

9º Seminário Itaú Internacional de avaliação econômica e projetos sociais

Spillovers from Conditional Cash Transfer Programs: *Bolsa Família* and Crime in Urban Brazil

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Motivation and Objective

- Youth account for a disproportionately high fraction of crimes (Levitt and Lochner, 2000).
 - ▣ 20% of the arrests for violent offenses in the US (those aged 15-19).
 - ▣ In São Paulo, for crimes with known age of the suspected offender, between 20% and 25% of robberies, thefts, and motor vehicle crimes (below age 18).
- Various potential channels in a two-way relationship between schooling and crime/violence:
 - ▣ Crime/Violence → Schooling (Grogger, 1997, Aizer, 2009, Rodríguez and Sanchez, 2009, Chambargwala and Morán, 2010).
 - ▣ Schooling → Crime/Violence
 - Long-term (Lochner and Moretti, 2004, Lochner, 2010, Machin et al, 2010).
 - Short-term (Snyder and Sickmund, 1999, Jacob and Lefgren, 2003, Gottfredson and Soulé, 2005, Luallen, 2005).

Motivation and Objective

- We analyze the effects of CCT on crime:
 - ▣ Potential effects:
 - Incapacitation effect.
 - Income effect.
- Results indicate that the causal effect of CCT is a 21% reduction in aggregate crimes, most likely due to an income effect.
 - Larger impact on property crime (especially robbery), smaller on violent crime.
- General crime dropped by 50% over the same period in the city of São Paulo

Overview



1. The Intervention
2. Related Literature
3. Data
4. Empirical Strategy
5. Results
6. Next Steps

1. The Interventions: CCT

□ Bolsa Família

- Federal minimum family income program – created in 2003, unifying several cash transfer programs that existed prior to 2003.
- Basic Benefit: families with monthly p.c. income \leq R\$70.00 receive R\$60.00.
- Variable Benefit: families with monthly p.c. income \leq R\$140.00 and children under 15 receive R\$22.00 per child under 15 (at most 3).
- Variable Youth Benefit: families with monthly p.c. income \leq R\$140.00 and adolescents 16-17 receive R\$33.00 per member aged 16-17 (at most 2) → introduced in 2008.
- Maximum benefit value: R\$192.00 per family with monthly per capita income of less than R\$70.00, 3 children under 15 years old and 2 young members aged 16-17 years old.
- Conditionalities: school enrolment and 85% attendance for children 6-15 and 75% for adolescents 16-17; fulfillment of the vaccination and growth and development calendar for children under 7; prenatal care for pregnant women and monitoring of lactating women.

2. Related Literature

- Incapacitation effect of time spent in school → effects on timing of crime during the day and total number of crimes.
 - ▣ Snyder and Sickmund (1999), Jacob and Lefgren (2003), Gottfredson and Soulé (2005), Luallen (2005).
- Effect of welfare payments on crime → effects on number of crimes and distribution of crimes through the month.
 - ▣ Zhang (1997), Hannon and DeFranzo (1998), Foley (2008), Jacob and Ludwig (2011)
 - ▣ May also be relevant in CCT case, irrespective of conditionalities and incapacitation, through an income effect.
- Vast literature evaluating the impact of CCT's on consumption, poverty, health, and schooling (surveyed in Fizbein and Schady, 2009).
 - ▣ In particular: on the impact of Bolsa Família on school attendance in Brazil (large)
 - ▣ Nothing analyzing effect on crime and violence.

3. Data

- Crime reports from INFOCRIM (2006-2009).
 - Information on each individual crime: type, day, hour, and location (lat & long).
 - We concentrate on theft, robbery, vandalism, violent crimes, crimes against minors, and drug-related offenses → 1,473,939 crimes over 4 years.

- Information on municipal and state schools from the Secretary of Education of the City of São Paulo (mostly elementary schools, up to 8th grade, 2006-2009).
 - Number of students.
 - Location
 - The vast majority covers up to 8th grade. Normally, up to age 15, but there is a lot of repetition in Brazil.

- Program variables (2006-2009).
 - Number of students in each school who receive conditional cash transfers (Bolsa Família) at the school level
 - Year when each municipal school changed from 3 to 2 day shifts.

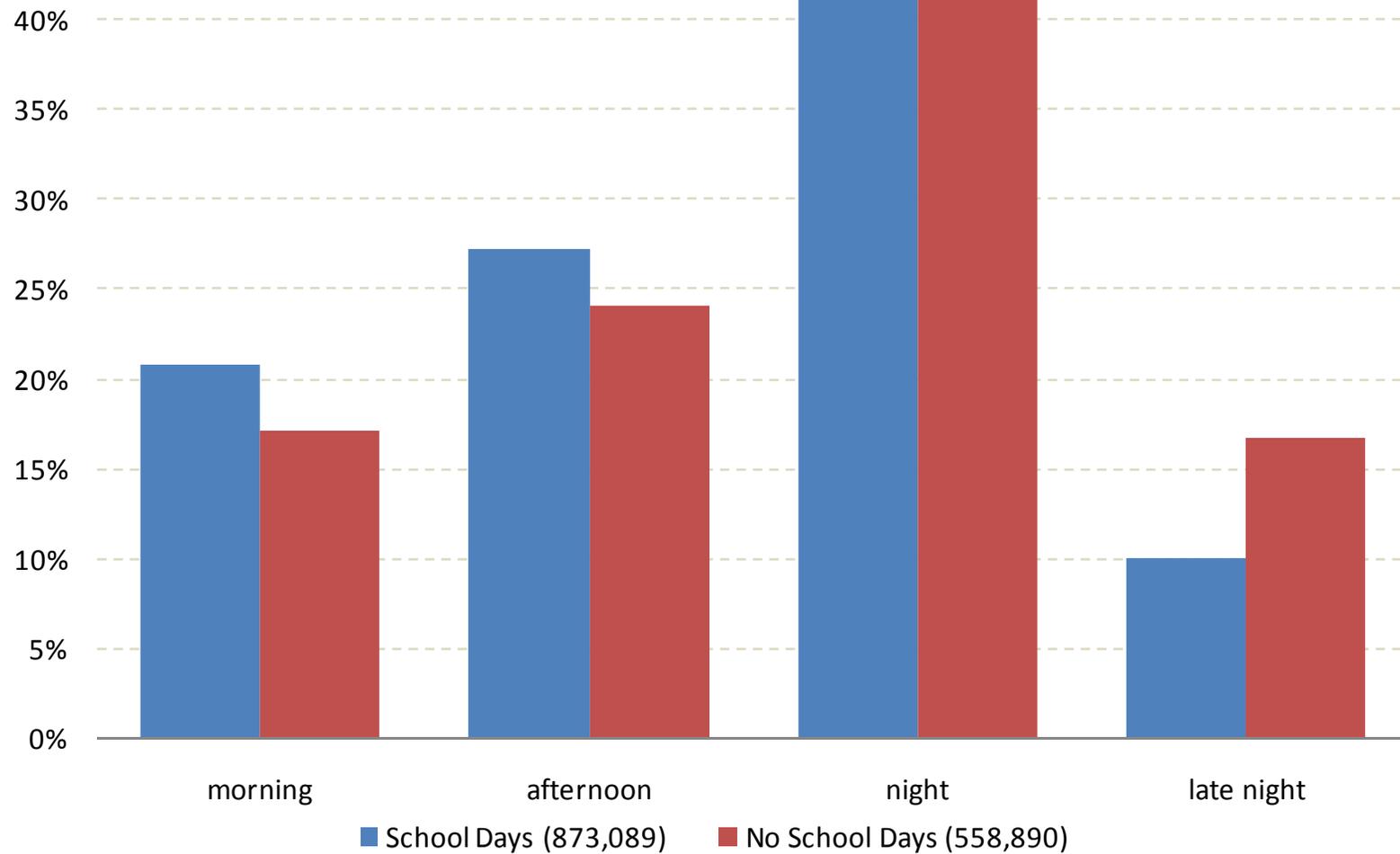
- School data from the Censo Escolar (School Census)
 - Extensive and detailed school and student characteristics from the School Census.

3. Data

- Unit of analysis.
 - Schools as units of analysis.
 - São Paulo does not have a clear geographic definition of school districts.
 - Children are assigned to closest school subject to vacancy restrictions. Municipal and state-level authorities' committee decide on cases of excessive demand
 - We create an artificial district around each school.
 - Area that is closer to a given school than to any other school is defined as its “district.”
 - Crimes happening within this area are “assigned” to that school.
- Of course people can commit crime in areas other than where they study or live
 - US evidence points to a concentration of crimes committed by youth immediately after school hours, when children/adolescents are likely to be around the school.
- We also account for presence of schools, children, and treatment in a certain neighborhood (a given km radius) of a school.

3. Data

Distribution of Crimes during the Day - SP 06-09



3. Data



- We restrict sample to schools that existed in 2006.

Summary Statistics: High Schools

Schools

Table 1 - Summary Statistics: *Bolsa Família* and Crime

Panel A: Middle Schools	Mean	Std Deviation	25th percentile	Median	75th percentile	# Schools	# Obs
All Crimes	377	561	132	240	408	975	3900
% 16-17 in 2006	15%	13%	3%	13%	27%	975	975
# receiving <i>Bolsa Família</i>	166	115	82	139	220	975	3900
# students	1248	457	899	1194	1564	975	3900
Panel B: High Schools	Mean	Std Deviation	25th percentile	Median	75th percentile	# Schools	# Obs
All Crimes	634	761	235	447	767	581	2324
% 16-17 in 2006	28%	11%	20%	28%	33%	581	581
# receiving <i>Bolsa Família</i>	124	95	57	102	170	581	2324
# students	1360	499	853	1345	1721	581	2324
Panel C: Middle and High Schools Together	Mean	Std Deviation	25th percentile	Median	75th percentile	# Schools	# Obs
All crimes reported	356	521	125	230	395	1035	4140
% 16-17 in 2006	17%	15%	3%	15%	30%	1035	1035
# receiving <i>Bolsa Família</i>	162	116	79	135	216	1035	4140
# students	1251	457	898	1194	1567	1035	4140

Source: Secretaria de Segurança do Estado de São Paulo, Secretaria Municipal de Educação - Cidade de São Paulo and Ministério da Educação. Only schools that existed in 2006 included in the sample.

4. Empirical Strategy

- School and year fixed effects.
 - Explore within school variation in # children covered.

- And control for a large set of school level variables.
 - Number of children in the school, number of children in other schools within a 2km radius, and number of treated children in other schools within a 2 km radius, average teacher years of schooling, student-to-teacher ratio, number of students per class, dummy for sewage at the school, proportion of girls, proportion of non-whites, dummy for the presence of TV in the school, dummy for water system at the school, proportion of students older than the normal grade age and a dummy for whether computers are available for students..

- Endogeneity: Bolsa Família may have expanded more rapidly in more deteriorating places → bias towards zero (or positive)

4. Empirical Strategy



- Our solution: restrict attention to variation provided by the expansion of the Bolsa Familia to 16 and 17 year-olds
 - Times-series variation: only after 2007
 - Cross-section variation: differences in age composition across schools

4. Empirical Strategy

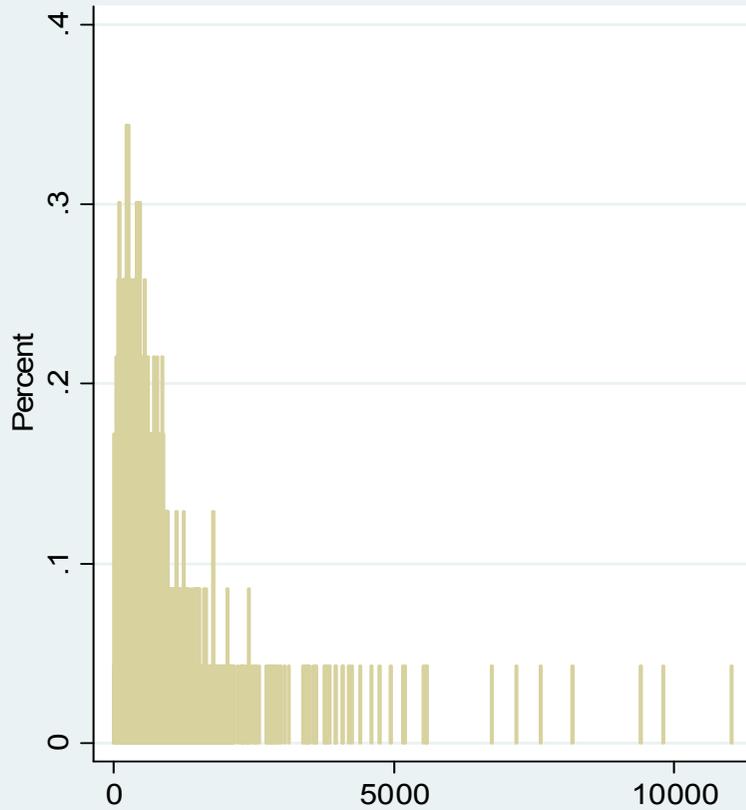


- In the context of count data, concerns related to excessive number of zeros and overdispersion. Here:
 - Excessive number of zeros does not seem to be a serious issue.
 - Overdispersion may be relevant.

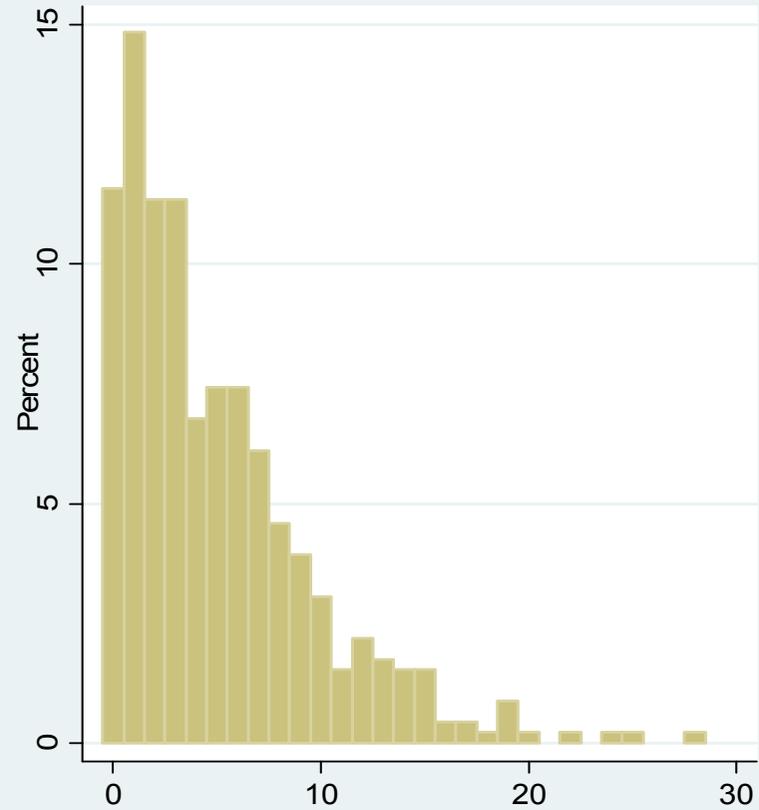
4. Empirical Strategy

Histograms: All Crimes

Histogram of All Crimes
Panel A : Unconditional



Histogram of All Crimes
Panel B : Conditional on less than 200 occurrences



4. Empirical Strategy

$$\ln(\text{crime})_{it} = \alpha_0 + \alpha_1(\text{CCT}_{it}) + \gamma'X_{it} + \vartheta_i + \delta_t + \varepsilon_{it}$$

where: $\ln(\text{crime})_{it}$ is log of the # crimes in school i in year t ;

CCT_{it} is the number of students receiving CCT;

X_{it} include a $n_students_{it}$ in the school and many other demographics

ϑ_i and δ_t are school and year fixed-effects.

- Main results use a linear specification, but the model also is estimated using the Poisson model and negative binomial model.
 - Coefficients can be interpreted as semi-elasticities.
 - Main results robust to different functional forms and definitions of treatment variables.

5. First Stage: High School

Table 3 - First Stage: Bolsa Família Regressed on Instrument, High Schools

	(1)	(2)	(3)
<i>Instrument</i> ‡	-0.0103 [0.0163]	0.0174** [0.00823]	0.0376*** [0.00782]
<i>Constant</i>	83.96*** [2.731]	83.96*** [1.745]	294.2** [117.0]
<i>Controls?</i>	No	No	Yes
<i>School Fixed Effects?</i>	No	Yes	Yes
<i>R²</i>	0.084	0.912	0.925
<i>F-statistic of Instrument</i>	0.401	4.467	23.10
<i>Observations</i>	2,324	2,324	2,233

*Source: Secretaria de Estado da Segurança Pública, Secretaria Municipal de Educação da Cidade de São Paulo, and Ministério da Educação. Standard errors in parentheses robust to clustering at the school level. * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variable is the number of Bolsa Família recipients in the school (Panel A for Middle Schools, Panel B for High Schools and Panel C for Middle and High Schools together). Controls: Year dummies, school size (number of students), average teacher years of schooling, student-to-teacher ratio, number of students per class, dummy for sewage at the school, proportion of girls, proportion of non-whites, dummy for the presence of TV in the school, dummy for water system at the school, proportion of students older than the normal grade age and a dummy for whether computers are available for students. ‡: Instrument is the number of 16 and 17 year-olds at the school interacted with years 2008 and 2009.*

5. First Stage: Middle School

Table 4 - First Stage: Bolsa Família Regressed on Instrument, Middle Schools

	(1)	(2)	(3)
<i>Instrument</i> ‡	-0.0321** [0.0132]	0.160*** [0.00840]	0.139*** [0.00694]
<i>Constant</i>	143.3*** [3.521]	12.57*** [1.466]	66.62 [72.73]
Controls?	No	No	Yes
School Fixed Effects?	No	Yes	Yes
R^2	0.084	0.912	0.925
<i>F</i> -statistic	5.936	361.1	399.8
Observations	3,900	3,900	3,898

Source: Secretaria de Estado da Segurança Pública, Secretaria Municipal de Educação da Cidade de São Paulo, and Ministério da Educação. Standard errors in parentheses robust to clustering at the city level in columns (1) through (3). * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variable is the number of *Bolsa Família* recipients at school that has high school grades. Controls: Year dummies, school size (number of students), average teacher years of schooling, student-to-teacher ratio, dummy for sewage at the school, proportion of girls, proportion of non-whites, dummy for the presence of TV in the school, dummy for water system at the school, proportion of students older than the normal grade age and a dummy for whether computers are available for students. ‡: Instrument is the number of 16 and 17 year-olds at the school interacted with years 2008 and 2009.

5. Main Results

<i>Panel A: Middle Schools</i>	(1)	(2)	(3)	(4)	(5)
	<i>OLS</i>	<i>OLS</i>	<i>OLS</i>	<i>Reduced- form</i> [†]	<i>IV</i> [‡]
<i>Bolsa Família</i>	-0.00224*** [0.000254]	-0.00157*** [0.000296]	5.04e-05 [0.000234]		-0.000920*** [0.000290]
<i>Instrument</i>				-0.000129*** [4.64e-05]	
<i>Constant</i>	5.723*** [0.0562]	0.300 [1.609]	3.754*** [1.087]	3.922*** [1.077]	3.484*** [0.896]
<i>Controls?</i>	No	Yes	Yes	Yes	Yes
<i>School Fixed Effects?</i>	No	No	Yes	Yes	Yes
<i>R²</i>	0.062	0.165	0.949	0.949	
<i>Observations</i>	3,900	3,726	3,726	3,726	3,726

5. Main Results

<i>Panel B: High Schools</i>	(1)	(2)	(3)	(4)	(5)
	<i>OLS</i>	<i>OLS</i>	<i>OLS</i>	<i>Reduced-form†</i>	<i>IV‡</i>
<i>Bolsa Família</i>	-0.00396*** [0.000419]	-0.00384*** [0.000506]	6.46e-05 [0.000276]		-0.00391*** [0.00141]
<i>Instrument</i>				-0.000147*** [5.53e-05]	
<i>Constant</i>	6.342*** [0.0540]	-1.152 [1.590]	4.798*** [1.120]	4.859*** [1.115]	6.872*** [0.949]
<i>Controls?</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>School Fixed Effects?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>R²</i>	0.130	0.334	0.967	0.967	
<i>Observations</i>	2,324	2,233	2,233	2,233	2,233

5. Main Results

<i>Panel C: Middle and High Schools Together</i>	(1)	(2)	(3)	(4)	(5)
	<i>OLS</i>	<i>OLS</i>	<i>OLS</i>	<i>Reduced-form†</i>	<i>IV‡</i>
<i>Bolsa Família</i>	-0.00235*** [0.000247]	-0.00147*** [0.000281]	3.67e-05 [0.000221]		-0.00110*** [0.000284]
<i>Instrument</i>				-0.000133*** [3.90e-05]	
<i>Constant</i>	5.676*** [0.0535]	-0.248 [1.458]	3.855*** [0.982]	3.952*** [0.969]	3.537*** [0.803]
<i>Controls?</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>School Fixed Effects?</i>	<i>No</i>	<i>No</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>R²</i>	0.068	0.196	0.949	0.949	0.947
<i>Observations</i>	4,140	3,958	3,958	3,958	3,958

5. Main Results: Quantitative Interpretation

- Quantitative interpretation: average treatment effect using all schools estimates

$$\begin{aligned} \ln(\text{Crime}|BF = 129) - \ln(\text{Crime}|BF = 70) &= -0.00110 \times 59 \leftrightarrow \ln\left(\frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70}\right) \\ &= -0.0649 \quad \leftrightarrow \frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70} = e^{-0.0649} = 0.937161, \end{aligned}$$

- Column (1) Moving the number of students receiving *Bolsa Família* from the average in 2006 to the the average in 2009 reduces crime by 6.3%

5. Main Results: Quantitative Interpretation

- Quantitative interpretation: average treatment effect using high school estimates

$$\begin{aligned} \ln(\text{Crime}|BF = 129) - \ln(\text{Crime}|BF = 70) &= -0.00391 \times 59 \leftrightarrow \ln\left(\frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70}\right) \\ &= -0.23069 \quad \leftrightarrow \frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70} = e^{-0.23069} = 0.793986, \end{aligned}$$

- Column (1) Moving the number of students receiving *Bolsa Família* from the average in 2006 to the the average in 2009 reduces crime by 20.6%

5. Main Results: Quantitative Interpretation

- Quantitative interpretation: average treatment effect using middle schools estimates

$$\begin{aligned} \ln(\text{Crime}|BF = 129) - \ln(\text{Crime}|BF = 70) &= -0.00092 \times 59 \leftrightarrow \ln\left(\frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70}\right) \\ &= -0.05428 \quad \leftrightarrow \frac{\text{Crime}|BF = 129}{\text{Crime}|BF = 70} = e^{-0.05428} = 0.947167, \end{aligned}$$

- Column (1) Moving the number of students receiving *Bolsa Família* from the average in 2006 to the the average in 2009 reduces crime by 6.3%

5. Main Results: Quantitative Interpretation

- Column (3) in all cases: zero
 - ▣ Within variation seems particularly endogenous
- Quantitative interpretation: local average treatment effect
 - ▣ If we run the model in levels and compute the percentage impact on schools with more 16 and 17 year olds teenagers, we find a 7% impact

5. By Crime Category: High School

Table 7 - Type of Crime: Effect of Bolsa Família by Type of Crime, IV Regressions for High Schools‡

	(1)	(2)	(3)	(4)	(5)	(6)
	Robbery	Theft	Violent Crime	Vandalism	Drug-related	Against Minors
Bolsa Família	-0.00464*** [0.00179]	-0.00118 [0.00195]	-0.00252* [0.00146]	0.000143 [0.00279]	-0.0150*** [0.00435]	-0.00782** [0.00371]
Constant	8.029*** [0.907]	3.105*** [1.096]	3.977*** [1.018]	3.417*** [1.275]	7.128** [2.770]	2.493 [1.738]
Controls?	Yes	Yes	Yes	Yes	Yes	Yes
School Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,233	2,233	2,233	2,233	2,233	2,233

Source: Secretaria de Estado da Segurança Pública, Secretaria Municipal de Educação da Cidade de São Paulo, and Ministério da Educação. Standard errors in parentheses robust to clustering at the school level. * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variable is the sum of all crimes in a certain category that occurred in the neighborhood of a school that has high-school grades. Coefficient is a semi-elasticity. The crime is attributed to the closest school. Controls: Year dummies, school size (number of students), average teacher years of schooling, student-to-teacher ratio, number of students per class, dummy for sewage at the school, proportion of girls, proportion of non-whites, dummy for the presence of TV in the school, dummy for water system at the school, proportion of students older than the normal grade age and a dummy for whether computers are available for students. ‡: Instrument is the number of 16 and 17 year-olds at the school interacted with years 2008 and 2009.

5. By Crime Category: High School

- Comments:
 - Larger impacts on (economically motivated) robbery
 - Comment on impact on thefts
 - Weaker and noisier impact on violent crime (rape, manslaughter, homicide and battery)
 - Interestingly (but expected): stronger impact on drug-related and crime perpetrated by minors

5. By Hour and Day of the Week: High School

Table 6 - Day and Time: Effect of Bolsa Família on Crime by Day and Time of Occurrence, IV Regressions for High Schools‡

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<i>School Days</i>					<i>No-School Days</i>				
	All Day	Morning	Afternoon	Evening	Night	All Day	Morning	Afternoon	Evening	Night
<i>Bolsa Família</i>	-0.00340** [0.00150]	-0.00263 [0.00194]	-0.00375** [0.00171]	-0.00200 [0.00151]	-0.00390* [0.00218]	-0.0038*** [0.00143]	-0.00329* [0.00199]	-0.00139 [0.00191]	-0.0041*** [0.00156]	-0.00650** [0.00254]
<i>Constant</i>	6.449*** [0.873]	4.866*** [1.008]	5.496*** [0.982]	5.472*** [0.980]	6.093*** [1.105]	6.181*** [1.009]	4.372*** [1.041]	4.826*** [1.044]	5.687*** [0.976]	5.186*** [1.269]
<i>Controls?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>School Fixed Effects?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>R²</i>	0.952	0.905	0.916	0.949	0.866	0.943	0.885	0.897	0.926	0.855
<i>Observations</i>	2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233	2,233

*Source: Secretaria de Estado da Segurança Pública, Secretaria Municipal de Educação da Cidade de São Paulo, and Ministério da Educação. Standard errors in parentheses robust to clustering at the school level. * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variable is the sum of all crimes in a certain category that occurred in the neighborhood of a school that has high-school grades. Coefficient is a semi-elasticity. The crime is attributed to the closest school. Controls: Year dummies, school size (number of students), average teacher years of schooling, student-to-teacher ratio, number of students per class, dummy for sewage at the school, proportion of girls, proportion of non-whites, dummy for the presence of TV in the school, dummy for water system at the school, proportion of students older than the normal grade age and a dummy for whether computers are available for students. ‡: Instrument is the number of 16 and 17 year-olds at the school interacted with years 2008 and 2009.*

5. Count Models: High School

Table 5 - Count Models: Effect of Bolsa Família on Crime with Alternative Functional Forms, High Schools‡

	(1)	(2)	(3)	(4)	(5)	(6)
	Poisson	Poisson	Poisson	Reduced-form, Poisson†	IV - Poisson‡	IV - Negative Binomial‡
Bolsa Família	-0.00465*** [0.000514]	-0.00620*** [0.000999]	0.000148 [0.000146]		-0.00259*** [0.00106]	-0.00329 *** [0.00139]
Instrument				-8.60e-05*** [2.85e-05]		
Residual First Stage					0.00283*** [0.00117]	0.00356*** [0.00132]
Constant	6.877*** [0.0726]	2.834 [2.006]	7.277*** [0.274]	7.236*** [0.280]	7.843*** [0.341]	7.878*** [0.401]
Controls?	No	Yes	Yes	Yes	Yes	Yes
School Fixed Effects?	No	No	Yes	Yes	Yes	Yes
Observations	2,324	2,323	2,323	2,323	2,323	2,323

Source: Secretaria de Estado da Segurança Pública, Secretaria Municipal de Educação da Cidade de São Paulo, and Ministério da Educação. Standard errors in parentheses robust to clustering at the school level. * significant at 10%; ** significant at 5%; *** significant at 1%. Dependent variable is the sum of all crimes that occurred in the neighborhood of a school that has high school grades. Coefficient is a semi-elasticity. The crime is attributed to the closest school. Controls: Year dummies, school size (number of students), average teacher years of schooling, student-to-teacher ratio, number of students per class, dummy for sewage at the school, proportion of girls, proportion of non-whites. †: Reduced-form, dependent variable regressed on exogenous covariates and the instrument. ‡: Instrument is the number of 16 and 17 year-olds at the school interacted with years 2008 and 2009. IV Poisson and Negative Binomial implemented via Control Function (standard errors are bootstrapped with 400 replications).

Conclusions



- Bolsa Família has had a significant impact on property crime
- Impact is larger in High Schools, as expected, but not by much
 - ▣ Evidence in favor of general income effect (at the family level)
- Impact is larger on robberies, drug related and perpetrated by minors
- No difference between school and non-school days: little evidence of incapacitation (contrast with Jacob and Lefgren (2003))

Appendix

Definition of the crimes considered (in Portuguese):

Robberies: "ROUBO CONSUMADO -- CARGA", "ROUBO CONSUMADO - DOCUMENTO", "ROUBO CONSUMADO - INTERIOR VEIC.", "ROUBO CONSUMADO - MOTO", "ROUBO CONSUMADO - ONIBUS", "ROUBO CONSUMADO - OUTROS", "ROUBO CONSUMADO - VEICULO", "ROUBO - ESTAB.OUTROS", "ROUBO - INTERIOR ESTEB.", "ROUBO CONSUMADO - EST.BANCARIO", "ROUBO CONSUMADO - EST.COMERC.", "ROUBO CONSUMADO - EST.ENSINO", "ROUBO CONSUMADO - RESIDENCIA", "ROUBO CONSUMADO - TRANSEUNTE", "ROUBO CONSUMADO - VEICULO", "ROUBO SEGUIDO MORTE-CARGA", "ROUBO SEGUIDO MORTE-EST.BANCARIO", "ROUBO SEGUIDO MORTE-EST.COMERC.", "ROUBO SEGUIDO MORTE-EST.ENSINO", "ROUBO SEGUIDO MORTE-ESTAB.OUTROS", "ROUBO SEGUIDO MORTE-INT.TRANSP.COLETIVO", "ROUBO SEGUIDO MORTE-INTERIOR ESTAB", "ROUBO SEGUIDO MORTE-INTERIOR VEIC.", "ROUBO SEGUIDO MORTE-MOTO", "ROUBO SEGUIDO MORTE-ONIBUS", "ROUBO SEGUIDO MORTE-OUTROS", "ROUBO SEGUIDO MORTE-RESIDENCIA", "ROUBO SEGUIDO MORTE-TRANSEUNTE", "ROUBO SEGUIDO MORTE-VEICULO", "ROUBO TENTADO - CARGA", "ROUBO TENTADO - DOCUMENTO", "ROUBO TENTADO - EST.BANCARIO", "ROUBO TENTADO - EST.COMERC.", "ROUBO TENTADO - EST.ENSINO", "ROUBO TENTADO - ESTAB.OUTROS", "ROUBO TENTADO - INTERIOR ESTAB.", "ROUBO TENTADO - INTERIOR VEIC.", "ROUBO TENTADO - MOTO", "ROUBO TENTADO - ONIBUS", "ROUBO TENTADO - OUTROS", "ROUBO TENTADO - RESIDENCIA", "ROUBO TENTADO - TRANSEUNTE", "ROUBO TENTADO - VEICULO", "ROUBO TENTADO - VEICULO", "ROUBO TENTADO-CONDOMINIO COMERCIAL", "ROUBO TENTADO-INT.TRANSP.COLET", "ROUBO/FURTO DE DOCUMENTO", "ROUBO+LESAO GRAVE-DOCUMENTO", "ROUBO+LESAO GRAVE-EST.BANCARIO", "ROUBO+LESAO GRAVE-EST.COMERC.", "ROUBO+LESAO GRAVE-INTERIOR VEIC.", "ROUBO+LESAO GRAVE-MOTO", "ROUBO+LESAO GRAVE-ONIBUS", "ROUBO+LESAO GRAVE-OUTROS", "ROUBO+LESAO GRAVE-RESIDENCIA", "ROUBO+LESAO GRAVE-TRANSEUNTE", "ROUBO+LESAO GRAVE-VEICULO", "ROUBO-CONDOMINIO COMERCIAL", "ROUBO-CONDOMINIO RESIDENCIAL", "ROUBO-CONDOMINIO RESIDENCIAL", "ROUBO-INTERIOR TRANSP.COLETIVO"

Appendix

Definition of the crimes considered (in Portuguese):

Thefts: "FURTO - BIP/PAGER/CELULAR", "FURTO - CARGA", "FURTO - DOCUMENTOS", "FURTO - ESTABELECIMENTO BANCARIO", "FURTO - ESTABELECIMENTO COMERCIAL", "FURTO - ESTABELECIMENTO ENSINO", "FURTO - INTERIOR DE VEICULO", "FURTO - MOTO", "FURTO - ONIBUS", "FURTO - OUTROS", "FURTO - RESIDENCIA", "FURTO - TRANSEUNTE", "FURTO - VEICULOS", "FURTO COISA COMUM-DOCUMENTO", "FURTO COISA COMUM-EST.BANCARIO", "FURTO COISA COMUM-EST.COMERC.", "FURTO COISA COMUM-ESTAB.OUTROS", "FURTO COISA COMUM-INTERIOR ESTAB", "FURTO COISA COMUM-INTERIOR VEIC.", "FURTO COISA COMUM-OUTROS", "FURTO COISA COMUM-RESIDENCIA", "FURTO COISA COMUM-TRANSEUNTE", "FURTO COISA COMUM-VEICULO", "FURTO CONSUMADO - VEICULO", "FURTO QUAL.CONSUMADO - CARGA", "FURTO QUAL.CONSUMADO - DOCUMENTO", "FURTO QUAL.CONSUMADO - EST.BANCARIO", "FURTO QUAL.CONSUMADO - EST.COMERC.", "FURTO QUAL.CONSUMADO - EST.ENSINO", "FURTO QUAL.CONSUMADO - INTERIOR VEIC.", "FURTO QUAL.CONSUMADO - MOTO", "FURTO QUAL.CONSUMADO - ONIBUS", "FURTO QUAL.CONSUMADO - RESIDENCIA", "FURTO QUAL.CONSUMADO - TRANSEUNTE", "FURTO QUAL.CONSUMADO - VEICULO", "FURTO QUAL.CONSUMADO - BIP/PAGER", "FURTO QUAL.CONSUMADO - CONDOMINIO RESIDENCIAL", "FURTO QUAL.CONSUMADO - ESTAB.OUTROS", "FURTO QUAL.CONSUMADO - INTERIOR ESTAB", "FURTO QUAL.CONSUMADO - INTERIOR TRANSP.COLETIVO", "FURTO QUAL.CONSUMADO - OUTROS", "FURTO QUAL.TENTADO - CARGA", "FURTO QUAL.TENTADO - DOCUMENTO", "FURTO QUAL.TENTADO - EST.BANCARIO", "FURTO QUAL.TENTADO - EST.COMERC.", "FURTO QUAL.TENTADO - EST.ENSINO", "FURTO QUAL.TENTADO - INTERIOR VEIC.", "FURTO QUAL.TENTADO - MOTO", "FURTO QUAL.TENTADO - ONIBUS", "FURTO QUAL.TENTADO - OUTROS", "FURTO QUAL.TENTADO - RESIDENCIA", "FURTO QUAL.TENTADO - TRANSEUNTE", "FURTO QUAL.TENTADO - VEICULO", "FURTO QUAL.TENTADO - BIP/PAGER", "FURTO QUAL.TENTADO - CONDOMINIO RESIDENCIAL", "FURTO QUAL.TENTADO - ESTAB.-OUTROS", "FURTO QUAL.TENTADO - INTERIOR ESTAB", "FURTO QUAL.TENTADO - INTERIOR TRANSP.COLETIVO", "FURTO TENTADO - VEICULO", "FURTO TENTADO - VEICULO", "FURTO TENTADO - BIP/PAGER", "FURTO TENTADO - CARGA", "FURTO TENTADO - DOCUMENTO", "FURTO TENTADO - EST.BANCARIO", "FURTO TENTADO - EST.COMERC.", "FURTO TENTADO - EST.ENSINO", "FURTO TENTADO - ESTAB.OUTROS", "FURTO TENTADO - INTERIOR ESTAB", "FURTO TENTADO - INTERIOR TRANSP.COLETIVO", "FURTO TENTADO - INTERIOR VEIC.", "FURTO TENTADO - MOTO", "FURTO TENTADO - ONIBUS", "FURTO TENTADO - OUTROS", "FURTO TENTADO - RESIDENCIA", "FURTO TENTADO - TRANSEUNTE", "FURTO TENTADO - VEICULO", "FURTO - CONDOMINIO RESIDENCIAL", "FURTO - ESTAB.OUTROS", "FURTO - INTERIOR ESTAB", "FURTO - INTERIOR TRANSP.COLET.""

Appendix

Definition of the crimes considered (in Portuguese):

Drug –related Crimes: ="ASSOCIACAO PARA O TRAFICO", "ENTORPECENTES - L 11343/06 ", "FABRICACAO DE ENTORPECENTE", "PORTE DE ENTORPECENTE", "TRAFICO ENTORPECENTE - MACONHA", "TRAFICO ENTORPECENTE- - OUTROS", "TRAFICO ENTORPECENTE-PSICOTROP", "USO DE ENTORPECENTE - MACONHA ", "USO DE ENTORPECENTE - OUTROS", "USO DE ENTORPECENTE-PSICOTROP."

Violent Crimes: "AMEACA", "ESTUPRO", "ESTUPRO (213)", "ESTUPRO DE VULNERAVEL (217-A)", "ESTUPRO TENTADO", "HOMICIDIO CULPOSO OUTROS", "HOMICIDIO DOLOSO", "HOMICIDIO QUALIFICADO", "LESAO CORPORAL CULPOSA OUTROS", "LESAO CORPORAL DOLOSA", "RIXA", "TENTATIVA DE HOMICIDIO", "VIAS DE FATO", "VIOLENCIA ARBITRARIA"

Vandalism : "CRUELDADE CONTRA ANIMAIS", "DANO", "ESCRITO OBSCENO", "PERTURB.DE TRABALHO OU SOSSEGO", "PERTURBACAO DA TRANQUILIDADE", "PROVOCACAO DE TUMULTO", "VADIAGEM"

Crimes against Minors: "ABANDONO DE INCAPAZ", "ABUSO DE INCAPAZES", "C/CRIANCA/ADOLESC. LEI 8069/90", "CORRUPCAO DE MENOR/LEI 2252/54", "CORRUPCAO DE MENORES", "CORRUPCAO DE MENORES (218)", "ENTREGA/FILHO A PESSOA INIDON.", "ESTUPRO DE VULNERAVEL (217-A)", "FAVOREC. PROSTITUICAO VULNERAVEL (218-B)", "MAUS TRATOS", "SEDUCAO"

1. The Interventions: CCT

- São Paulo's Renda Mínima
 - Municipal minimum family income program – created in 2006.
 - Eligibility criteria: families that live in the city of São Paulo for at least 2 years, with monthly p.c. income \leq R\$175.00, and at least one child under 16.
 - Conditionality: school enrolment and minimum attendance of 85% for children aged 6-15, fulfillment of the vaccination calendar for children under 7.
 - Renda Mínima's benefit value complements Bolsa Família's federal program benefit.
 - Maximum benefit value (Bolsa Família + Renda Mínima):
 - R\$ 140.00: families with 1 child
 - R\$ 170.00: families with 2 children
 - R\$ 200.00 : families with 3 or more children

9º Seminário Itaú Internacional de avaliação econômica e projetos sociais