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Abstract:

One issue that affects the economic and social development of a country is the ability of the judiciary to present itself as a legitimate instance in resolving conflicts that arise in the social, business and economic development. One way to measure this is through legitimacy of the motivations that lead citizens to trust or not in the Judiciary. We created the Brazilian Confidence in Justice Index (BCJI) as a validation argument for our confidence measure. The BCJI is a measure of perception, which shows the opinion of the population about Brazil's judiciary. Our results indicate that race and gender are important predictors once controlled for other characteristics of respondents. Blacks have a slightly lower level of confidence in the judiciary than whites. Women also present less confidence than men. We also show that people with low income have lower levels of trust. Our findings also have other important implications for confidence in the judicial system. We show that there is a positive and strong relationship between confidence in the judicial system and propensity to seek the judiciary. This result indicates that although judiciary has lower levels of trust for a pool of demographic and economic variables, most Brazilians perceive it as a legitimate way to seek solution to their problems and would not hesitate to go to court to resolve conflicts of their daily lives.

Keywords: Confidence in Justice; Institutions; Judiciary.

JEL Codes: K11; K30; K40.

Confidence in the Judicial System: Evidence from Brazil

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ABSTRACT

One issue that affects the economic and social development of a country is the ability of the judiciary to present itself as a legitimate instance in resolving conflicts that arise in the social, business and economic development. One way to measure this is through legitimacy of the motivations that lead citizens to trust or not in the Judiciary. We created the Brazilian Confidence in Justice Index (BCJI) as a validation argument for our confidence measure. The BCJI is a measure of perception, which shows the opinion of the population about Brazil's judiciary. Our results indicate that race and gender are important predictors once controlled for other characteristics of respondents. Blacks have a slightly lower level of confidence in the judiciary than whites. Women also present less confidence than men. We also show that people with low income have lower levels of trust. Our findings also have other important implications for confidence in the judicial system. We show that there is a positive and strong relationship between confidence in the judicial system and propensity to seek the judiciary. This result indicates that although judiciary has lower levels of trust for a pool of demographic and economic variables, most Brazilians perceive it as a legitimate way to seek solution to their problems and would not hesitate to go to court to resolve conflicts of their daily lives.

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1 -- Introduction

One issue that affects the economic and social development of a country is the ability of the judiciary to present itself as a legitimate instance in resolving conflicts that arise in the social, business and economic development. One way to measure this is through legitimacy of the motivations that lead citizens to trust or not in the judiciary. Confidence in the judiciary creates legitimacy and consolidates the rule of law (Levasseur 2002). Many institutions are important and affect the political system of a country in which the rule of law exists. The judiciary is among the most important institutions to achieve and maintain this condition (Buscaglia and Domingo 1997). The judiciary has been a vital part of the emergence and consolidation of democracy in most Latin American countries as they moved from military and authoritarian regimes to democracy over the last two decades, deciding and solving disputes that arise in society, business, economy and politics. Measuring judicial performance is a good way of measuring the effectiveness of the rule of law in a country, therefore an indicator of the quality of a country's democracy (O`Donnell, 1998).

Although there is an extensive literature examining confidence in the judiciary in developed countries, there is a scant attention in emerging countries. The purpose of this study is to analyze the determinants of public confidence in the judicial system in Brazil. We explore correlations between confidence in the judicial system and a pool of demographic and economic variables as race, income, age, gender, education, experience with the judicial system and knowledge about the judiciary. We developed a measure of judicial performance in Brazil through the motivations that drive people to trust or not the country's judicial system. The result is a confidence index in the Brazilian justice, as a statistical summary carried out in seven Brazilian states, based on a representative sample of the population. We used eleven surveys with telephone interviews. Our sample consists of 4,685 respondents in 2010, 6,213 in 2011, and 6,049 in 2012.

One problem in describing public confidence in the judiciary is that it is multifaceted. According to Staats, Bowler and Hiskey (2005) judicial performance is a multidimensional concept. The authors built a measure composed of five different elements: the extent of independence, accountability, efficiency, effectiveness and accessibility. They surveyed 17 Latin American countries, interviewing legal experts and developed a composite measure based on these five dimensions. Our approach is a little different. We assess judicial performance via the factors that lead people to trust or not in the judicial system. We are interested in the dimensions of efficiency in terms of speed in deciding conflicts;

competence to resolve conflicts (responsiveness); impartiality as a measure of accountability; independence from external political influence and ease of use and costs as a measure of access to justice. We created the Brazilian Confidence in Justice Index (BCJI) as a validity argument for our confidence measure. The BCJI is a measure of perception, which shows the opinion of the population about Brazil's judiciary. In Brazil, the judiciary has a dual role. Sadek (2004) sees the Brazilian judiciary as both a state power and also a public service provider. It is a state power when judging whether or not policies and actions of the executive and legislative branches of government comply with the constitution, but it is also a public service provider when adjudicating disputes and guaranteeing individual rights. Our focus on the public service provider role of the judiciary: how effective it is in guaranteeing "justice" for individuals and business.

Our results indicate that race and gender are important predictors once controlled for other characteristics of the respondents. Blacks have a slightly lower level of confidence in the judiciary than whites. These results can be explained in part by the vision that the judicial system is expensive and not very honest to them. Women present lower level confidence than men. For them, although the judiciary is faster it is less honest, somewhat independent, difficult to access and has little ability to resolve conflicts. We found that people who had experience with the judicial system present lower levels of trust. They also think that justice is expensive and slow. The results show that people with more knowledge of the judicial system present higher levels of confidence in the judiciary in Brazil. However, this result may be related positively with the knowledge of laws and not of the procedures of the judicial system. Another finding is that people with more years of education (college) also have a slightly higher level of confidence in the judiciary. They think that justice is cheaper, easier to access, more independent, honest and competent. Finally, we also analyzed the relationship between confidence in the judiciary and propensity to seek the judicial system in some hypothetical situations. We show that there is a positive and strong relationship between confidence in the judicial system and propensity to seek the judiciary. This result indicates that although judiciary has lower levels of trust for a pool of demographic and economic variables, most Brazilians perceive it as a legitimate way to seek solution to their problems and would not hesitate to go to court to resolve conflicts of their daily lives.

This paper is organized as follows: Section 2 describes our methodology and our sample. Section 3 presents the results. Finally, Section 4 concludes the paper.

2 – Methodology and Sample

Our results are based on three surveys conducted along 2010, 2011 and 2012. These surveys were obtained through telephone contact during the period of thirty-three months. The population of the survey is comprised of people distributed by states: Minas Gerais, Pernambuco, Rio Grande do Sul, Bahia, Rio de Janeiro, São Paulo and the Federal District, which combined represent approximately 60% of the population, according to the 2010 census conducted by the Brazilian Institute of Geography and Statistics (IBGE). The informant is an individual who represents the selected household, of any gender (male or female) and is 18 years old.

We use a method of proportional quota sampling, using the following quotas: gender, household income, education, age and economic status (economically active or not). The groups (strata) were proportionally distributed according to the 2010 Census and National Household Sample Survey 2009[1]. Our sample consists of 4,685 respondents in 2010, 6,213 in 2011, and 6,049 in 2012. Table 1 provides an overview of the sample.

Table 1. Sample Description

The sample is distributed through 7 states, which together represent approximately 60% of the country's population, according to census data. The sample size was determined by the number of inhabitants in each state. The sampling frame was constructed to take the range of 95% and absolute sampling error of 2.5%.

States	*Population*	*Sample*		
		2010	*2011*	*2012*
São Paulo	37.035.456	1694	2252	1614
Minas Gerais	17.905.134	810	1089	1164
Rio de Janeiro	14.392.106	662	867	818
Bahia	13.085.769	599	793	792
Rio Grande do Sul	10.187.842	463	609	607
Pernambuco	7.929.154	362	476	572
Distrito Federal	2.051.146	95	127	482
Total	102.586.606	4,685	6,213	6,049

The BCJI is calculated as the average from a set of nine questions covering the main aspects of confidence in justice. The respondent must issue his opinion on the justice regarding: confidence; speed in solving conflict; cost access; ease of access; political independence; honesty; ability to solve conflicts; panorama of the last 5 years and expectation for the next 5 years. Each question has the same weight within the index.

[1] The National Household Sample Survey – PNAD investigates every year and on a continuous basis, overall population characteristics, education, labor, income and housing, among others, for different periods of time according to the need of information about the country, as well as characteristics about migration, fertility, nuptiality, health, food security, and other topics.

Thus, to compute the BCJI, we sum all 9 questions, and then divide by 9. The BCJI has a range between 0 and 10. For each question, we use the weighted average of responses. Thus, to compute weighted average of first question about confidence in justice we used four response categories that include: 1 = not at all confident, 2 = not very confident, 3 = fairly confident and 4 = very confident. Table 2 describes the BCJI and their components.

Table 2 Describes the BCJI and their components.

The questions that form the questionnaire have four or five responses. Each question is identified by assigning an index n to its response, which also corresponds to a value assigned to that response. Thus, the first response, ie, the answer 0, is assigned the value 0. To the last response is assigned the value max, which can be 3 or 4, depending on whether the question has four or five possible responses. Then, values are weighted according to the proportion of people who chose that response.

		Weighted Average			
	BCJI	*2010*	*2011*	*2012*	*All Years*
P1	Confidence	4.10	4.61	4.38	4.38
P2	Speed in solving conflicts	1.99	1.99	1.91	1.96
P3	Costs access	4.62	4.61	4.80	4.68
P4	Ease of access	2.18	2.27	2.25	2.24
P5	Political independence	3.40	3.55	3.65	3.54
P6	Honesty	4.10	4.01	4.16	4.09
P7	Ability to solve conflicts	4.22	4.43	4.46	4.38
P8	Panorama of the last 5 years	5.91	5.86	5.85	5.87
P9	Expectation for the next 5 years	7.22	7.52	7.30	7.26

Table 3 presents basic statistics of the BCJI for each year. Overall, the BCJI has not changed much between 2010 and 2012. Institutions change over time, but they are path-dependent because individuals learn, organizations develop, and ideologies form in the context of a particular set of formal and informal rules (North, 1990). North's view, institutional change is generally incremental rather than sudden, an accumulation of many small changes rather than occasional large changes. It is therefore natural that the index does not change much in the short term. Although the BCJI has not changed significantly over time, there are important differences between a pool of demographic and economic variables as race, income, age, gender, labor education, experience with the justice and knowledge about the judiciary that can be observed and analyzed.

Table 3. Descriptive Statistics for BCJI

Descriptive statistics for BCJI in 2010, 2011 and 2012. The BCJI is calculated as the average from a set of nine questions covering the main aspects of confidence in justice: Confidence (P1); Speed in solving conflicts (P2); Cost access (P3); Ease of access (P4); Political independence (P5); Honesty (P6); Ability to solve conflicts (P7): Panorama of the last 5 years (P8) and Expectation for the next 5 years (P9).

2010			
Weighted Average	*Std. Dev.*	*Min.*	*Max.*
4.19	1.24	0.25	8.70
2011			
4.29	1.31	0.25	9.07
2012			
4.31	1.30	0.25	9.35
All Years			
4.27	1.29	0.25	9.35

Figure 1 provides a histogram showing the overall variation in confidence in the judiciary, for the 16,867 respondents in our sample. The distribution of BCJI scores is reasonably symmetric and close to normal.

Figure 1. Distribution of *BCJI*

Histogram shows fraction of respondents with Brazilian Confidence in Justice Index (BCJI) scores in indicated ranges. Sample = 16,867 respondents. Mean = 4.27, standard deviation =1.29 and median = 4.25.

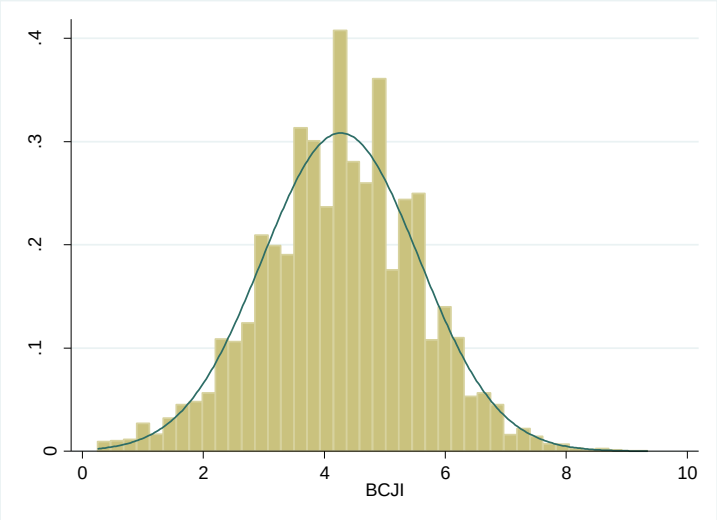

Table 4 provides Pearson correlation coefficients between BCJI and its component questions. In all sample years, BCJI correlates positively with each question; with coefficients from 0.41 to 0.64. Part of this correlation is by construction, because each question forms part of BCJI. The correlations between questions are generally positive and statistically significant but moderate. The correlation is high for some questions like confidence, cost access and honesty, but it is moderate between -0.02 and 0.35 for other questions. This suggests that, except for confidence; cost access and honesty, colinearity between questions and BCJI should not be a big problem.

Table 4. Correlations

Correlations between Brazilian Confidence in Justice Index (BCJI) and its components for all three years. Significant coefficients, at 5% or less, are in **boldface.**

	BCJI	*P1*	*P2*	*P3*	*P4*	*P5*	*P6*	*P7*	*P8*	*P9*
BCJI	**1**									
P1	**0.64*** **	**1**								
P2	**0.45*** **	**0.24*** **	**1**							
P3	**0.63*** **	**0.45*** **	**0.22*** **	**1**						
P4	**0.41*** **	**0.14*** **	**0.14*** **	**0.13*** **	**1**					
P5	**0.52*** **	**0.21*** **	**0.15*** **	**0.22*** **	**0.24*** **	**1**				
P6	**0.62*** **	**0.43*** **	**0.19*** **	**0.43*** **	**0.13*** **	**0.20*** **	**1**			
P7	**0.44*** **	**0.16*** **	**0.10*** **	**0.16*** **	**0.04*** **	**0.10*** **	**0.20*** **	**1**		
P8	**0.58*** **	**0.28*** **	**0.19*** **	**0.29*** **	**0.11*** **	**0.18*** **	**0.27*** **	**0.12*** **	**1**	
P9	**0.49*** **	**0.20*** **	**0.11*** **	**0.19*** **	**0.06*** **	**0.10*** **	**0.18*** **	**0.10*** **	**0.35*** **	**1**

To model contextual as well as a pool of demographic and economic variables explaining individual confidence in justice, we run pooled Ordinary Least Squares (OLS) regressions. The BCJI in each year is treated as an independent observation.

$$BCJI_{i,t} = \beta_0 + \beta_1 * gender_{i,t} + \beta_2 * race_{i,t} + \beta_3 * age_{i,t} + \beta_4 * income_{i,t} + \beta_5 * education_{i,t} + \beta_6 * experience_{i,t} + \beta_7 * knowledge_{i,t} + \beta_i * X_{i,t} + \varepsilon_{i,t}$$

Many personal characteristics are potentially associated with confidence in the judiciary. We therefore include some control variables to reduce omitted variable bias. We use the following control variables: states dummies, quarter dummies, employee, and marital status where $X_{i,t}$ is a vector of control variables.

In order to examine the relationship between these features and the questions of BCJI, we use pooled OLS for each question.

$$PI_{i,t} = \beta_0 + \beta_1 * gender_{i,t} + \beta_2 * race_{i,t} + \beta_3 * age_{i,t} + \beta_4 * income_{i,t} + \beta_5 * education_{i,t} + \beta_6 * experience_{i,t} + \beta_7 * knowledge_{i,t} + \beta_i * X_{i,t} + \varepsilon_{i,t}$$

The index "I" is between 1 and 9 and represents each question of BCJI.

3 –Results

Regression analysis was used to examine the influence of gender, race, income and education and experience with the judicial system and knowledge about the judiciary on public confidence in the judiciary. Table 5 shows that confidence in the judiciary differs

largely between these groups. Women have lower levels of confidence in the judiciary than men. The results obtained by Pooled OLS indicate that women's present levels of confidence in the judiciary 12% lower than men (with significance at the 1% level). For them, although the judiciary is faster it is less honest, somewhat independent, difficult to access and has little ability to resolve conflicts. Lawrence (2001) shows that women rely less on justice. These results may be explained in part by two aspects: discrimination and violence against women. Brazil has the seventh highest murder rate among women from 84 countries according to research by Waiselfisz (2012). He shows that the murder rate in the country was around 4.4 victims for every 100,000 women. Physical violence is prevalent, comprising 44.2% of cases. The psychological or moral hazard is above 20% and the sexual violence is responsible for 12.2% of victims. Some studies also show that discrimination exists within the Brazilian labor market. Lovell (2000) shows that women and blacks that work in São Paulo experience greater discrimination compared to their counterparts in Bahia. Nomura (2010), Brown, Moon and Zoloth (1980) show that wage discrimination for the same position was greater for women.

Race has also been one of the most important predictors of citizens' perceptions on confidence in the judiciary. We found that blacks[2] have lower levels of confidence in the judiciary compared to whites. The results indicate that blacks present levels of confidence in the judiciary 4.82% lower than whites (with significance at the 10% level). For them, the judiciary is expensive and less honest. We results are consistent with the literature that documenting these racial differences. Sherman (2002) shows that there are clear racial divisions of opinion about the criminal justice system's component institutions, though not about the system as a whole. He shows that whites have twice as much confidence in their local court systems than blacks. In measures of confidence in courts, race is again a factor that shows a big difference of opinion. Some studies show that minority group members are more distrustful of and less confident in the police and the courts (Huang & Vaughn, 1996; Lasley, 1994; Schummann, Steeh, Bobo, & Krysan, 1997). In general, these minority concerns are fueled by issues of racial profiling (Cole,1999; Kennedy,1997). Some studies also show that blacks suffer discrimination in Brazil. Twine (1998), Reichmann (1999), Burdick (1998), and Sheriff (2000), have provided important evidence of racism experienced by Afro-Brazilians. According to the MNDH (Movimento Nacional de Direitos Humanos) federal government police apparatuses killed three times more blacks than whites

[2] We constructed the black dummy variable considering black, brown and indigenous people.

in 1997. Blacks in Brazil are more severely punished than their white counterparts for committing crimes of equal or comparable gravity (Adorno, 1995).

Although the BCJI has no statistically significant difference between family's income, the results regarding the question of confidence in judiciary show that people with high income have higher levels of confidence in judiciary. For them, the justice is politically independent, has low cost and is of easy access. There is substantial literature suggesting that those with more wealth or power are treated differently than those without such resources. The Brazilian Institute of Geography and Statistics (IBGE) presented a survey in which Brazil, in 2011, reached its lowest income inequality in thirty years. The Gini coefficient in Brazil fell from 0.518 in 2009 to 0.501 in 2011. However, Brazil still remains one of the most unequal countries in the world.

Education is another important predictors of citizens' perceptions on confidence in the judiciary. People with more years of education have higher levels of confidence in judiciary. The coefficient implies that a one year additional in education predicts a 0.71% increase in BCJI. This result is statistically significant at the 1% level. For them, although justice is expensive and has little ability to resolve conflicts it is politically independent, honest and has low cost. Bennack (1999) shows that people with higher incomes and more education reported greater confidence in most of the institutions examined. Jones, Weatherburn, and McFarlane (2008) show that confidence in the criminal justice system was generally found to be more prevalent among younger people, those who are better educated, and those on higher incomes. They also found that respondents who earned higher annual incomes were more confident that the judicial system is effective in bringing people to judiciary, meeting the needs of victims, respecting the rights of the accused and treating the accused fairly. Benesh (2006) shows that people who reported that they knew more about the courts were more likely to feel confident in them, as were people who had higher levels of education.

Salzman and Ramsey (2013) show that experience with the justice system is likely to cause more awareness of the court's deficiencies in Latin America, which probably leads to lower levels of judicial confidence. They also found that even in situations where a litigant achieves success in the courts, the experience with the imperfect process in a Latin American judicial system may still yield lower levels of confidence relative to the inexperienced position from which the litigant began. Our results indicate that people who had experience with the judiciary present levels of trust 11.07% lower than people who had no experience

with the judiciary (with significance at the 1% level). These informants, although justice is politically independent and easily accessible it is slow and expensive.

Knowledge about the judicial system has a positive relationship with confidence in the courts (Gibson et al.,1998; Benesh, 2006). In emerging economies, individuals that are better informed about the judicial system will recognize its inadequacies, which leads to lower levels of confidence in that institution (Salzman and Ramsey, 2013). However, we found that people with knowledge about the judicial system have higher levels of confidence in the judiciary. The results indicate that people with knowledge about the judicial system present levels of confidence 17.36% higher (with significance at the 10% level). Nonetheless, this result may be related positively with knowledge of the law and not of the procedures of the judicial system.

Table 5 - Determinants of BCJI - Pooled OLS Regression

	BCJI	*Confidence*	*Speed in solving conflicts*	*Costs access*	*Ease of access*	*Political independence*	*Honesty*	*Ability to solve conflicts*	*Panorama of the last 5 years*	*Expectation for the next 5 years*
Confidence in the Federal Government	**0.7870*** **	**0.3504*** **	**0.1992*** **	**0.3054*** **	**0.0627*** **	**0.1671*** **	**0.3531*** **	**0.1814*** **	**0.3865*** **	**0.3507*** **
	(40.58)	(32.35)	(15.87)	(28.50)	(5.22)	(12.47)	(30.98)	(12.97)	(25.05)	(22.09)
Female	**-0.1205*** **	**-0.0365*** **	**0.0466*** **	-0.0133	**-0.1210*** **	**-0.0794*** **	**-0.0505*** **	**-0.0605*** **	**-0.0981*** **	**0.0505*** **
	(-6.15)	(-3.34)	(3.70)	(-1.23)	(-9.94)	(-5.92)	(-4.42)	(-4.25)	(-6.32)	(3.07)
Black	**-0.0482***	**-0.0386** **	-0.0200	**-0.0413*** **	0.0035	0.0054	**-0.0480*** **	-0.0156	**0.0432***	0.0094
	(-1.68)	(-2.40)	(-1.13)	(-2.62)	(0.20)	(0.28)	(-2.87)	(-0.74)	(1.86)	(0.39)
Age	**-0.0224*** **	**-0.0044** **	**-0.0148*** **	**-0.0088*** **	**-0.0109*** **	**-0.0203*** **	**0.0043** **	**-0.0051** **	**-0.0070** **	**0.0064** **
	(-6.29)	(-2.14)	(-6.30)	(-4.45)	(-5.13)	(-8.52)	(2.07)	(-1.99)	(-2.47)	(2.12)
Age squared	**0.0002*** **	0.0000	**0.0001*** **	**0.0001*** **	**0.0000** **	**0.0001*** **	**-0.0000***	0.0000	0.0000	**-0.0001*** **
	(3.89)	(1.06)	(3.68)	(3.70)	(2.11)	(4.84)	(-1.85)	(1.06)	(0.72)	(-2.85)
From 2 until 4 minimum wages	-0.0284	0.0291	0.0060	0.0054	0.0226	0.0199	-0.0379	-0.0418	0.0386	-0.0362
	(-0.66)	(1.15)	(0.21)	(0.21)	(0.84)	(0.69)	(-1.41)	(-1.28)	(1.08)	(-0.97)
From 4 until 12 minimum wages	0.0103	**0.0573** **	-0.0116	0.0373	**0.0652** **	**0.0723** **	-0.0262	-0.0488	0.0272	**-0.0234**
	(0.24)	(2.32)	(-0.41)	(1.52)	(2.46)	(2.53)	(-1.00)	(-1.54)	(0.78)	(-0.64)
More than 12 minimum wages	0.0378	**0.0780*** **	-0.0235	**0.0616** **	**0.0648** **	**0.0779*** **	-0.0105	-0.0520	0.0372	**-0.0794** **
	(0.86)	(3.05)	(-0.81)	(2.41)	(2.37)	(2.61)	(-0.39)	(-1.58)	(1.03)	(-2.10)
Education	**0.0071*** **	**0.0123*** **	**-0.0042*** **	**0.0093*** **	0.0020	**0.0031** **	**0.0076*** **	**-0.0063*** **	0.0012	**-0.0051*** **
	(3.49)	(11.04)	(-3.30)	(8.30)	(1.60)	(2.25)	(6.57)	(-4.38)	(0.72)	(-2.99)
Experience with the judiciary	**-0.1107*** **	**-0.0291*** **	**-0.1187*** **	**-0.0610*** **	**0.0813*** **	**0.0731*** **	-0.0142	0.0015	**-0.0838*** **	**-0.0715*** **
	(-5.76)	(-2.74)	(-9.73)	(-5.78)	(6.86)	(5.59)	(-1.28)	(0.10)	(-5.46)	(-4.42)
Knowledge of the judiciary	**0.1736*** **	**0.0939*** **	-0.0017	**0.0696*** **	**0.1044*** **	**0.1525*** **	**0.0750*** **	**0.0673*** **	**0.0790*** **	**0.0695*** **
	(7.05)	(6.58)	(-0.11)	(4.86)	(6.95)	(9.08)	(5.05)	(3.67)	(3.96)	(3.24)
Constant	**4.7446*** **	**2.1892*** **	**2.2934*** **	**2.4445*** **	**1.7842*** **	**2.5472*** **	**2.0722*** **	**2.3672*** **	**3.4497*** **	**3.6477*** **
	(52.15)	(42.55)	(38.20)	(48.33)	(32.16)	(41.50)	(38.62)	(36.05)	(48.48)	(48.81)
Observations	16,867	16,867	16,867	16,867	16,867	16,867	16,867	16,867	16,867	16,867
Adjusted R-squared	0.1154	0.1020	0.0356	0.0653	0.0415	0.0625	0.0695	0.0163	0.0534	0.0342

Notes: 1) Control variables are: state, quarter dummies, employee and marital state. 2) T-statistics (heteroskedasticity-consistent for cross-sectional OLS) are in parentheses. *, **, and *** respectively indicate significance levels at 10%, 5%, and 1% levels. Significant results (at 5% level or better) are in boldface.

We also assessed the relationship between confidence in the judiciary and propensity to seek the judicial system in some hypothetical situations. We examined a range of conflicts in which the population will often be involved in and where they have a choice as to whether to raise proceedings in court, excluding issues where the people involved in are not free to decide whether or not to seek a judicial solution. We created a behavior index based on six different hypothetical situations where we ask the public how likely they would be to try and use the judiciary to resolve a conflict or problem, the possible answers to those questions are: (i) definitely not, (ii) probably not, (iii) probably yes, (iv) definitely yes. The behavior index is a measure of perception, which shows the opinion of the population about the propensity to seek to court to resolve their conflicts.

We presented cases concerning family issues (C1), provision of service (C2), consumer issues (C3), neighborhood (C4), labor (C5) and a case involving the Government (C6). We also tried to create situations in which people from very different income and social groups would all experience and situations in which respondents will be asked to envisage occupying different positions in the conflict – thus, for example, in one circumstance the respondent is the consumer, with a weaker position and in another situation the interviewee is the contractor, in respect of service provision, having a stronger position.

Table 6 shows that there is a positive relationship between confidence in the judicial system and behavior index. We also show that women, blacks, age, education, experience and knowledge of the justice court system are positively correlated with the behavior index. These results indicate that although judiciary has lower levels of the confidence for a pool of demographic and economic variables, most Brazilians perceive it as a legitimate way to seek solution to their problems and would not hesitate to go to court to resolve conflicts of their daily lives. Although women have lowers levels of confidence in the judiciary than men, they are more likely to seek the judicial system for family, labor and services issues and less for consumer issues. We found similar results for age and experience with the judiciary. These results are statistically significant at the 1% level.

Table 6 - Determinants of Behavior Index – Pooled OLS Regression

	Behavior Index	*Family issues*	*Provision of service*	*Consumer issues*	*Neighborhood*	*Labor*	*Government*
BCJI	**0.0780*** **	**0.0446*** **	0.0099	0.0110	**0.0328*** **	**0.0240*** **	**0.0256*** **
	(7.20)	(7.75)	(1.53)	(1.09)	(5.06)	(3.85)	(4.78)
Confidence in the Federal Government	0.0239	0.0090	0.0067	0.0307	0.0239	0.0061	0.0096
	(0.92)	(0.64)	(0.41)	(1.09)	(1.45)	(0.39)	(0.74)
Female	**0.1930*** **	**0.3818*** **	**0.0819*** **	0.0241	**-0.0576*** **	**-0.0411*** **	-0.0163
	(7.69)	(27.86)	(5.19)	(0.93)	(-3.67)	(-2.72)	(-1.30)
Black	**0.0949*** **	-0.0049	**0.0400***	0.0507	**0.0867*** **	0.0013	**0.0393** **
	(2.62)	(-0.25)	(1.77)	(1.02)	(3.91)	(0.06)	(2.18)
Age	**0.0256*** **	**0.0072*** **	**0.0152*** **	**0.0137*** **	**0.0176*** **	0.0014	**0.0060** **
	(5.24)	(2.73)	(5.13)	(4.84)	(5.95)	(0.48)	(2.52)
Age squared	**-0.0004*** **	**-0.0002*** **	**-0.0002*** **	**-0.0002*** **	**-0.0002*** **	-0.0000	**-0.0001*** **
	(-6.99)	(-5.31)	(-6.82)	(-5.22)	(-6.21)	(-1.32)	(-3.39)
From 2 until 4 minimum wages	0.0738	**0.0551***	0.0168	**0.0505***	0.0359	0.0090	0.0188
	(1.17)	(1.65)	(0.44)	(1.75)	(0.91)	(0.24)	(0.59)
From 4 until 12 minimum wages	**0.1351** **	**0.1036*** **	0.0322	**0.0650***	0.0348	0.0139	**0.0655** **
	(2.21)	(3.21)	(0.87)	(1.67)	(0.91)	(0.38)	(2.12)
More than 12 minimum wages	0.0979	**0.1085*** **	-0.0160	0.0583	0.0226	0.0306	0.0339
	(1.55)	(3.27)	(-0.42)	(1.29)	(0.57)	(0.82)	(1.06)
Education	**0.0114*** **	**0.0094*** **	-0.0010	-0.0016	**0.0039** **	**0.0065*** **	0.0016
	(4.58)	(7.20)	(-0.61)	(-0.92)	(2.47)	(4.29)	(1.27)
Experience with the justice	**0.1644*** **	**0.0610*** **	0.0174	0.0204	**0.0892*** **	**0.0887*** **	**0.0446*** **
	(6.83)	(4.69)	(1.13)	(0.86)	(5.80)	(6.01)	(3.69)
Knowledge of justice	**0.2197*** **	**0.1059*** **	**0.0570*** **	**0.0559*** **	**0.0950*** **	**0.0951*** **	**0.0546*** **
	(6.32)	(5.56)	(2.71)	(2.59)	(4.42)	(4.53)	(3.17)
Constant	**5.8826*** **	**3.0057*** **	**2.9872*** **	**3.2713*** **	**2.7576*** **	**3.3194*** **	**3.3899*** **
	(45.81)	(43.78)	(37.29)	(45.18)	(34.25)	(43.50)	(52.81)
Observations	16,867	16,867	16,867	16,867	16,867	16,867	16,867
Adjusted R-squared	0.0445	0.0883	0.0183	0.0023	0.0149	0.0223	0.0124

Table shows coefficients of the pooled OLS for indicated regressions of hypothetical situations of conflicts on personal features and control variables. Control variables are: state, year dummies, employee, and marital state. T-statistics are in parentheses. *, **, and *** respectively indicate significance levels at 10%, 5%, and 1% levels. Significant results (at 5% level or better) are in boldface.

Finally, we also looked at the relationship between confidence in the judiciary and propensity to seek the judicial system using pseudo-panel. Ideally we would like to have panel data, however we have cross sectional data. Recently pseudo-panel methods begun to be applied to overcome some limitation of cross sectional data. We also use the pseudo-panel because it is important to control for unobservable characteristics of respondents of the survey. We constructed a pseudo-panel based on the same three surveys conducted along 2010, 2011 and 2012. The cohorts are constructed according to Verbeek and Vella (2005) and Verbeek (2007) regarding the size of the cohorts and the variables chosen to construct the cohorts. The cohorts are based on age and years of education of respondents. Verbeek (2007) shows that choosing these variables are

important to maintain the asymptotic properties of the pseudo-panel. The cohorts were constructed considering age of respondent into 5 year intervals, including only those between 18 and 72 years old. We select the following 7 groups for years of education: 0-3 years, 4 years, 4-7 years, 8 years, 9-10 years, 11 years, and 12 years or more. After defining cohorts, a set other variables are combined into the dataset including a pool of demographic and economic variables as race, income, age, gender, labor, education and all questions covering the main aspects of confidence in judicial system. Using this information, the pseudo-panels are generated by averaging all variables at the cohort level.

Figure 2 reports cohort's sizes. We have 77 cohorts with an average of 219 and a median of 189 observations per cohort. The minimum and maximum cohort values are 21 and 921, respectively.

Figure 2:

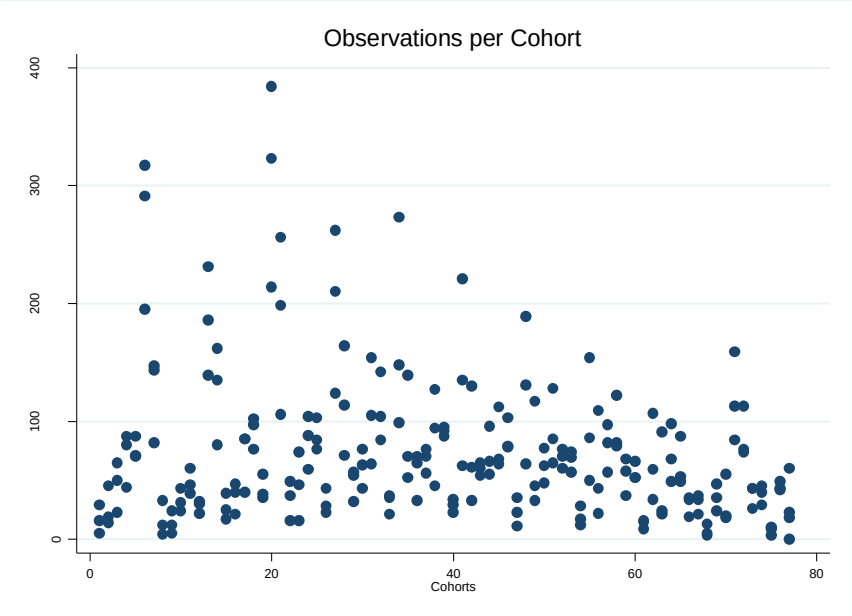

Table 7 provides the basic descriptive statistics of the pseudo-panel for all questions and demographic and economic variables of the constructed cohorts. The average of BCJI in 2010 was 4.17. It jumped to 4.28 in 2011 and 4.31 in 2012. Overall, the BCJI has not changed much over time. This result is due to the low variation among the questions that comprise the index. We can observe the same result for behavior index.

The average of behavior index in 2010 was 6.95. It jumped to 7.08 in 2011 and decreases to 7.00 in 2012.

Table 7 - Descriptive Statistics of variables in pseudo-panel

	2010		2011		2012	
Variables	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**	**Mean**	**Std. Dev.**
BCJI	4.17	0.21	4.28	0.20	4.31	0.31
Confidence	4.08	0.44	4.63	0.46	4.30	0.51
Speed in solving conflicts	1.93	0.38	1.97	0.36	1.95	0.44
Costs access	4.58	0.41	4.58	0.37	4.81	0.55
Ease of access	2.12	0.47	2.21	0.45	2.14	0.49
Political independence	3.33	0.56	3.49	0.54	3.55	0.69
Honesty	4.11	0.39	4.12	0.63	4.21	0.48
Ability to solve conflicts	4.24	0.42	4.49	0.63	4.64	0.54
Panorama of the last 5 years	5.90	0.32	5.82	0.37	5.89	0.59
Expectation for the next 5 years	7.24	0.37	7.25	0.37	7.35	0.60
Behavior Index	6.95	0.38	7.08	0.29	7.00	0.34
Family issues	8.59	0.75	8.75	0.58	8.57	0.76
Provision of service	7.93	0.68	8.09	0.65	8.03	0.63
Consumer	0.28	0.03	0.27	0.02	0.27	0.01
Neighborhood	7.84	0.60	8.15	0.62	8.08	0.71
Labor	8.28	0.56	8.35	0.50	8.25	0.59
Government	8.78	0.47	8.86	0.39	8.80	0.42

Table 8 shows reinforces our previous findings that there is a positive relationship between confidence in the judiciary and propensity to seek the judicial system. The coefficient on BCJI is positive and statistically strong. The RE coefficient implies that a one-standard deviation increase in BCJI predicts a 0.30 increase in behavior index (with significance at the 10% level). When controlling for unobserved effects of each cohort (FE) this coefficient is lower, but it is still statistically significant at the 5% level. This result is relevant because people who present higher levels of confidence in the judiciary they have also higher propensity to seek judicial system to resolve their problems. This result may be related to the fact that they see justice as a legitimate institution to resolve their conflicts. Societies with more trust have better governance, stronger economic growth, spend more on redistribution, and have greater respect for the law among the citizenry (Uslaner, 2004). Lambsdorff (1999) argues that the key to less corruption and more trust is an effective system of property rights and the rule of law. If the law is enforced on fair grounds, then people will be more likely to obey the law and confidence

in the judicial system will be higher. However, if people feel they are treated unfairly, so they rely less on justice and will be less likely to obey the laws.

Table 8 - Determinants of Behavior Index: Pseudo-Panel

	Random Effects				Fixed Effects			
BCJI	**0.317*** (0.08)**	**0.322*** (0.07)**	**0.310*** (0.08)**	**0.300*** (0.08)**	**0.234** (0.09)**	**0.258*** (0.09)**	**0.235** (0.10)**	**0.236** (0.10)**
Covariates	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**
Year Dummies		**Y**		**Y**		**Y**		**Y**
State Dummies			**Y**	**Y**			**Y**	**Y**
Constant	4.908*** (0.54)	4.648*** (0.58)	3.605*** (0.69)	3.658*** (0.70)	5.093*** (0.69)	4.565*** (0.73)	4.624*** (0.93)	4.670*** (0.91)
Observations	231	231	231	231	231	231	231	231
Median RE λ	0.41	0.38	0.30	0.31				
R-squared					0.192	0.237	0.254	0.270

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

4 - Conclusion

This paper provides a picture of the confidence in judicial system in Brazil over 2010-2012, relying on a series of three surveys. We develop a measure of judicial performance in Brazil through the motivations that drive people to trust or not the country's judicial system. The result is a confidence index in the Brazilian justice that is a measure of perception, which shows the opinion of the population about Brazil's judiciary.

Our results indicate that race and gender are important predictors once controlled for other characteristics of respondents. Blacks and women have a slightly lower level of confidence in the judiciary. People who had experience with the judiciary present lower levels of trust. However, the results show that people with more knowledge of the judicial system and with more years of education present higher levels of confidence in the judiciary in Brazil. In other words, our results indicate that a highly educated individual with some understanding of the judicial system, who has a high level of confidence in the institutions of government, will demonstrate the highest levels of confidence in the judicial system. On the other hand, a person without much formal education, women, blacks, who does not trust much the institutions of government will have the lowest levels. These results are reasonable and confirm some very interesting notions about what drives confidence in the judicial system. Understand the confidence in judiciary is highly

important today when people are worried about judicial decisions and with the performance of the judicial system. Today it is essential that the judicial system considers carefully what drives support for these institutions.

We also show that there is a positive relationship between confidence in the judiciary and behavior index that is a measure of perception, which shows the opinion of the population about the propensity to seek to court to resolve their conflicts. This result shows that people who have higher levels of confidence in judiciary is more likely to use it. We also show that women, blacks, age, education, experience and knowledge of the justice court system are positively correlated with the behavior index. Although these people have lowers levels of confidence in judiciary, they are more likely to seek justice for some hypothetical situations. One possible explanation for these results is that these people can perceive the justice as a legitimate way to seek solution to their problems and would not hesitate to go to courts to solve conflicts of their daily lives.

Our findings also have other important implications for confidence in the judiciary. Given that blacks and women have lower levels of the trust, efforts should be made to improve costs; access and honesty of the judicial system toward these groups of individuals. Our findings also show that people with low income have lower levels of the confidence in the judiciary. Thus, it would be good if there were efforts to improve access to judiciary for these social classes. Our results should be viewed as provisional results of an empirical analysis of possible determinants of confidence in justice. In order to assess the influence of other aspects on the confidence in the judicial system, more precise estimates and measures of confidence institutional are needed.

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