not only to age, but also to gender. The magnitude of each problem changes according to each male's social class. Prisons concern poor males, while car accidents and drug consumption concern elite males.

It is not written anywhere in our Constitution, but States are the main guardians of the Brazilian youth. In the same way as municipalities look after the interests of the children, including vaccination and primary school, and the federal government takes care of the social security and disabled people, the States have attributions that make them the tutors of the youth. The constitutional responsibilities of the States include: education (secondary school), problem-areas that carry the face of Brazilian youth such as security (violence and drugs), traffic (accidents).

As a consequence, standard human development measures such as life expectancy, school attendance rate and income among others that have evolved for the population in general, present different trajectories in the case of young people. Violence, unemployment, and car accidents - ever present in the news - are areas where we have clearly evolved as a society. The objective of this research is to discuss some obscure aspects of this trajectory like the use of drugs, life in prisons and deaths by car accidents, using household surveys as the searchlight in providing a north for the actions of the State, or as we argue here, of the states.

The youth are a real mystery, not only in the eyes of the state and their parents, but also to themselves. As a consequence of this difficulty, in the last few years there has been a relative failure of initiatives targeting this public, such as Primeiro Emprego and Soldado Cidadão programs. Although there have been new more promising initiatives - like the recently announced extension of the maximum age to receive the Bolsa Familia grant from 15 to 17 years of age, as well as the direct delivery of the benefit to the young person (and not to their mother)[6]., the expansion of the FUNDEB to include resources for the secondary

[6] http://www3.fgv.br/ibrecps/EDJ/referencia/fc148a.PDF

schools and finally, the PROUNI - which exemplifies the attempt to optimize the use of fiscal benefits, hitherto incurred by private universities, to address the chronic lack of university students in the country.

Brazil is used to promulgating national-level laws, without testing them at the State level, contrary to the US for instance. As a result, we also make mistakes at the national level and learn very little from our mistakes and achievements. In this sense, we advocate the concession of greater freedom for the States to promulgate their own laws in areas where the diversity is great between different territories and the related knowledge is scarce. In short, the concession of greater freedom for the states to define their laws would allow for greater adaptability to local conditions, working as useful laboratories in the analysis of the causes of the studied problems and the effectiveness of the specific actions.

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APPENDICES A: Bivariate Exercises

APPENDIX A.1: Prisoners Panorama

http://www3.fgv.br/ibrecps/EDJ/Panorama_Censo_eng/index.htm

Vertical							
Total Population							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Total	100	100	100	100	100	100	100

Vertical							
Gender							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Male	48,26	96,61	96,58	92,61	97,79	92,55	98,02
Female	51,74	3,39	3,42	7,39	2,21	7,45	1,98

Vertical							
Age Range							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
		3,15					
20 to 24	15,89	26,14	27,92	21,37	28,37	23,94	26,34
25 to 29	13,63	25,82	24,56	26,57	27,51	22,6	21,91
30 to 35	15,35	20,45	21,94	23,34	20,23	23,5	23,97
36 to 39	9,54	9,02	9,95	9,41	8,9	10,82	12,34
40 to 44	10,38	6,99	8,15	7,57	6,98	8,72	6,8
45 to 49	8,59	3,98	3,03	3,9	4,11	4	5,59
50 to 54	6,94	1,93	1,59	2,96	1,81	2,56	1,33
55 to 59	5,38	1,13	1,47	2,48	0,96	1,02	0,73
60 or more	14,31	1,39	1,38	2,41	1,13	2,83	0,99

Vertical							
Race							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
White	55,75	43,61	8,74	27,04	45,42	73,66	35,93
Black	6,75	11,73	14,67	13,03	11,47	10,34	10,65
Asian	0,55	0,14	0,36	0,24	0,14	0	0
Mulatto	35,94	35,2	75,42	58,58	30,39	14,88	50,62
Indigenous	0,41	0,3	0	0,7	0,22	0,68	0
Ignored	0,61	9,01	0,81	0,41	12,36	0,44	2,8

Vertical							
Person with Disability							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Yes	20,94	8,96	16,25	14,08	7,81	11,12	5,26
No	79,06	91,04	83,75	85,92	92,19	88,88	94,74

Vertical							
Person with Incapacity							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Yes	3,26	2,35	1,43	4,12	2,07	2,13	2,95
No	96,74	97,65	98,57	95,88	97,93	97,87	97,05

Vertical							
Immigration - State / Country							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Less than 1 year	0,38	0,44	0,77	0,25	0,51	0,26	0,26
1 to 5 years	3,13	3,7	8,34	3,68	3,58	2,31	5,73
6 to 10 years	2,84	3,46	6,6	2,12	3,78	0,75	5,12
More than 10 years	15,58	11,83	18,24	5,18	12,65	6,13	28,89

Did not migrate	78,07	80,56	66,06	88,77	79,48	90,55	60,01

Vertical							
Immigration - Municipality							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Less than 1 year	1,48	17,57	10,24	8,24	21,46	6,76	2,57
1 to 5 years	10,1	34,26	42,42	37,1	34,02	42,61	20,08
6 to 10 years	7,86	5,38	8,35	7,03	4,51	8,48	8,34
More than 10 years	31,28	7,68	13,76	12,23	4,55	15,2	28,76
Did not migrate	49,27	35,11	25,23	35,41	35,47	26,94	40,25

Vertical							
Years of Schooling							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
No instruction or less than 1 year	13,19	12,23	15,87	29,5	9,3	10,39	12,31
1 to 3	16,84	18,66	25,83	23,13	17,8	15,87	23,07
4 to 7	30,24	46,55	38,39	27,98	51,3	39,2	37,32
8 to 11	29,75	19,15	15,33	17,23	18,82	22,9	24,35
12 or more	9,1	2	1,44	0,91	1,79	6,7	1,54
Ignored	0,89	1,42	3,14	1,25	0,99	4,93	1,41

Vertical							
Religion							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
No religion	6,75	16,21	28,98	22,95	14,21	8,23	27,29
Catholic	74,38	51,68	51,77	61,64	47,28	77,01	54,49
Evangelic	15,12	12,64	17,27	13,98	12,62	9,92	13,29
Spiritualistic	1,7	0,59	0,35	0,41	0,59	0,55	1,12
Afro-Brazilian	0,39	0,58	0	0,31	0,41	3,15	0
Oriental	0,36	0,29	0	0	0,35	0,41	0,41
Other	1,3	18,01	1,62	0,71	24,53	0,73	3,4

Vertical							
Matrimonial Situation							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
With Partner	64,88	1,83	0,67	6,15	0,78	5,62	0
Single	35,12	98,17	99,33	93,85	99,22	94,38	100

Vertical							
Matrimonial Situation - Detailed							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Civil and Religious Marriage	32,73	0,82	0	1,01	0,49	4,58	0
Only Civil Marriage	11,45	0,31	0	1,61	0,09	0,37	0
Common Law Marriage	17,83	0,7	0,67	3,54	0,2	0,66	0
Separated	2,32	14,32	9,81	18,43	13,8	17,18	17,07
Legally Separated	1,8	2,05	0,49	1,15	2,06	4,09	3,31
Divorced	1,41	1,82	0,67	1,75	1,86	3,26	0,97
Widow(er)	5,48	0,88	1,05	1,59	0,78	1,35	0
Single	24,12	79,1	87,3	70,93	80,72	68,49	78,65

Vertical							
Maternity							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Is a mother	40,68	2,41	2,92	6,17	1,5	5,17	1,49
Is not a mother	10,82	0,98	0,5	1,22	0,71	2,29	0,5
Man, child or ignored	48,5	96,61	96,58	92,61	97,79	92,55	98,02

Vertical							
Household Situation							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Urbanized Area	81,83	61,04	21,84	67,48	60,2	60,31	75,04
Non-Urbanized Area	0,71	6,61	10,12	0	5,24	34,57	0
Isolated Urbanized Area	0,6	1,67	0	0	2,36	0	0
Rural Dwelling (Settlement)	1,7	1,09	0	8,46	0	0	0
Rural Area, Excluding Rural Dwelling	14,45	29,59	68,04	24,06	32,2	5,12	24,96

Vertical							
City Size							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Capital - Metropolitan Region	22,18	28,8	0	42,45	27,83	10,57	52,28
Periphery - Metropolitan Region	19,42	24,12	0	22	23,74	43,92	16
Large Urban	15,27	15,13	31,96	27,31	10,22	27,53	23,48
Medium Urban	17,66	9,16	0	2,33	10,58	12,86	8,24
Small Urban	10,08	1,78	0	1,84	2,15	0	0
Rural	15,4	21,02	68,04	4,07	25,47	5,12	0

Vertical							
Place of Residence							
Category (%)	**Total Population**	**Total Population of Prisoners**	**North**	**Northeast**	**Southeast**	**South**	**Center-West**
Penitentiary	0,09	100	100	100	100	100	100

Source: *CPS/FGV based on Census 2000/IBGE microdata*

APPENDIX A.2: Agressions and Car Accidents rates – Cross-Tabulations

Deaths – per 100 thousand people
External Causes
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**77.19**	**76.57**	**74.38**	**91.50**	**69.73**	**70.81**	**72.99**	**72.81**	**70.02**	**69.22**
São Paulo	96.48	93.77	90.74	102.25	91.80	89.08	103.71	80.61	73.54	67.72
Minas Gerais	60.71	60.25	57.66	65.29	45.03	48.65	44.81	58.03	60.05	60.89
Rio de Janeiro	127.68	121.15	115.39	115.88	103.87	102.49	122.53	105.32	98.94	97.96
Bahia	46.13	48.43	48.98	76.77	48.38	48.57	45.80	54.68	54.89	55.45
Rio Grande do Sul	68.95	69.02	64.59	79.61	63.65	62.71	61.89	64.62	64.50	63.28
Paraná	81.55	75.56	72.25	88.05	69.94	70.46	69.80	76.72	82.22	81.01
Pernambuco	82.32	91.99	98.52	122.73	93.19	93.69	77.34	90.63	88.22	89.54
Ceará	51.04	52.16	45.10	78.78	52.98	53.59	50.63	61.41	62.01	62.97
Pará	70.97	76.60	78.92	71.60	35.64	58.20	68.99	67.11	48.27	55.76
Maranhão	24.90	27.65	30.76	53.20	27.43	29.55	29.62	35.89	34.16	42.87
Santa Catarina	76.89	75.76	63.53	87.62	62.21	61.39	66.57	66.48	66.77	66.43
Goiás	74.09	77.62	70.25	91.88	70.67	69.55	87.65	71.34	74.97	73.75
Paraíba	44.00	41.36	40.19	57.47	39.78	35.21	36.90	44.92	53.37	54.09
Espírito Santo	98.86	101.91	110.20	130.39	96.02	94.32	102.96	99.15	98.14	96.99
Amazonas	66.62	67.24	68.55	62.95	48.14	56.70	62.81	59.57	46.16	46.40
Alagoas	61.34	62.57	62.66	83.36	58.95	61.84	56.09	69.30	69.86	73.68
Piauí	25.75	26.74	28.46	50.37	39.04	41.33	34.46	47.17	49.48	50.38
Rio Grande do Norte	51.49	54.01	48.94	76.61	54.74	50.60	47.71	51.17	54.55	55.75
Mato Grosso	78.97	85.45	89.36	117.81	96.75	91.94	149.73	95.33	96.01	93.96
Distrito Federal	110.10	94.43	93.77	96.19	86.63	82.82	135.70	90.26	82.35	80.87
Mato Grosso do Sul	103.47	102.43	84.28	95.37	78.97	77.03	101.19	85.78	88.38	87.38
Sergipe	72.92	61.55	65.15	97.52	68.42	69.97	64.62	66.44	69.30	67.86
Rondônia	124.83	129.99	148.75	127.51	87.98	143.19	247.94	143.57	92.23	90.04
Tocantins	49.80	51.05	59.05	86.30	61.36	64.32	72.00	71.05	73.07	64.00
Acre	97.10	102.23	95.18	69.18	53.81	81.94	98.15	83.13	45.72	52.71
Amapá	121.00	82.39	89.60	86.77	70.44	84.92	116.00	83.46	69.46	71.79
Roraima	147.19	150.16	176.59	202.10	106.66	122.81	223.70	105.55	88.87	79.80

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Total
External Causes - Men
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**97,903**	**99,464**	**98,118**	**98,028**	**99,502**	**102,311**	**106,714**	**106,815**	**107,032**	**106,651**
São Paulo	28,045	27,715	27,561	29,365	29,172	29,253	28,179	26,666	24,545	22,498
Minas Gerais	7,905	8,053	7,728	6,931	6,513	7,255	7,810	8,913	9,491	9,719
Rio de Janeiro	14,241	13,858	13,341	12,890	12,614	12,646	13,688	13,257	12,656	12,665
Bahia	4,853	5,073	5,205	4,994	5,165	5,416	6,060	6,210	6,291	6,503
Rio Grande do Sul	5,322	5,495	5,127	5,158	5,250	5,417	5,551	5,485	5,680	5,662
Paraná	5,662	5,622	5,438	5,403	5,477	5,743	5,998	6,291	6,921	6,928
Pernambuco	5,208	5,943	6,449	6,233	6,393	6,680	6,605	6,525	6,433	6,533
Ceará	2,865	3,056	2,654	3,127	3,301	3,476	3,785	4,075	4,238	4,298
Pará	1,740	1,928	2,040	1,945	1,875	2,154	2,558	2,722	2,890	3,392
Maranhão	1,075	1,168	1,345	1,002	1,280	1,431	1,579	1,727	1,716	2,186
Santa Catarina	2,985	3,028	2,553	2,670	2,675	2,783	2,977	3,102	3,143	3,178
Goiás	2,608	2,961	2,700	2,965	2,908	2,984	3,237	3,157	3,414	3,448
Paraíba	1,188	1,172	1,128	1,080	1,172	1,041	1,432	1,363	1,632	1,652
Espírito Santo	2,354	2,490	2,689	2,462	2,553	2,567	2,776	2,750	2,798	2,764
Amazonas	1,013	1,051	1,082	1,045	1,149	1,058	1,147	1,190	1,224	1,298
Alagoas	1,407	1,398	1,414	1,231	1,406	1,544	1,747	1,781	1,824	1,939
Piauí	559	600	635	639	914	984	1,010	1,116	1,241	1,263
Rio Grande do Norte	1,103	1,146	1,062	1,099	1,253	1,188	1,264	1,248	1,402	1,413
Mato Grosso	1,562	1,660	1,742	1,789	2,087	2,043	2,207	2,173	2,272	2,219
Distrito Federal	1,553	1,467	1,490	1,419	1,500	1,516	1,523	1,663	1,595	1,565
Mato Grosso do Sul	1,664	1,653	1,416	1,348	1,372	1,367	1,515	1,532	1,648	1,610
Sergipe	959	853	909	981	1,027	1,104	1,154	1,056	1,124	1,109
Rondônia	865	874	1,025	906	1,041	1,131	1,248	1,202	1,217	1,188
Tocantins	408	434	536	521	561	631	652	714	763	700
Acre	253	278	272	205	249	269	347	289	244	296
Amapá	291	246	286	296	307	342	370	345	346	369
Roraima	215	242	291	324	288	288	295	262	284	255

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – per 100 thousand people
External Causes - Men
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**63.42**	**63.71**	**62.01**	**76.73**	**58.60**	**59.90**	**61.55**	**61.40**	**58.79**	**57.84**
São Paulo	81.77	79.46	77.83	87.84	78.77	76.72	88.83	68.66	61.46	55.56
Minas Gerais	47.28	47.51	45.07	51.88	36.40	39.59	36.58	47.91	49.85	50.47
Rio de Janeiro	106.00	102.00	97.30	98.14	87.65	85.96	103.93	88.88	83.06	82.25
Bahia	37.72	39.81	40.40	62.23	39.52	40.70	38.43	46.11	45.90	47.03
Rio Grande do Sul	54.85	56.14	51.83	64.79	51.53	52.09	50.13	52.06	52.85	52.16
Paraná	64.43	61.31	58.56	72.06	57.27	58.67	58.19	63.34	68.13	67.45
Pernambuco	69.12	79.45	85.56	107.61	80.74	82.69	68.03	79.77	77.13	77.58
Ceará	42.05	44.02	37.72	65.45	44.42	45.46	42.70	52.36	52.98	53.02
Pará	57.76	63.22	65.31	60.82	30.28	48.99	58.96	58.14	42.15	48.57
Maranhão	20.22	22.00	25.04	42.34	22.65	24.68	24.40	29.32	28.43	35.78
Santa Catarina	60.67	60.86	50.60	71.17	49.94	50.41	54.09	55.14	54.27	54.11
Goiás	59.40	63.48	56.62	74.94	58.12	57.36	71.56	59.24	61.75	61.26
Paraíba	35.16	35.12	33.58	48.34	34.03	29.80	30.81	38.68	45.67	45.91
Espírito Santo	82.91	86.96	92.54	110.62	82.43	80.28	87.92	84.31	83.21	80.99
Amazonas	56.52	57.08	57.05	53.53	40.85	47.73	54.25	51.08	38.35	39.78
Alagoas	51.47	52.38	52.49	69.33	49.81	53.52	49.52	60.89	61.06	64.23
Piauí	20.21	22.22	23.35	40.59	32.15	33.98	27.53	38.09	41.61	41.97
Rio Grande do Norte	41.95	44.05	40.36	63.02	45.12	41.69	40.23	43.09	47.21	47.00
Mato Grosso	65.23	72.23	74.38	101.23	83.33	78.56	125.65	81.62	82.34	79.04
Distrito Federal	87.42	77.70	77.02	78.76	73.13	70.77	111.83	75.58	69.61	66.96
Mato Grosso do Sul	85.32	83.82	70.70	79.36	66.02	63.94	82.91	70.39	73.67	71.02
Sergipe	58.57	51.27	53.74	81.35	57.55	59.88	55.53	56.13	57.92	56.28
Rondônia	101.48	110.30	125.90	108.37	75.45	122.22	211.79	124.24	80.52	77.29
Tocantins	39.84	39.92	48.10	71.26	48.48	52.37	59.58	57.78	59.43	53.52
Acre	80.28	83.83	79.17	57.65	44.66	68.88	83.07	70.24	38.60	45.75
Amapá	99.47	68.70	75.59	74.23	64.36	74.47	99.82	69.72	59.94	61.90
Roraima	118.08	131.66	152.48	163.70	88.78	108.16	190.18	91.57	74.45	65.01

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Total
External Causes - Women
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**21,105**	**19,988**	**19,437**	**18,750**	**18,812**	**18,544**	**19,718**	**19,777**	**20,368**	**20,912**
São Paulo	5,046	4,992	4,569	4,817	4,822	4,703	4,712	4,630	4,816	4,912
Minas Gerais	2,203	2,152	2,151	1,785	1,541	1,658	1,756	1,880	1,940	2,007
Rio de Janeiro	2,884	2,581	2,455	2,287	2,302	2,393	2,400	2,435	2,407	2,391
Bahia	1,082	1,095	1,098	1,157	1,152	1,044	1,157	1,154	1,226	1,155
Rio Grande do Sul	1,368	1,260	1,262	1,180	1,230	1,105	1,301	1,321	1,252	1,207
Paraná	1,504	1,307	1,270	1,192	1,202	1,144	1,195	1,323	1,420	1,384
Pernambuco	991	928	970	872	986	880	899	888	924	1,007
Ceará	585	565	516	632	633	621	699	703	719	806
Pará	398	408	424	341	331	403	435	418	419	500
Maranhão	238	293	302	253	269	281	338	387	346	432
Santa Catarina	797	741	652	617	657	605	687	638	724	723
Goiás	643	642	603	660	624	632	728	641	723	701
Paraíba	297	207	222	204	198	189	254	216	267	293
Espírito Santo	452	425	501	440	421	447	474	481	501	546
Amazonas	181	182	217	181	205	199	181	198	249	216
Alagoas	270	272	272	248	258	239	232	246	263	285
Piauí	150	121	136	147	194	209	249	261	235	253
Rio Grande do Norte	248	258	225	235	264	247	233	234	218	262
Mato Grosso	322	296	346	290	336	347	420	364	377	415
Distrito Federal	401	315	324	313	271	258	325	321	289	325
Mato Grosso do Sul	345	357	269	272	264	278	332	334	328	371
Sergipe	234	171	192	192	194	186	189	194	220	228
Rondônia	196	156	186	158	171	194	211	186	175	195
Tocantins	101	120	121	110	149	144	136	163	175	136
Acre	53	61	55	41	51	51	63	53	45	45
Amapá	63	49	53	50	29	48	60	68	55	59
Roraima	53	34	46	76	58	39	52	40	55	58

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – per 100 thousand people
External Causes - Women
Period: 1996 – 2005

Unid.Federação	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**13.67**	**12.80**	**12.28**	**14.68**	**11.08**	**10.86**	**11.37**	**11.37**	**11.19**	**11.34**
São Paulo	14.71	14.31	12.90	14.41	13.02	12.33	14.85	11.92	12.06	12.13
Minas Gerais	13.18	12.69	12.54	13.36	8.61	9.05	8.22	10.11	10.19	10.42
Rio de Janeiro	21.47	19.00	17.90	17.41	16.00	16.27	18.22	16.32	15.80	15.53
Bahia	8.41	8.59	8.52	14.42	8.81	7.85	7.34	8.57	8.95	8.35
Rio Grande do Sul	14.10	12.87	12.76	14.82	12.07	10.63	11.75	12.54	11.65	11.12
Paraná	17.12	14.25	13.68	15.90	12.57	11.69	11.59	13.32	13.98	13.47
Pernambuco	13.15	12.41	12.87	15.05	12.45	10.89	9.26	10.86	11.08	11.96
Ceará	8.59	8.14	7.33	13.23	8.52	8.12	7.89	9.03	8.99	9.94
Pará	13.21	13.38	13.57	10.66	5.35	9.17	10.03	8.93	6.11	7.16
Maranhão	4.48	5.52	5.62	10.69	4.76	4.85	5.22	6.57	5.73	7.07
Santa Catarina	16.20	14.89	12.92	16.45	12.27	10.96	12.48	11.34	12.50	12.31
Goiás	14.65	13.76	12.64	16.68	12.47	12.15	16.09	12.03	13.08	12.45
Paraíba	8.79	6.20	6.61	9.13	5.75	5.41	5.47	6.13	7.47	8.14
Espírito Santo	15.92	14.84	17.24	19.77	13.59	13.98	15.01	14.75	14.90	16.00
Amazonas	10.10	9.88	11.44	9.27	7.29	8.98	8.56	8.50	7.80	6.62
Alagoas	9.88	10.19	10.10	13.97	9.14	8.28	6.58	8.41	8.80	9.44
Piauí	5.42	4.48	5.00	9.34	6.82	7.22	6.79	8.91	7.88	8.41
Rio Grande do Norte	9.43	9.92	8.55	13.48	9.51	8.67	7.42	8.08	7.34	8.72
Mato Grosso	13.45	12.88	14.77	16.41	13.42	13.34	23.91	13.67	13.66	14.78
Distrito Federal	22.57	16.68	16.75	17.37	13.21	12.04	23.86	14.59	12.61	13.91
Mato Grosso do Sul	17.69	18.10	13.43	16.01	12.70	13.00	18.17	15.35	14.66	16.36
Sergipe	14.29	10.28	11.35	15.92	10.87	10.09	9.09	10.31	11.34	11.57
Rondônia	22.99	19.69	22.85	18.90	12.39	20.96	35.81	19.23	11.58	12.69
Tocantins	9.86	11.04	10.86	15.04	12.88	11.95	12.43	13.19	13.63	10.40
Acre	16.82	18.40	16.01	11.53	9.15	13.06	15.08	12.88	7.12	6.96
Amapá	21.53	13.68	14.01	12.54	6.08	10.45	16.19	13.74	9.53	9.90
Roraima	29.11	18.50	24.10	38.40	17.88	14.65	33.52	13.98	14.42	14.79

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Total
Aggressions
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**38,894**	**40,507**	**41,950**	**42,914**	**45,360**	**47,943**	**49,695**	**51,043**	**48,374**	**47,578**
São Paulo	12,350	12,552	14,001	15,810	15,631	15,745	14,494	13,903	11,216	8,727
Minas Gerais	1,225	1,307	1,471	1,546	2,056	2,344	2,977	3,822	4,241	4,208
Rio de Janeiro	8,049	7,966	7,570	7,249	7,337	7,352	8,321	7,840	7,391	7,098
Bahia	1,880	1,975	1,251	890	1,223	1,579	1,735	2,155	2,255	2,823
Rio Grande do Sul	1,466	1,633	1,514	1,523	1,662	1,848	1,906	1,900	1,963	2,015
Paraná	1,377	1,586	1,633	1,698	1,766	2,039	2,226	2,525	2,813	2,981
Pernambuco	3,015	3,710	4,428	4,200	4,276	4,697	4,431	4,512	4,173	4,307
Ceará	882	1,021	941	1,108	1,229	1,298	1,443	1,560	1,576	1,692
Pará	688	746	769	637	806	955	1,186	1,383	1,522	1,926
Maranhão	350	320	266	251	344	536	576	762	696	903
Santa Catarina	404	415	399	381	423	460	572	653	632	616
Goiás	705	695	636	800	1,011	1,102	1,275	1,259	1,427	1,398
Paraíba	628	491	454	404	519	490	608	620	659	740
Espírito Santo	1,199	1,426	1,692	1,543	1,449	1,472	1,639	1,640	1,630	1,600
Amazonas	449	467	536	527	557	483	512	561	523	598
Alagoas	740	642	585	552	724	836	989	1,041	1,034	1,211
Piauí	126	153	141	131	234	279	315	316	347	386
Rio Grande do Norte	237	237	223	226	251	316	301	409	342	408
Mato Grosso	659	767	846	825	996	986	963	929	867	907
Distrito Federal	698	668	720	723	770	774	744	856	815	745
Mato Grosso do Sul	727	735	669	572	644	619	694	709	650	628
Sergipe	238	190	176	338	416	532	549	473	464	492
Rondônia	301	357	489	434	466	565	606	559	562	552
Tocantins	128	121	136	148	179	223	180	225	205	202
Acre	102	100	109	51	108	122	151	135	115	125
Amapá	164	137	163	193	155	184	181	190	173	196
Roraima	107	90	132	154	128	107	121	106	83	94

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – per 100 thousand people
Aggressions
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**25.20**	**25.94**	**26.51**	**33.59**	**26.71**	**28.07**	**28.66**	**29.34**	**26.57**	**25.80**
São Paulo	36.01	35.99	39.54	47.29	42.21	41.29	45.69	35.80	28.08	21.55
Minas Gerais	7.33	7.71	8.58	11.57	11.49	12.79	13.94	20.54	22.28	21.85
Rio de Janeiro	59.91	58.63	55.21	55.19	50.98	49.98	63.18	52.56	48.51	46.10
Bahia	14.61	15.50	9.71	11.09	9.36	11.87	11.00	16.00	16.45	20.42
Rio Grande do Sul	15.11	16.69	15.31	19.13	16.31	17.77	17.21	18.03	18.26	18.56
Paraná	15.67	17.30	17.58	22.65	18.47	20.83	21.59	25.42	27.69	29.02
Pernambuco	40.01	49.60	58.75	72.51	54.00	58.15	45.64	55.16	50.03	51.15
Ceará	12.95	14.71	13.37	23.19	16.54	16.98	16.28	20.04	19.70	20.87
Pará	22.84	24.46	24.62	19.92	13.02	21.72	27.34	29.54	22.20	27.58
Maranhão	6.58	6.03	4.95	10.61	6.09	9.25	8.90	12.94	11.53	14.78
Santa Catarina	8.21	8.34	7.91	10.16	7.90	8.33	10.39	11.61	10.91	10.49
Goiás	16.06	14.90	13.34	20.22	20.21	21.18	28.19	23.62	25.81	24.84
Paraíba	18.58	14.71	13.52	18.08	15.07	14.03	13.08	17.59	18.44	20.57
Espírito Santo	42.23	49.80	58.23	69.33	46.78	46.04	51.91	50.28	48.48	46.88
Amazonas	25.05	25.36	28.26	26.99	19.80	21.79	24.22	24.08	16.39	18.33
Alagoas	27.07	24.05	21.71	31.09	25.65	28.98	28.03	35.59	34.61	40.12
Piauí	4.56	5.67	5.18	8.32	8.23	9.63	8.59	10.79	11.63	12.83
Rio Grande do Norte	9.01	9.11	8.47	12.96	9.04	11.09	9.58	14.12	11.52	13.57
Mato Grosso	27.52	33.37	36.12	46.68	39.77	37.91	54.82	34.89	31.42	32.31
Distrito Federal	39.29	35.38	37.22	40.13	37.54	36.13	54.63	38.90	35.57	31.88
Mato Grosso do Sul	37.28	37.27	33.40	33.68	30.99	28.95	37.98	32.57	29.06	27.70
Sergipe	14.54	11.42	10.40	28.03	23.31	28.86	26.42	25.14	23.91	24.97
Rondônia	35.31	45.06	60.07	51.91	33.77	61.06	102.84	57.78	37.18	35.91
Tocantins	12.50	11.13	12.21	20.24	15.47	18.51	16.45	18.21	15.97	15.45
Acre	32.37	30.16	31.73	14.34	19.37	31.24	36.15	32.81	18.19	19.32
Amapá	56.06	38.26	43.08	48.40	32.49	40.07	48.83	38.39	29.97	32.88
Roraima	58.76	48.96	69.17	77.81	39.46	40.18	78.01	37.05	21.76	23.96

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Total
Aggressions - Men
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**35,171**	**36,881**	**38,404**	**39,334**	**41,585**	**44,040**	**45,775**	**47,082**	**44,519**	**43,665**
São Paulo	11,390	11,522	12,965	14,676	14,477	14,639	13,441	12,869	10,356	7,947
Minas Gerais	1,046	1,131	1,276	1,332	1,807	2,103	2,684	3,452	3,871	3,833
Rio de Janeiro	7,382	7,310	6,994	6,687	6,780	6,759	7,731	7,306	6,880	6,572
Bahia	1,708	1,800	1,150	798	1,093	1,463	1,614	2,003	2,057	2,613
Rio Grande do Sul	1,276	1,443	1,333	1,360	1,487	1,669	1,709	1,724	1,769	1,809
Paraná	1,223	1,431	1,454	1,515	1,600	1,840	2,023	2,294	2,559	2,740
Pernambuco	2,764	3,462	4,146	3,937	3,970	4,395	4,148	4,240	3,898	4,024
Ceará	789	937	884	1,014	1,121	1,183	1,319	1,457	1,453	1,550
Pará	610	669	703	596	743	857	1,114	1,292	1,429	1,800
Maranhão	319	272	236	223	314	482	539	696	643	845
Santa Catarina	337	363	332	331	369	399	496	584	552	547
Goiás	599	604	552	684	878	976	1,134	1,125	1,284	1,273
Paraíba	522	447	413	370	474	443	554	583	594	681
Espírito Santo	1,074	1,296	1,523	1,412	1,333	1,338	1,489	1,497	1,495	1,452
Amazonas	417	432	481	475	521	428	477	526	474	551
Alagoas	671	580	541	497	657	781	919	972	958	1,136
Piauí	110	139	120	124	216	242	285	282	321	344
Rio Grande do Norte	202	210	203	201	231	291	278	377	321	365
Mato Grosso	567	675	750	755	914	893	870	837	768	815
Distrito Federal	626	613	661	656	717	724	688	779	754	688
Mato Grosso do Sul	646	656	596	508	571	554	613	644	595	558
Sergipe	206	172	162	297	378	500	512	439	434	463
Rondônia	255	324	444	394	419	500	561	507	528	503
Tocantins	108	102	117	133	163	199	159	203	187	181
Acre	87	86	97	44	95	110	140	120	105	112
Amapá	148	125	151	176	151	172	169	174	158	181
Roraima	89	80	120	139	106	100	109	100	76	82

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – per 100 thousand people
Aggressions - Men
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**22.78**	**23.62**	**24.27**	**30.79**	**24.49**	**25.78**	**26.40**	**27.06**	**24.45**	**23.68**
São Paulo	33.21	33.03	36.61	43.90	39.09	38.39	42.37	33.14	25.93	19.63
Minas Gerais	6.26	6.67	7.44	9.97	10.10	11.48	12.57	18.56	20.33	19.91
Rio de Janeiro	54.95	53.81	51.01	50.91	47.11	45.95	58.70	48.98	45.15	42.68
Bahia	13.28	14.12	8.93	9.94	8.36	10.99	10.23	14.87	15.01	18.90
Rio Grande do Sul	13.15	14.74	13.48	17.08	14.60	16.05	15.43	16.36	16.46	16.67
Paraná	13.92	15.61	15.66	20.21	16.73	18.80	19.62	23.10	25.19	26.68
Pernambuco	36.68	46.28	55.01	67.97	50.14	54.41	42.72	51.83	46.74	47.79
Ceará	11.58	13.50	12.56	21.22	15.09	15.47	14.88	18.72	18.17	19.12
Pará	20.25	21.94	22.51	18.64	12.00	19.49	25.68	27.59	20.84	25.78
Maranhão	6.00	5.12	4.39	9.42	5.56	8.31	8.33	11.82	10.65	13.83
Santa Catarina	6.85	7.30	6.58	8.82	6.89	7.23	9.01	10.38	9.53	9.31
Goiás	13.64	12.95	11.57	17.29	17.55	18.76	25.07	21.11	23.22	22.62
Paraíba	15.45	13.40	12.30	16.56	13.76	12.68	11.92	16.54	16.62	18.93
Espírito Santo	37.83	45.26	52.42	63.44	43.04	41.85	47.16	45.90	44.46	42.55
Amazonas	23.27	23.46	25.36	24.33	18.52	19.31	22.56	22.58	14.85	16.89
Alagoas	24.54	21.73	20.08	27.99	23.28	27.07	26.05	33.23	32.07	37.63
Piauí	3.98	5.15	4.41	7.88	7.60	8.36	7.77	9.63	10.76	11.43
Rio Grande do Norte	7.68	8.07	7.71	11.53	8.32	10.21	8.85	13.02	10.81	12.14
Mato Grosso	23.68	29.37	32.02	42.72	36.50	34.34	49.53	31.44	27.83	29.03
Distrito Federal	35.24	32.47	34.17	36.41	34.96	33.80	50.52	35.41	32.90	29.44
Mato Grosso do Sul	33.12	33.27	29.76	29.91	27.48	25.91	33.55	29.59	26.60	24.61
Sergipe	12.58	10.34	9.58	24.63	21.18	27.12	24.64	23.33	22.36	23.50
Rondônia	29.92	40.89	54.54	47.13	30.37	54.03	95.20	52.40	34.93	32.72
Tocantins	10.55	9.38	10.50	18.19	14.09	16.51	14.53	16.43	14.57	13.84
Acre	27.61	25.93	28.23	12.37	17.04	28.17	33.52	29.17	16.61	17.31
Amapá	50.59	34.91	39.91	44.14	31.65	37.45	45.59	35.16	27.37	30.36
Roraima	48.88	43.52	62.88	70.23	32.68	37.56	70.27	34.95	19.92	20.90

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Total
Aggressions - Women
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**3,682**	**3,587**	**3,503**	**3,536**	**3,743**	**3,851**	**3,867**	**3,937**	**3,830**	**3,884**
São Paulo	960	1,030	1,036	1,134	1,154	1,102	1,051	1,032	859	777
Minas Gerais	178	176	195	213	249	240	293	370	370	375
Rio de Janeiro	653	646	563	539	542	564	563	525	507	510
Bahia	172	174	100	90	127	116	119	152	195	209
Rio Grande do Sul	190	190	181	163	173	179	197	176	194	206
Paraná	154	155	179	181	164	196	202	229	250	241
Pernambuco	247	241	277	260	306	295	279	272	275	283
Ceará	85	84	56	93	107	115	124	103	123	141
Pará	78	77	66	39	63	98	72	90	93	124
Maranhão	29	46	29	27	30	54	37	66	53	58
Santa Catarina	67	52	67	50	54	61	76	69	80	68
Goiás	106	87	72	113	130	125	141	132	138	124
Paraíba	106	43	41	34	45	47	44	35	61	59
Espírito Santo	124	129	165	131	116	133	149	142	135	148
Amazonas	32	33	54	51	36	55	35	35	49	47
Alagoas	69	62	44	55	67	54	70	69	76	75
Piauí	15	14	20	6	17	36	28	33	26	42
Rio Grande do Norte	35	27	20	25	20	24	23	32	21	42
Mato Grosso	87	87	94	70	82	92	93	92	99	89
Distrito Federal	71	55	59	66	51	50	56	75	59	57
Mato Grosso do Sul	80	73	71	64	71	63	79	64	55	70
Sergipe	31	18	14	40	38	32	37	34	29	29
Rondônia	44	33	45	38	46	65	43	51	33	49
Tocantins	20	19	19	15	16	24	21	22	18	21
Acre	15	14	12	7	13	12	11	15	10	13
Amapá	16	12	12	17	4	12	12	16	15	15
Roraima	18	10	12	15	22	7	12	6	7	12

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – per 100 thousand people
Aggressions - Women
Period: 1996 – 2005

State	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
TOTAL	**2.39**	**2.30**	**2.21**	**2.77**	**2.20**	**2.25**	**2.23**	**2.26**	**2.10**	**2.11**
São Paulo	2.80	2.95	2.93	3.39	3.12	2.89	3.31	2.66	2.15	1.92
Minas Gerais	1.06	1.04	1.14	1.59	1.39	1.31	1.37	1.99	1.94	1.95
Rio de Janeiro	4.86	4.75	4.11	4.10	3.77	3.83	4.27	3.52	3.33	3.31
Bahia	1.34	1.37	0.78	1.12	0.97	0.87	0.75	1.13	1.42	1.51
Rio Grande do Sul	1.96	1.94	1.83	2.05	1.70	1.72	1.78	1.67	1.80	1.90
Paraná	1.75	1.69	1.93	2.41	1.71	2.00	1.96	2.31	2.46	2.35
Pernambuco	3.28	3.22	3.68	4.49	3.86	3.65	2.87	3.33	3.30	3.36
Ceará	1.25	1.21	0.80	1.95	1.44	1.50	1.40	1.32	1.54	1.74
Pará	2.59	2.53	2.11	1.22	1.02	2.23	1.66	1.92	1.36	1.78
Maranhão	0.55	0.87	0.54	1.14	0.53	0.93	0.57	1.12	0.88	0.95
Santa Catarina	1.36	1.05	1.33	1.33	1.01	1.10	1.38	1.23	1.38	1.16
Goiás	2.41	1.87	1.51	2.86	2.60	2.40	3.12	2.48	2.50	2.20
Paraíba	3.14	1.29	1.22	1.52	1.31	1.35	0.95	0.99	1.71	1.64
Espírito Santo	4.37	4.51	5.68	5.89	3.75	4.16	4.72	4.35	4.01	4.34
Amazonas	1.79	1.79	2.85	2.61	1.28	2.48	1.66	1.50	1.54	1.44
Alagoas	2.52	2.32	1.63	3.10	2.37	1.87	1.98	2.36	2.54	2.48
Piauí	0.54	0.52	0.74	0.38	0.60	1.24	0.76	1.13	0.87	1.40
Rio Grande do Norte	1.33	1.04	0.76	1.43	0.72	0.84	0.73	1.10	0.71	1.40
Mato Grosso	3.63	3.79	4.01	3.96	3.27	3.54	5.29	3.46	3.59	3.17
Distrito Federal	4.00	2.91	3.05	3.66	2.49	2.33	4.11	3.41	2.57	2.44
Mato Grosso do Sul	4.10	3.70	3.54	3.77	3.42	2.95	4.32	2.94	2.46	3.09
Sergipe	1.89	1.08	0.83	3.32	2.13	1.74	1.78	1.81	1.49	1.47
Rondônia	5.16	4.16	5.53	4.55	3.33	7.02	7.30	5.27	2.18	3.19
Tocantins	1.95	1.75	1.71	2.05	1.38	1.99	1.92	1.78	1.40	1.61
Acre	4.76	4.22	3.49	1.97	2.33	3.07	2.63	3.65	1.58	2.01
Amapá	5.47	3.35	3.17	4.26	0.84	2.61	3.24	3.23	2.60	2.52
Roraima	9.89	5.44	6.29	7.58	6.78	2.63	7.74	2.10	1.84	3.06

Source. CPS/IBRE/FGV microdata from DATASUS/MS

Deaths – Traffic Accidents

Deaths per 100 thousand people
Men

	Brasil	Acre	Alagoas	Amapá	Amazonas	Bahia	Ceará	Distrito Federal	Espirito Santo	Goiás	Maranhão	Mato Grosso do Sul	Mato Grosso do Sul	Minas Gerais
1992	14,02	13,03	17,51	16,68	9,93	4,55	8,53	28,52	18,88	23,44	8,35	12,40	18,98	11,26
1993	13,94	12,57	15,47	16,84	8,12	4,76	9,08	29,05	19,31	20,88	6,96	13,68	23,57	12,09
1994	14,58	11,42	16,67	22,99	10,71	5,82	9,44	29,25	22,13	23,68	5,12	10,73	21,04	12,93
1995	16,28	12,52	16,05	18,70	12,41	5,51	11,57	33,15	22,50	22,54	5,73	18,24	21,02	14,68
1996	17,72	10,75	17,54	17,39	10,21	7,43	13,04	30,90	23,08	19,73	5,92	23,17	25,52	17,00
1997	17,83	13,59	20,92	17,42	10,65	8,14	14,67	25,89	22,01	22,76	6,50	20,89	23,52	16,17
1998	15,21	11,67	19,79	16,87	9,60	6,47	12,49	23,50	21,96	17,54	6,16	20,84	17,69	13,94
1999	14,69	11,37	17,69	14,33	8,52	6,77	13,20	22,74	20,52	19,84	5,28	21,64	18,01	12,60
2000	14,09	13,27	15,94	18,45	9,49	7,50	14,08	22,91	21,37	22,45	6,37	25,12	16,51	11,08
2001	14,68	13,75	15,75	18,45	7,72	7,58	15,40	22,22	22,15	21,13	7,42	23,90	19,61	12,43
2002	15,52	17,72	17,49	19,55	8,41	8,43	16,76	22,18	24,24	23,40	9,34	27,91	23,22	12,87
2003	15,42	13,65	15,08	16,64	8,48	7,95	17,17	24,80	21,63	22,44	9,13	23,95	21,89	13,61
2004	16,22	11,07	16,11	17,36	10,26	8,01	18,25	22,07	21,74	23,93	10,40	29,80	26,02	15,08
2005	16,14	13,73	16,58	15,38	9,94	10,78	18,10	21,36	20,89	22,31	11,85	25,68	26,61	15,15

Fonte: CPS/IBRE/FGV a partir dos dados do DATASUS/MS

	Pará	Paraíba	Paraná	Pernambuc	Piauí	Rio de Janeiro	Rio Grande do Norte	Rio Grande do Sul	Rondônia	Roraima	Santa Catarina	São Paulo	Sergipe	Tocantins
1992	9,30	9,25	22,55	12,92	7,89	11,29	11,88	12,92	16,78	28,71	25,36	17,61	22,30	7,63
1993	7,48	10,14	22,73	12,89	7,15	11,21	13,82	13,37	16,27	24,06	26,36	17,21	15,73	10,62
1994	6,81	9,55	26,11	13,58	8,36	12,74	11,76	14,73	14,41	27,80	27,48	17,05	18,12	8,18
1995	7,29	11,62	25,15	14,29	7,38	21,07	11,11	15,84	15,98	24,41	28,99	19,23	15,95	7,25
1996	8,84	3,06	27,70	17,19	8,08	21,50	12,31	17,22	19,12	31,56	31,42	21,51	15,02	7,91
1997	10,72	7,65	26,28	17,21	7,46	20,76	12,26	17,47	16,65	40,47	30,74	21,64	11,47	13,14
1998	10,54	8,71	23,08	16,04	9,32	16,51	14,94	14,19	19,90	41,81	22,06	17,48	8,49	17,15
1999	7,78	10,22	22,51	15,39	8,78	13,68	12,09	14,26	17,66	43,09	24,01	17,07	14,95	18,06
2000	9,30	10,54	21,07	14,91	12,73	14,34	13,79	14,71	18,70	35,76	21,96	13,21	17,48	22,38
2001	9,92	10,49	21,22	13,94	12,95	14,91	12,36	14,01	17,97	32,32	23,22	15,03	16,45	21,94
2002	11,40	15,77	22,19	15,82	14,15	15,44	12,55	16,07	20,18	33,44	24,35	13,77	19,83	25,60
2003	11,67	12,82	22,99	14,26	15,25	15,17	11,53	14,80	21,70	19,03	24,59	14,89	17,60	23,90
2004	11,19	15,53	25,46	14,15	16,92	15,56	12,52	16,06	21,08	18,49	26,27	14,55	19,39	29,68
2005	11,84	15,11	23,88	13,99	18,06	15,25	12,83	15,27	22,68	21,11	26,03	14,35	16,72	25,42

Fonte: CPS/IBRE/FGV a partir dos dados do DATASUS/MS

Deaths per 100 thousand people
Men

	Brasil	Acre	Alagoas	Amapá	Amazona	Bahia	Ceará	Distrito Federal	Espirito Santo	Goiás	Maranhão	Mato Grosso do Sul	Mato Grosso do Sul	Minas Gerais
1992	14,02	13,03	17,51	16,68	9,93	4,55	8,53	28,52	18,88	23,44	8,35	12,40	18,98	11,26
1993	13,94	12,57	15,47	16,84	8,12	4,76	9,08	29,05	19,31	20,88	6,96	13,68	23,57	12,09
1994	14,58	11,42	16,67	22,99	10,71	5,82	9,44	29,25	22,13	23,68	5,12	10,73	21,04	12,93
1995	16,28	12,52	16,05	18,70	12,41	5,51	11,57	33,15	22,50	22,54	5,73	18,24	21,02	14,68
1996	17,72	10,75	17,54	17,39	10,21	7,43	13,04	30,90	23,08	19,73	5,92	23,17	25,52	17,00
1997	17,83	13,59	20,92	17,42	10,65	8,14	14,67	25,89	22,01	22,76	6,50	20,89	23,52	16,17
1998	15,21	11,67	19,79	16,87	9,60	6,47	12,49	23,50	21,96	17,54	6,16	20,84	17,69	13,94
1999	14,69	11,37	17,69	14,33	8,52	6,77	13,20	22,74	20,52	19,84	5,28	21,64	18,01	12,60
2000	14,09	13,27	15,94	18,45	9,49	7,50	14,08	22,91	21,37	22,45	6,37	25,12	16,51	11,08
2001	14,68	13,75	15,75	18,45	7,72	7,58	15,40	22,22	22,15	21,13	7,42	23,90	19,61	12,43
2002	15,52	17,72	17,49	19,55	8,41	8,43	16,76	22,18	24,24	23,40	9,34	27,91	23,22	12,87
2003	15,42	13,65	15,08	16,64	8,48	7,95	17,17	24,80	21,63	22,44	9,13	23,95	21,89	13,61
2004	16,22	11,07	16,11	17,36	10,26	8,01	18,25	22,07	21,74	23,93	10,40	29,80	26,02	15,08
2005	16,14	13,73	16,58	15,38	9,94	10,78	18,10	21,36	20,89	22,31	11,85	25,68	26,61	15,15

Fonte: CPS/IBRE/FGV a partir dos dados do

	Pará	Paraíba	Paraná	Pernambuc	Piauí	Rio de Janeiro	Rio Grande do Norte	Rio Grande do Sul	Rondônia	Roraima	Santa Catarina	São Paulo	Sergipe	Tocantins
1992	9,30	9,25	22,55	12,92	7,89	11,29	11,88	12,92	16,78	28,71	25,36	17,61	22,30	7,63
1993	7,48	10,14	22,73	12,89	7,15	11,21	13,82	13,37	16,27	24,06	26,36	17,21	15,73	10,62
1994	6,81	9,55	26,11	13,58	8,36	12,74	11,76	14,73	14,41	27,80	27,48	17,05	18,12	8,18
1995	7,29	11,62	25,15	14,29	7,38	21,07	11,11	15,84	15,98	24,41	28,99	19,23	15,95	7,25
1996	8,84	3,06	27,70	17,19	8,08	21,50	12,31	17,22	19,12	31,56	31,42	21,51	15,02	7,91
1997	10,72	7,65	26,28	17,21	7,46	20,76	12,26	17,47	16,65	40,47	30,74	21,64	11,47	13,14
1998	10,54	8,71	23,08	16,04	9,32	16,51	14,94	14,19	19,90	41,81	22,06	17,48	8,49	17,15
1999	7,78	10,22	22,51	15,39	8,78	13,68	12,09	14,26	17,66	43,09	24,01	17,07	14,95	18,06
2000	9,30	10,54	21,07	14,91	12,73	14,34	13,79	14,71	18,70	35,76	21,96	13,21	17,48	22,38
2001	9,92	10,49	21,22	13,94	12,95	14,91	12,36	14,01	17,97	32,32	23,22	15,03	16,45	21,94
2002	11,40	15,77	22,19	15,82	14,15	15,44	12,55	16,07	20,18	33,44	24,35	13,77	19,83	25,60
2003	11,67	12,82	22,99	14,26	15,25	15,17	11,53	14,80	21,70	19,03	24,59	14,89	17,60	23,90
2004	11,19	15,53	25,46	14,15	16,92	15,56	12,52	16,06	21,08	18,49	26,27	14,55	19,39	29,68
2005	11,84	15,11	23,88	13,99	18,06	15,25	12,83	15,27	22,68	21,11	26,03	14,35	16,72	25,42

Fonte: CPS/IBRE/FGV a partir dos dados do

Deaths per 100 thousand people
total

	Brasil	Acre	Alagoas	Amapá	Amazona	Bahia	Ceará	Distrito Federal	Espirito Santo	Goiás	Maranhão	Mato Grosso do Sul	Mato Grosso do Sul	Minas Gerais
1992	3,87	1,86	5,25	3,60	2,32	1,25	2,23	8,23	5,73	6,13	2,31	1,89	5,87	3,48
1993	4,02	1,83	4,07	7,77	2,21	1,17	2,82	8,67	6,15	4,89	2,04	3,56	4,86	4,26
1994	4,23	5,82	4,42	3,78	3,00	1,44	2,56	10,02	5,43	6,81	1,45	2,40	7,44	4,34
1995	4,53	3,29	4,32	3,99	3,28	1,50	2,67	11,28	6,06	6,22	1,30	4,84	6,69	4,70
1996	4,85	2,89	5,20	5,80	3,22	1,95	3,35	9,82	6,64	5,60	2,09	6,08	7,11	4,64
1997	4,53	3,20	4,92	5,97	3,21	2,31	3,09	7,19	5,26	5,56	1,81	5,03	6,97	4,44
1998	3,90	3,31	5,13	4,51	2,82	1,56	2,68	7,33	6,08	4,89	1,38	5,32	3,06	3,98
1999	3,66	2,27	4,28	3,64	2,40	1,60	2,97	6,90	6,26	4,56	1,48	5,18	3,85	3,30
2000	3,35	2,87	3,83	1,68	2,84	1,78	2,96	5,31	5,62	5,08	1,43	5,27	3,37	2,88
2001	3,29	4,00	3,64	4,01	1,76	1,63	2,80	4,20	4,72	5,28	1,64	4,92	4,36	3,02
2002	3,51	5,11	2,94	5,03	2,23	1,63	3,15	5,97	5,53	6,12	2,41	5,84	6,12	3,19
2003	3,58	3,16	2,91	5,05	2,74	1,79	3,27	6,44	4,77	4,96	2,49	5,05	5,81	3,26
2004	3,69	3,09	3,26	4,16	2,77	1,78	3,17	4,07	4,73	6,20	2,49	5,15	6,14	3,67
2005	3,69	1,54	3,11	3,01	2,72	2,16	3,66	4,70	4,80	5,41	2,99	5,90	6,39	3,61

Fonte: CPS/IBRE/FGV a partir dos dados do

	Pará	Paraíba	Paraná	Pernambuc	Piauí	Rio de Janeiro	Rio Grande do Norte	Rio Grande do Sul	Rondônia	Roraima	Santa Catarina	São Paulo	Sergipe	Tocantins
1992	2,53	2,55	6,42	3,33	2,00	3,34	3,65	3,81	4,26	2,69	6,58	4,71	6,46	2,23
1993	2,70	2,72	6,92	3,78	2,33	3,01	3,28	4,10	4,99	2,07	6,81	4,88	4,51	2,47
1994	2,04	3,24	7,26	4,02	1,86	3,74	3,70	4,65	3,79	4,77	7,32	4,89	4,81	1,31
1995	1,82	2,93	6,96	4,27	1,72	6,36	2,56	4,66	3,66	7,25	7,86	4,96	4,36	3,08
1996	2,54	0,97	7,84	4,46	1,87	6,34	2,93	5,11	5,21	8,09	9,15	5,33	4,56	2,77
1997	2,42	1,47	6,93	3,91	1,59	5,75	2,66	4,90	4,62	5,89	8,13	5,14	2,47	4,07
1998	3,00	2,47	5,76	4,31	1,88	4,86	3,43	4,06	5,17	8,06	6,26	3,95	2,55	3,34
1999	1,63	2,52	5,61	3,60	2,63	3,65	2,83	3,73	4,55	13,49	6,02	4,11	3,15	4,49
2000	1,82	1,95	4,91	3,30	3,06	3,84	3,17	3,75	4,57	6,17	6,10	3,01	3,42	7,17
2001	2,10	2,19	4,66	2,70	2,51	3,92	2,52	3,31	3,84	5,93	5,40	3,33	3,52	5,99
2002	2,68	3,23	4,83	2,77	4,31	3,74	2,38	3,97	5,45	7,21	5,86	3,01	3,68	4,89
2003	2,28	2,53	5,34	2,95	3,25	4,03	2,29	4,50	5,70	4,48	5,42	3,26	3,95	6,18
2004	2,42	2,94	5,84	3,12	2,92	3,86	2,43	3,85	5,00	4,62	6,01	3,39	4,47	7,90
2005	2,62	3,36	5,55	2,94	3,29	3,80	2,49	3,55	5,00	5,59	6,26	3,37	3,19	5,04

Fonte: CPS/IBRE/FGV a partir dos dados do

APPENDIX A.3: General Statistics on Work and and Labor of the Youth

Total – Does not work and is not enrolled at school either (%)

	1995	2004	2005	2006
10 a 14	6,16	2,48	2,14	2,14
15 a 19	16,47	14,42	14,96	15,04
20 a 24	25,75	24,98	24,53	24,81
25 a 29	27,43	24,07	24,10	23,89
30 a 39	25,14	22,92	22,60	22,61
40 or more	45,69	44,88	44,93	44,52
15 to 17	13,79	9,90	10,08	10,11

Source: CPS/IBRE/FGV from the microdata of PNAD 2006/IBGE

Woman - Does not work and is not enrolled at school either (%)

	1995	2004	2005	2006
10 a 14	6,63	2,55	2,16	2,18
15 a 19	22,53	19,05	19,46	19,54
20 a 24	39,57	35,44	35,33	35,05
25 a 29	43,77	36,43	35,84	35,62
30 a 39	40,81	34,71	34,21	34,11
40 or more	62,22	57,70	57,39	56,63
15 to 17	18,26	12,63	12,84	12,82

Source: CPS/IBRE/FGV from the microdata of PNAD 2006/IBGE

Man - Does not work and is not enrolled at school either (%)

	1995	2004	2005	2006
10 a 14	5,71	2,41	2,12	2,11
15 a 19	10,56	9,91	10,54	10,56
20 a 24	11,63	14,21	13,74	14,36
25 a 29	9,31	11,00	11,71	11,60
30 a 39	8,30	10,04	10,06	10,15
40 or more	27,02	30,04	30,43	30,53
15 to 17	9,47	7,26	7,35	7,43

Source: CPS/IBRE/FGV from the microdata of PNAD 2006/IBGE

Appendices B: Econometric Exercises

APPENDIX B.1.a: National Imprisioment Probabilities - Binomial Logistic Model

Econometric Exercises

18 years old or older
'Multivariate Analysis '
Complete Model

The LOGISTIC Procedure

Class Level Information

Class	Value	Design Variables
SEXO	Man	1
	Woman	-1
fxcor	Afro	1
	No Afro	-1
fxage	18 to 35	1
	zz35 or more	-1
fxeduca	0-6	1
	zz6 or more	-1
reli	No religion	1
	z religion	-1
ESTCIVIL	Single	1
	zzNo Single	-1
MIGRAMU	Hás Migrate	1
	ZzNative	-1

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	177974.34	155788.24
SC	177988.70	155903.05
-2 Log L	177972.34	155772.24

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	22200.1029	7	<.0001
Score	20024.8023	7	<.0001
Wald	12565.9934	7	<.0001

Type III Analysis of Effects			
		Wald	
Effect	DF	Chi-Square	Pr > ChiSq
SEXO	1	3947.3178	<.0001
fxcolor	1	80.7372	<.0001
fxage	1	986.1136	<.0001
fxeduca	1	656.9218	<.0001
reli	1	262.2117	<.0001
ESTCIVIL	1	2434.6685	<.0001
MIGRAMU	1	2320.7510	<.0001

Analysis of Maximum Likelihood Estimates						
				Standard	Wald	
Parameter		DF	Estimate	Error	Chi-Square	Pr > ChiSq
Intercept		1	-8.1951	0.0293	78465.8861	<.0001
SEXO	Man	1	1.6412	0.0261	3947.3178	<.0001
fxcor	Afro	1	0.0884	0.00984	80.7372	<.0001
fxage	18 to 35	1	0.3803	0.0121	986.1136	<.0001
fxeduca	0-6	1	0.2603	0.0102	656.9218	<.0001
reli	No Religion	1	0.2104	0.0130	262.2117	<.0001
ESTCIVIL	Single	1	0.6507	0.0132	2434.6685	<.0001
MIGRAMU	Migrant	1	0.4861	0.0101	2320.7510	<.0001

Odds Ratio Estimates			
	Point	95% Wald	
Effect	Estimate	Confidence Limits	
SEXO Man vs woman	26.639	24.046	29.512
fxcor Afro vs No Afro	1.193	1.148	1.240
fxage 18 to 35 vs zz35 or more	2.140	2.040	2.244
fxeduca 0-6 vs zz6 or more	1.683	1.617	1.751
reli No religion vs zReligion	1.523	1.447	1.603
ESTCIVIL Single vs zzNo Single	3.675	3.490	3.870
MIGRAMU Migrant vs zzNative	2.644	2.541	2.750

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	60.8	Somers' D	0.543
Percent Discordant	6.6	Gamma	0.805
Percent Tied	32.6	Tau-a	0.001
Pairs	123900436048	c	0.771

Source: CPS/IBRE/FGV processing microdata from Census/IBGE

APPENDIX B.1.b: – Prisioners in Rio - Logistic regressions

LOGISTIC MODEL - Analysis Of Parameter Estimates 2000
Inmate

	Estimate	Standard Error	T-Student		Odds Ratio Conditional	Odds Ratio Non Conditional	Inmate# (%)	Standard Error	Population## (%)
Gender									
Men	1,6517	0,0931	17,7411	**	27,205	35,0764	0,0045	0,0003	96,67
Women	0	0	.		1,000	1,0000	0,0001	0,0000	3,33
Race									
Afro	0,295	0,0369	7,9946	**	1,804	3,1665	0,0036	0,0003	67,70
Non Afro	0	0	.		1,000	1,0000	0,0011	0,0001	32,30
Age Range									
18 to 35	0,5339	0,044	12,1341	**	2,909	5,1014	0,0041	0,0003	76,69
35 or more	0	0	.		1,000	1,0000	0,0008	0,0001	23,31
Years of Schooling									
0-6	0,8621	0,0376	22,9282	**	5,608	4,4974	0,0045	0,0004	66,28
6 or more	0	0	.		1,000	1,0000	0,0010	0,0001	32,83
Religion									
Non Religious	0,3205	0,036	8,9028	**	1,898	4,1390	0,0064	0,0007	35,33
Religious	0	0	.		1,000	1,0000	0,0015	0,0001	64,67
Marital Status									
Single	0,606	0,0529	11,4556	**	3,360	7,7659	0,0041	0,0003	85,88
Non Single	0	0	.		1,000	1,0000	0,0005	0,0001	14,12
Immigration									
Native	0,3139	0,0431	7,2831	**	1,873	2,0264	0,0026	0,0002	79,69
Migrant	0	0	.		1,000	1,0000	0,0013	0,0002	20,31

	DF	Value	Value / DF
Obs : 897 ; Log Likelihood : 2738,8512 ; Wald Chi-Square :	7	7	248

* Statistically significant at a confidence level of 90% . ** Statistically significant at a confidence level of 95%
# rate of inmates in a specific group; ## percentage of specific attributes in inmate population

	Population	%
Inmate	897	0,21
Non Inmate	424695	99,79

Source: CPS/FGV processing CENSO/IBGE microdata.

LOGISTIC MODEL - Analysis Of Parameter Estimates 2000

Inmate

	Estimate	T-Student		Odds Ratio Conditional	Odds Ratio Non Conditional	Inmate # (%)	Standard Error	Population ## (%)
Gender								
Men	1,6295	17,4278	**	5,101	35,0764	0,0045	0,0003	96,67
Women	0	.		1,000	1,0000	0,0001	0,0000	3,33
Years of Schooling								
0	1,0143	9,9539	**	2,757	37,0696	0,0058	0,0011	12,65
0-4	1,2413	14,7423	**	3,460	36,9928	0,0058	0,0008	23,77
4-8	0,7021	9,3364	**	2,018	23,4956	0,0037	0,0004	43,14
8-12	-0,6964	-7,8600	**	0,498	5,7946	0,0009	0,0001	18,08
More than 12	0	.		1,000	1,0000	0,0002	0,0001	1,46
Religion								
Catholic	-0,6047	-4,2169	**	0,546	0,1629	0,0010	0,0001	31,10
Evangelic	0,0125	0,0809		1,013	0,2622	0,0017	0,0003	13,79
Spiritualistic	-1,4387	-2,8837	**	0,237	0,0271	0,0002	0,0002	0,35
Afro-Brazilian	-0,9636	-2,5910	**	0,382	0,1058	0,0007	0,0005	0,66
Oriental	-0,1508	-0,2876		0,860	0,1013	0,0006	0,0007	0,31
Other	2,6177	16,9430	**	13,704	7,6078	0,0465	0,0067	18,46
No Religion	0	.		1,000	1,0000	0,0064	0,0007	35,33
Marital Status								
Married	-0,364	-2,3652	**	0,695	0,1406	0,0006	0,0001	11,51
Legally Separated	0,0883	0,3011		1,092	0,1638	0,0007	0,0004	0,99
Divorced	0,159	0,5654		1,172	0,1621	0,0007	0,0004	1,11
Widow(er)	-1,0945	-2,8399	**	0,335	0,0362	0,0002	0,0001	0,52
Single	0	.		1,000	1,0000	0,0041	0,0003	85,88
Immigration - UF								
Less than 1 Year	-0,4613	-5,4982	**	0,630	0,4345	0,0011	0,0002	14,57
Native	0	.		1,000	1,0000	0,0025	0,0002	85,43
Immigration - Municipality								
Less than 1 Year	-0,276	-0,5871		0,759	0,5350	0,0014	0,0015	0,33
1 to 5 years	0,5903	3,6665	**	1,805	1,3512	0,0034	0,0008	7,79
6 to 10 years	0,2	1,0246		1,221	0,8851	0,0023	0,0008	3,21
More than 10 years	-0,3949	-2,5314	**	0,674	0,2901	0,0007	0,0002	8,98
Native	0	.		1,000	1,0000	0,0026	0,0002	79,69

	DF	Value	Value / DF
Obs : 897 ; Log Likelihood : 3398,9871 ; Wald Chi-Square :	20	2416	121

* Statistically significant at a confidence level of 90% . ** Statistically significant at a confidence level of 95%

rate of inmates in a specific group; ## percentage of specific attributes in inmate population

	Population	%
Inmates	897	0,21
Non Inmates	424695	99,79

Source: CPS/FGV processing CENSO/IBGE microdata.

APPENDIX B.1.c: – Prisioners in Rio - Mincerian Equations

Regressions used in the application of income

Below, we found the results of the income regressions from main work and income from all sources applied to the carioca population aged 18 years old or more. The estimates have been used as the basis in the application of income for inmates and unemployed.

$$\text{Re}nda_i = \beta_0 + \beta_1 sexo_i + \beta_2 cor_i + \beta_3 rel_i + \beta_4 idade_i + \beta_5 idade^2{}_i + \beta_6 educa_i + e_i$$

Where:

- i represents the i-th income that is, i=1, 2, 3,...,n;
- *sexo* – gender variable
- *cor* – variable indicating race or ethnicity
- rel - variable indicating religious beliefs
- idade – age in years
- idade – age in square years
- educa – variable indicating for educational attainment levels
- e_i is a perturbation stochastic component;

β_j - parameters to be estimated, that is, j = 0, 1, 2, ..., 6

Mincerian Earnings equation (main job)
Cariocas with age 18 or over

Data Summary	
Number of Observations	218078
Sum of Weights	2179434.7
Weighted Mean of lnsalario	6.32413
Weighted Sum of lnsalario	13783038

Fit Statistics	
R-square	0.4471
Root MSE	0.7308
Denominator DF	218077

Class Level Information

Class Variable	Label	Levels	Values
SEXO		2	Homem Mulher
fxcor	Raça/Cor	5	Amarela Indígena Parda Preta zBranca
reli	Religião	2	Com religião Sem religião

ANOVA for Dependent Variable lnsalario

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	941310	104590.0	19595.9	<.0001
Error	218068	1163900	5.3		
Corrected Total	218077	2105210			

Tests of Model Effects

Effect	Num DF	F Value	Pr > F
Model	9	17143.3	<.0001
Intercept	1	33799.9	<.0001
SEXO	1	17817.3	<.0001
fxcor	4	1276.61	<.0001
reli	1	19.86	<.0001
IDADE	1	5369.03	<.0001
IDADE2	1	2714.98	<.0001
educa	1	92001.7	<.0001

The denominator degrees of freedom for the F tests is 218077.

Estimated Regression Coefficients

Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	3.4405083	0.01768428	194.55	<.0001
SEXO Homem	0.4341379	0.00325242	133.48	<.0001
SEXO Mulher	0.0000000	0.00000000	.	.
fxcor Amarela	0.1545798	0.03595479	4.30	<.0001
fxcor Indígena	-0.1005873	0.02992673	-3.36	0.0008
fxcor Parda	-0.2172891	0.00356626	-60.93	<.0001
fxcor Preta	-0.2727232	0.00503211	-54.20	<.0001
fxcor zBranca	0.0000000	0.00000000	.	.
reli Com religião	-0.0213933	0.00480004	-4.46	<.0001
reli Sem religião	0.0000000	0.00000000	.	.
IDADE	0.0679877	0.00092786	73.27	<.0001
IDADE2	-0.0006067	0.00001164	-52.11	<.0001
Educa	0.1212288	0.00039968	303.32	<.0001

The denominator degrees of freedom for the t tests is 218077.

Source: CPS/FGV a partir dos microdados da Censo Demográfico 2000/IBGE.

Mincerian Earnings equation (all income sources)
Cariocas with age 18 or over

Data Summary	
Number of Observations	300926
Sum of Weights	3011371.5
Weighted Mean of LNRENTOF	6.36589
Weighted Sum of LNRENTOF	19170061

Fit Statistics	
R-square	0.4367
Root MSE	0.7817
Denominator DF	300925

Class Level Information			
Class Variable	Label	Levels	Values
SEXO		2	Homem Mulher
fxcor	Raça/Cor	5	Amarela Indígena Parda Preta zBranca
reli	Religião	2	Com religião Sem religião

ANOVA for Dependent Variable LNRENTOF					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	1426286	158476.2	25917.4	<.0001
Error	300916	1839999	6.1		
Corrected Total	300925	3266285			

Tests of Model Effects			
Effect	Num DF	F Value	Pr > F
Model	9	23764.1	<.0001
Intercept	1	73037.6	<.0001
SEXO	1	18093.5	<.0001
fxcor	4	1306.45	<.0001
reli	1	30.30	<.0001
IDADE	1	14331.8	<.0001
IDADE2	1	6978.69	<.0001
educa	1	133491	<.0001

The denominator degrees of freedom for the F tests is 300925.

Estimated Regression Coefficients				
Parameter	Estimate	Standard Error	t Value	Pr > |t|
Intercept	3.5553131	0.01131253	314.28	<.0001
SEXO Homem	0.3958542	0.00294289	134.51	<.0001
SEXO Mulher	0.0000000	0.00000000	.	.
fxcor Amarela	0.1256464	0.03204086	3.92	<.0001
fxcor Indígena	-0.0810586	0.02859028	-2.84	0.0046
fxcor Parda	-0.1999011	0.00328851	-60.79	<.0001
fxcor Preta	-0.2588276	0.00470672	-54.99	<.0001
fxcor zBranca	0.0000000	0.00000000	.	.
reli Com religião	-0.0251991	0.00457771	-5.50	<.0001
reli Sem religião	0.0000000	0.00000000	.	.
IDADE	0.0568363	0.00047476	119.72	<.0001
IDADE2	-0.0004192	0.00000502	-83.54	<.0001
Educa	0.1289943	0.00035306	365.36	<.0001

The denominator degrees of freedom for the t tests is 300925.

Source: CPS/FGV a partir dos microdados da Censo Demográfico 2000/IBGE.

APPENDIX B.2: Declaration of Drugs Use – Binomial Logistic Model

http://www.fgv.br/ibrecps/edj/Drogas_eng/index.htm

Econometric Exercises

18 years old or older
'Multivariate Analysis '

The LOGISTIC Procedure

Class Level Information

Class	Value	Design Variables
Sexo	Woman	1
	Man	-1
Fxcor	Afro	1
	No Afro	-1
Fxage	18 to 35	1
	zz35 or more	-1
fxeduca	0-6	1
	zz6 or more	-1
Reli	No religion	1
	zReligion	-1

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	551.587	448.184
SC	561.076	505.119
-2 Log L	549.587	436.184

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	113.4026	5	<.0001
Score	89.3321	5	<.0001
Wald	32.6088	5	<.0001

Type III Analysis of Effects			
		Wald	
Effect	DF	Chi-Square	Pr > ChiSq
Sexo	1	0.0004	0.9832
Fxcor	1	11.5931	0.0007
Fxage	1	12.4277	0.0004
Fxeduca	1	6.0411	0.0140
Reli	1	0.2393	0.6247

Analysis of Maximum Likelihood Estimates						
				Standard	Wald	
Parameter		DF	Estimate	Error	Chi-Square	Pr > ChiSq
Intercept		1	17.4768	399.0	0.0019	0.9651
Sexo	Man	1	-8.4185	399.0	0.0004	0.9832
Fxcor	Afro	1	1.1564	0.3396	11.5931	0.0007
Fxage	18 to 35	1	-1.4269	0.4048	12.4277	0.0004
Fxeduca	0-6	1	0.8656	0.3522	6.0411	0.0140
Reli	No religion	1	-0.1614	0.3299	0.2393	0.6247

Odds Ratio Estimates				
		Point	95% Wald	
Effect		Estimate	Confidence Limits	
sexo	Man vs Woman	<0.001	<0.001	>999.999
fxcor	Afro vs No Afro	10.102	2.668	38.246
fxage	18 to35 vs zz35 or more	0.058	0.012	0.282
fxeduca	0-6 vs zz6 or more	5.648	1.420	22.461
reli	No religion vs zReligion	0.724	0.199	2.639

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	65.9	Somers' D	0.638
Percent Discordant	2.1	Gamma	0.938
Percent Tied	32.0	Tau-a	0.000
Pairs	1269268	C	0.819

Source:CPS/IBRE/FGV processing microdata from POF/IBGE

APPENDIX B.3: Binomial Logistic Model - Youngest offspring still alive

We replicate the model of section 5 considering only mothers who are 40 to 50 years old, and also adding alternative interactive terms.

http://www.fgv.br/ibrecps/edj/Maternidade_eng/index.htm

Logistic Regression – Mothers from 40 to 50 years old youngest offspring born alive is still alive

Parameter	Category	Estimate	Std error	Chi-square	sig	Conditional Ratio
Intercept		21.8776	0.6279	1214.06	**	.
cor	Asian	17.9170	304.1440	0.00		60431171.42
cor	Ignored	17.6259	2981.811	0.00		45168551.11
cor	Indígenous	-0.0997	0.0404	6.08	**	0.91
cor	Mulato	-0.1265	0.0054	541.15	**	0.88
cor	Black	-0.3011	0.0087	1201.82	**	0.74
cor	Zwhite	0.0000	0.0000	.		1.00
edu	1 to 3	-18.8687	0.0075	6364315	**	0.00
edu	12 or more	-17.6891	0.0127	1935037	**	0.00
edu	4 to 7	-18.4495	0.0073	6328054	**	0.00
edu	8 to 11	-18.2201	0.0078	5456351	**	0.00
edu	ZNo instruction	-19.0040	0.0000	.		0.00
edu	Ignored	0.0000	0.0000	.		1.00
filhosex	Man	-0.4588	0.0047	9471.99	**	0.63
filhosex	Zwoman	0.0000	0.0000	.		1.00
idcacula		-0.0545	0.0004	16835.5	**	0.95
IDADE		0.1193	0.0282	17.87	**	1.13
IDADE2		-0.0016	0.0003	25.63	**	1.00
RFPC		-0.0001	0.0000	240.68	**	1.00
favela	Slum	-0.1382	0.0115	143.83	**	0.87
favela	ZNo Slum	0.0000	0.0000	.		1.00
NEW	Metropolitan Region	-0.0164	0.0064	6.51	**	0.98
NEW	Rural	-0.2567	0.0065	1565.78	**	0.77
NEW	Urban	0.0000	0.0000	.		1.00
chavuf	AC	-0.2140	0.0575	13.87	**	0.81
chavuf	AL	-0.0849	0.0218	15.10	**	0.92
chavuf	AM	-0.2055	0.0242	71.93	**	0.81
chavuf	AP	-0.5975	0.0405	217.67	**	0.55
chavuf	BA	-0.3570	0.0106	1135.26	**	0.70
chavuf	CE	-1.0956	0.0105	10831.4	**	0.33
chavuf	DF	0.6050	0.0359	284.03	**	1.83
chavuf	ES	-0.7436	0.0152	2389.51	**	0.48
chavuf	GO	-0.3315	0.0142	547.82	**	0.72
chavuf	MA	-1.3206	0.0108	14968.3	**	0.27
chavuf	MG	-0.3256	0.0095	1182.54	**	0.72
chavuf	MS	0.1978	0.0266	55.14	**	1.22
chavuf	MT	-0.1939	0.0211	84.77	**	0.82
chavuf	PA	-0.8342	0.0135	3816.46	**	0.43
chavuf	PB	-0.9642	0.0145	4399.21	**	0.38
chavuf	PE	-0.6603	0.0115	3313.70	**	0.52
chavuf	PI	-0.7529	0.0167	2026.71	**	0.47
chavuf	PR	-0.0661	0.0126	27.59	**	0.94
chavuf	RJ	-0.0303	0.0108	7.82	**	0.97
chavuf	RN	-1.1129	0.0145	5909.61	**	0.33
chavuf	RO	-0.5197	0.0279	345.99	**	0.59
chavuf	RR	-0.8470	0.0473	321.05	**	0.43
chavuf	RS	0.1624	0.0136	142.19	**	1.18
chavuf	SC	-0.4615	0.0138	1114.29	**	0.63
chavuf	SE	-0.4957	0.0217	519.89	**	0.61
chavuf	TO	-1.0973	0.0219	2510.04	**	0.33
chavuf	ZZZSP	0.0000	0.0000	.		1.00

** Statistically significant at a confidence level of 90% . ** Statistically significant at a confidence level of 95% .*

Source:CPS/IBRE/FGV processing microdata from PNAD/IBGE

Logistic Regression – Mothers from 40 to 50 years old youngest offspring born alive is still alive

Parameter	Category	Estimate	Std Error	Chi-squared	sig	Conditional Ratio
Intercept		22.0238	0.6281	1229.67	**	.
Cor	Asian	17.9185	303.9869	0.00		60518826.11
Cor	Ignored	17.6357	2981.811	0.00		45612078.25
Cor	Indígenous	-0.1028	0.0404	6.47	**	0.90
Cor	Mulato	-0.1265	0.0054	540.81	**	0.88
Cor	Black	-0.3017	0.0087	1206.39	**	0.74
Cor	Zwhite	0.0000	0.0000	.		1.00
Edu	1 to 3	-18.8714	0.0075	6366301	**	0.00
Edu	12 or more	-17.6903	0.0127	1935221	**	0.00
Edu	4 to 7	-18.4515	0.0073	6330762	**	0.00
Edu	8 to 11	-18.2225	0.0078	5457842	**	0.00
Edu	ZNo instruction	-19.0062	0.0000	.		0.00
Edu	Ignored	0.0000	0.0000	.		1.00
Filhosex	Man	-0.5775	0.0137	1783.07	**	0.56
Filhosex	Zwoman	0.0000	0.0000	.		1.00
Idcacula		-0.0589	0.0006	8486.98	**	0.94
IDADE		0.1162	0.0282	16.94	**	1.12
IDADE2		-0.0016	0.0003	24.52	**	1.00
RFPC		-0.0001	0.0000	239.99	**	1.00
Favela	Slum	-0.1392	0.0115	145.95	**	0.87
Favela	ZNo Slum	0.0000	0.0000	.		1.00
NEW	Metropolitan Region	-0.0165	0.0064	6.60	**	0.98
NEW	Rural	-0.2570	0.0065	1569.33	**	0.77
NEW	Urban	0.0000	0.0000	.		1.00
Chavuf	AC	-0.2172	0.0575	14.28	**	0.80
Chavuf	AL	-0.0843	0.0218	14.89	**	0.92
Chavuf	AM	-0.2041	0.0242	70.99	**	0.82
Chavuf	AP	-0.5928	0.0405	214.22	**	0.55
Chavuf	BA	-0.3568	0.0106	1134.37	**	0.70
Chavuf	CE	-1.0955	0.0105	10829.8	**	0.33
Chavuf	DF	0.6035	0.0359	282.61	**	1.83
Chavuf	ES	-0.7443	0.0152	2393.43	**	0.48
Chavuf	GO	-0.3333	0.0142	553.96	**	0.72
Chavuf	MA	-1.3212	0.0108	14983.9	**	0.27
Chavuf	MG	-0.3268	0.0095	1190.80	**	0.72
Chavuf	MS	0.1972	0.0266	54.79	**	1.22
Chavuf	MT	-0.1940	0.0211	84.85	**	0.82
Chavuf	PA	-0.8342	0.0135	3817.38	**	0.43
Chavuf	PB	-0.9628	0.0145	4385.99	**	0.38
Chavuf	PE	-0.6605	0.0115	3316.31	**	0.52
Chavuf	PI	-0.7516	0.0167	2020.03	**	0.47
Chavuf	PR	-0.0665	0.0126	27.86	**	0.94
Chavuf	RJ	-0.0306	0.0108	7.98	**	0.97
Chavuf	RN	-1.1127	0.0145	5908.83	**	0.33
Chavuf	RO	-0.5215	0.0279	348.39	**	0.59
Chavuf	RR	-0.8463	0.0473	320.57	**	0.43
Chavuf	RS	0.1625	0.0136	142.38	**	1.18
Chavuf	SC	-0.4633	0.0138	1122.99	**	0.63
Chavuf	SE	-0.4951	0.0217	518.44	**	0.61
Chavuf	TO	-1.0997	0.0219	2520.83	**	0.33
Chavuf	ZZZSP	0.0000	0.0000	.		1.00
idcacula*filhosex	Man	0.0072	0.0008	85.73	**	1.01
idcacula*filhosex	Zwoman	0.0000	0.0000	.		1.00

** Statistically significant at a confidence level of 90% . ** Statistically significant at a confidence level of 95% .*

Source:CPS/IBRE/FGV processing microdata from PNAD 2006 /IBGE

http://www.fgv.br/ibrecps/edj/Maternidade_int_eng/index.htm

Logistic Regression – Mothers from 40 to 50 years old
youngest offspring born alive is still alive

Parâmetro	Categoria	Estimativa	Erro Padrão	Qui-Quadrado	sig	Razão condicional
Intercept		21.8808	0.6279	1214.47**		.
Cor	Asian	17.9146	304.2177	0.00		60284762.22
Cor	Ignored	17.6297	2981.811	0.00		45342095.88
Cor	Indígenous	-0.0948	0.0404	5.50**		0.91
Cor	Mulato	-0.1265	0.0054	541.07**		0.88
Cor	Black	-0.3012	0.0087	1202.06**		0.74
Cor	Zwhite	0.0000	0.0000	.		1.00
Edu	1 to 3	-18.8692	0.0075	6362020**		0.00
Edu	12 or more	-17.6897	0.0127	1934731**		0.00
Edu	4 to 7	-18.4502	0.0073	6324289**		0.00
Edu	8 to 11	-18.2203	0.0078	5455906**		0.00
Edu	ZNo instruction	-19.0036	0.0000	.		0.00
Edu	Ignored	0.0000	0.0000	.		1.00
filhosex	Man	-0.4528	0.0048	8823.99**		0.64
filhosex	Zwoman	0.0000	0.0000	.		1.00
idcacula		-0.0545	0.0004	16827.7**		0.95
IDADE		0.1189	0.0282	17.76**		1.13
IDADE2		-0.0016	0.0003	25.49**		1.00
RFPC		-0.0001	0.0000	239.83**		1.00
Favela	Slum	-0.0475	0.0193	6.05**		0.95
Favela	ZNo Slum	0.0000	0.0000	.		1.00
NEW	Metropolitan Region	-0.0171	0.0064	7.09**		0.98
NEW	Rural	-0.2569	0.0065	1568.32**		0.77
NEW	Urban	0.0000	0.0000	.		1.00
chavuf	AC	-0.2134	0.0575	13.79**		0.81
chavuf	AL	-0.0840	0.0218	14.79**		0.92
chavuf	AM	-0.2054	0.0242	71.90**		0.81
chavuf	AP	-0.5974	0.0405	217.56**		0.55
chavuf	BA	-0.3566	0.0106	1133.08**		0.70
chavuf	CE	-1.0952	0.0105	10821.6**		0.33
chavuf	DF	0.6061	0.0359	285.07**		1.83
chavuf	ES	-0.7420	0.0152	2378.31**		0.48
chavuf	GO	-0.3310	0.0142	546.33**		0.72
chavuf	MA	-1.3200	0.0108	14953.6**		0.27
chavuf	MG	-0.3250	0.0095	1177.62**		0.72
chavuf	MS	0.1984	0.0266	55.44**		1.22
chavuf	MT	-0.1933	0.0211	84.22**		0.82
chavuf	PA	-0.8337	0.0135	3810.31**		0.43
chavuf	PB	-0.9644	0.0145	4400.22**		0.38
chavuf	PE	-0.6593	0.0115	3303.14**		0.52
chavuf	PI	-0.7499	0.0167	2009.10**		0.47
chavuf	PR	-0.0656	0.0126	27.15**		0.94
chavuf	RJ	-0.0287	0.0108	7.03**		0.97
chavuf	RN	-1.1122	0.0145	5902.03**		0.33
chavuf	RO	-0.5194	0.0279	345.55**		0.59
chavuf	RR	-0.8468	0.0473	320.94**		0.43
chavuf	RS	0.1632	0.0136	143.53**		1.18
chavuf	SC	-0.4611	0.0138	1112.56**		0.63
chavuf	SE	-0.4954	0.0217	519.11**		0.61
chavuf	TO	-1.0970	0.0219	2508.84**		0.33
chavuf	ZZZSP	0.0000	0.0000	.		1.00
filhosex*favela	Man	-0.1395	0.0234	35.64**		0.87
filhosex*favela	Man	0.0000	0.0000	.		1.00
filhosex*favela	Zwoman	0.0000	0.0000	.		1.00
filhosex*favela	Zwoman	0.0000	0.0000	.		1.00

** Statistically significant at a confidence level of 90% . ** Statistically significant at a confidence level of 95% .*
Source:CPS/IBRE/FGV processing microdata from PNAD/IBGE