*Vamos para Rua!* – Taking to the Streets Protest in Brasil

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The unprecedented protests that unfolded in the month of June 2013 surprised even the most observant Brazilian scholars. In the streets of all major cities in Brazil, one could hear thousands chanting, *Vamos para Rua*! or "Let's take it to the streets." A local conflict over the increase of public transportation fare took an unexpected turn and ignited a massive nationwide protest. These protests have perplexed many because Brazil was not experiencing the context of economic or political instabilities that are common to countries around the world, where massive, violent protests have emerged as consequence of such instabilities – for instance, the crises that have developed both in Europe and in the Arab world in recent times. In Brazil, however, the contemporary protests do not appear to be linked to the contexts typically associated with Latin American protests: economic depression, unemployment, inflation, economic liberalization, privatization efforts, or a breakdown of the party system. Thus, we turn to a different theoretical framework, *post-materialism*, to understand Brazil's contemporary protests.

The many posters displayed by protesters during their manifestations on the streets in 2013 seemed to indicate that the movement constituted an uprising antagonizing the political elite and Brazilian policymakers. Backed in its majority by members of the middle class, the protests attracted attention to issues ranging from poor public services, including transportation, healthcare, and education, to the way government budget is drained by the inefficient public machinery and widespread corruption. To make matters worse, as Brazil was preparing to host the two most important sportive events in the world (the World Cup, in 2014, and the Olympics, in 2016), more and more of these problems have come to surface. After having caused an unprecedented expenditure of public money, most of the infrastructure required by FIFA as preparation for the World Cup was not delivered. This culminated in a generalized dissatisfaction demonstrated on the streets and in the rapid decent of the approval rate of the current government. The rallying cry of protesters advocating for public hospitals and public schools "according to the FIFA standard" echoed around the world in an unforeseen manner. This current state of dissatisfaction has only

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gained traction since the 2013 protests, indicating that Brazilians might be undergoing a transition from *materialistic* to *post-materialistic* values. The thesis of postmaterialism, first proposed by Ronald Inglehard in the 1970s, is a theory of collective change. According to this theory, countries experience a culture shift in which the society's value priorities slowly change from *materialist* to *postmaterialist* when experiencing rising levels of economic prosperity and physical security. This shift can have significant effects on political life and participation (Inglehart 1977, 1990, 1997; Inglehart and Welzel 2009).

Using data from the World Values Survey, we develop a general analysis highlighting individual level factors that were significant in explaining protest participation among Brazilians in 1991, 2006 and 2014 to shed some light on the current situation. In what follows, by drawing data from the World Values Survey (WVS), we document the extent to which change in values from materialist to post-materialist contribute towards explaining the 2013 protests in Brazil. Understanding the factors that prompted Brazilians to protest is important for several reasons. First, Brazil is the largest and most populous country in Latin America. As an emerging power, and as the most influential and powerful country in the continent any political unrest can have significant political and economic impact to other countries in the region. Secondly, Brazil had not experience such a large political movement for nearly two decades. Although movements such as the *Movimento dos Trabalhadores Sem-Terra* and other movements have been organizing protests and demonstrations throughout Brazil for year, they were much smaller in scale and spread out throughout the country than the current waves of protests (Valente and Berry, 2015). Traditionally, Brazilians are not prone to protesting. In fact, as recent as 2002, Brazil registered one of the lowest rates of protest participation in Latin America (Moseley and Layton 2013). Thus, understanding this new phenomenon and what factors influence protest participation in Brazil is an important contribution to social movement studies. We begin by providing a brief historical background on the 2013 protests, we then present the theoretical framework based on Inglehart's post-materialism theory, present our model, discuss the results, and draw together the main conclusions.

# **Background Context**

On August 27, 2012, the mayor office in Natal, Rio Grande do Sul, raised bus fare by R\$0.20 centavos. Two days later, about two thousand people mobilized and protested against the raise. During this protest, the police severely repressed protesters hoping to dissipate the

mobilization. Consistent with the work of Schatzman (2005) and others, the opposite happened as the repression fueled further protests. An even bigger protest took place on August 30<sup>th</sup>, 2012, making officials retract their decision and keep the previous bus fare. However, nine months later, on May 13, 2013, officials tried again to raise the price of the bus fare, resulting in more protests. Also in 2013, there were protests in Porto Alegre, Rio Grande do Sul, and in Goiânia, when on May 16 protesters tried and were successful in avoiding a rise in fare tariffs. It was in São Paulo, however, were the largest protests movements, resulting from a rise in bus fare from R\$3,00 to R\$3,20, were seen on June 2. The Movimento Passe Livre (MPL), an organization that advocates free fares in mass transit, organized protests on the 6<sup>th</sup>, 7<sup>th</sup>, and 11<sup>th</sup> of June. These were marked by harsh police repression, resulting in several injured protesters and policemen. The police brutality helped bolster the cohesion of the movement, as now protesters, regardless of class, were subject to repression. As Holston (2014, 892) remarked, "All are victims." The protests and government reaction fed broad concern about "police violence, and seemingly endless corruption scandals" (Taylor 2014, 59). In contrast, the media, mainly Rede Globo, portrayed the protesters as vandals. The dissatisfaction generated by the police repression and the persecution of the media caused the movement to expand in such a way that on June 13, there were further protests in the cities of Natal, Porto Alegre, Teresina, Maceio, Rio de Janeiro, and Sorocaba. Also, on June 13 there were movements in São Paulo, and as a result of the police's continue use of violent tactics, many journalists and protesters were injured. "From this point on, a tide of violent repression spread across a large part of the São Paulo metropolitan area, with the Military Police attacking demonstrators, passers-by and journalists indiscriminately for several hours. Participants and eyewitnesses spoke of 'crazed' policemen and open-air 'battle scenes.' Such excessive use of force drew the attention and sympathy of the general public" (Singer 2014, 21). From June 13 onward, these protests ignited a massive wave of protests around the country. On June 17, more than 300,000 Brazilians protested in 12 different cities, from North to South regions. On June 20th, more than 1.4 million Brazilians took to the streets in 120 different cities. Since then, protests, and strikes have become common occurrences, particularly with the preparation and beginning of the World Cup. The World Cup, in particular, became a contentious issue. "Even the World Cup, which galvanized the public into euphoric outpourings of national pride when seven years ago Brazil was chosen to host the 2014 championship, is now a source of bitter recriminations over misspent national treasure" (Taylor 2014, 57).

## Protests in Latin America: Brazil in Context

For over two decades, Brazil had been relatively calm, compared to the rest of Latin America. In fact, the last protests of the same magnitude were held in 1984, culminating in the end of the dictatorship regime and the establishment of the Constitution in 1988, and in the national movement that resulted in the impeachment of President Fernando Collor<sup>1</sup> de Mello in 1992. Other notable protests include protests against poverty and exclusion in 1998, protests against privatization and IMF reforms in 1998 and 1999, and protests against corruption in 2005 and 2011. Despite these, Brazil had one of the lowest rates of protest participation in Latin America, with only 4.7 percent of Brazilians claiming to have taken part in a protest or public manifestation in 2012 according to the Americas Barometer (Moseley and Layton 2013). Thus, what kindled the massive protests in Brazil? Could we have predicted that Brazil was on the verge of "waking up"? Most of the literature on protests focuses on precipitating factors such as neoliberal reform or institutional factors. However, today, Brazil is somewhat of an outlier in these areas, leading toward a focus on a shift to *post-materialism* as a possible explanatory factor.

## Neoliberalism and Privatization

Much of the literature on Latin American protests focuses on opposition to neoliberal or austerity policies. According to Roberts (2008), when market reforms result in unmet social needs or heightened economic insecurities, they generate a basis for the collective articulation of political grievances leading to popular mobilization. This approach is common to many studies of Latin American protests during the height of the Washington Consensus, IMF driven reforms, and privatization. For example, Almeida (2007), in a study of protests from 1995-2001, examines protests against free trade agreements or neoliberal policies that "incite popular collective action" through "negative conditions and incentives" (124). In his study, Brazil was one of the top three countries for this type of protest. Ortiz and Bejar (2013) examine the relationship between IMF reforms and contentious collective action from 1980-2007. They conclude, "Indeed, our findings indicate that citizens perceive that their political elites are 'selling out' when they acquiesce to strict austerity measures by entering into agreements with the IMF, and they express their discontent through contentious actions"

<sup>&</sup>lt;sup>1</sup> Remarkably, Fernando Collor de Mello regained his political rights after the eight-year disqualification imposed by the Brazilian senate, and is now a senator for the state of Alagoas.

Ortiz and Bejar (2013, 508). Kingstone, Young, and Aubrey (2013) ask when protests against privatization are successful. They conclude that broad coalitions tend to be successful, in addition to mobilizations in which civil liberties are protected, but there is weak political inclusion or poor channels to mediate conflict. Other studies explore particular protests country by country. Assies (2003) looks at protests against water privatization in Cochabamba, Bolivia. Romano (2012) examines protests against water privatization in Nicaragua. Epstein (2003) examined the Argentine *piquetero* movement for unemployment relief in the context of profound economic crisis. Arce (2008) provides a discussion of the protests in Peru, by examining "how different types of policies lead to different patterns of societal responses" (Arce 2008, 33), focusing specifically on the distribution of the costs and benefits of reform.

In contrast, despite IMF agreements in 1983, 1988, 1992, 1998, 2001, 2002 (Ortiz and Bejar 2013, 501), Brazil announced it would discontinue its agreement with the IMF in March 2005. Since its last agreement in 2002, "the economy has undergone a strong recovery and seems to be aiming for sustained growth" (dos Santos 2005). Brazil has continued to be a strong economic performer in the region.

# **Quality of Institutions**

Another approach to Latin American protests has been to focus on institutional factors. Scholars have focused on the relationship between quality of representation and protests. Here, there is specific attention to volatility and fractionalization. Arce (2010) examines the quality of representation, especially in terms of the political parties. In a regional analysis of 17 countries using the protest data from Banks' (2005) Cross-National Time-Series Data Archives, he specifically studies party system institutionalization (electoral volatility using the Pederson Index) and legislative fragmentation. He argues "where the quality of representation is high, one would expect political parties to be able to address the demands of the citizenry through electoral and legislative means, thereby dampening political conflict and suppressing extra-systemic forms of popular mobilization. Conversely, where the quality of representation is low, one would expect political parties to be unable to channel popular sector demands to the state, much less respond to them effectively" (Arce 2010, 670). Similarly, Machado, Scartascini, and Tommasi (2011) examine institutional strength to explain the prevalence of protests. They study seventeen Latin American countries using LAPOP individual survey data finding that "unconventional forms of political participation tend to be chosen more often where institutions are of lower quality" (342). Like Arce (2010),

they argue that institutional quality is associated with a lower level of protest. However, in general, they find relatively few protests in Brazil.

How does Brazil rate in these two areas? Although Brazil, early in its democracy had high volatility, volatility has declined in recent years. Hagopian, Gervasoni, & Moraes (2009) also note that Brazil's party system has been stabilizing. Roberts (2013, 1441) discusses Brazil as somewhat of an outlier in terms of party system stability. Whereas much of the region suffers from electoral volatility, Roberts documents a steep decline in Brazilian electoral volatility from the 1980s and 1990s (30.7) to the first decade of the 21<sup>st</sup> century (22.0).<sup>2</sup> However, there has been an increase in the effective number of parties and fractionalization has remained high.

Table 1 presents standard measures of volatility and fractionalization in Brazil.

Measure	1994	1998	2002	2006	2010	2014
Pedersen Index (volatility)	58.6	17.8	33.6	30.4	20.4	24.3
Effective number of elective parties	8.52	8.14	9.28	10.62	11.21	14.06
Effective number of legislative parties	8.16	7.14	8.47	9.32	10.36	13.22
Fractionalization	0.88	.87	.86	.88	.90	.91*
Opposition Parties Fractionalization	0.88	.78	.71	.80	.74	.63*
Government Parties Fractionalization	0.71	.66	.78	.72	.82	.69*

Table 1. Volatility and Fractionalization in Brazil

\*Data for 2012. Pedersen index scores come from Melo 2015, 95. All other data are from Keefer 2012.

First, volatility has declined significantly since 1994. Second, the effective number of parties has increased from around 8 in 1996 to 14 in 2014. Finally, overall fractionalization remains steady, albeit high. There has been a slight decline in fractionalization among opposition parties and а slight increase among government parties. Machado, Scartascini, and Tommasi (2011) control for the following country level variables: the Global Competitiveness Report's measure for the capability of Congress, the Fraser Institute of Economic Freedom Report's measure of judicial independence, and the International Country Risk Guide's measure of bureaucratic quality. Table 2 presents these measures. In our time period, there are no changes in the International Country Risk rating of

<sup>&</sup>lt;sup>2</sup> Roberts created a net volatility scores for all presidential and legislative elections based on the 1983 Peterson Index of Volatility (Roberts 2013, 1441).

bureaucratic quality. There is a slight increase in the institution score from the Global Competitiveness Report over time. The Fraser Institute score of judicial independence has increased since its lowest point in 2005. Overall, there is no obvious relationship between institutional or electoral factors highlighted in the protest literature in Latin America and the recent protest wave in Brazil.

Nonetheless, in general, Brazilians hold a very negative view of their institutions. In fact, LAPOP reported that in 2014-2015, Brazilians had the second lowest respect for their political institutions in the region (Russo 2016, 1). This dearth of support has been evident in LAPOP surveys since 2007, when less than 53% of Brazilians expressed support for their institutions. By 2014, only 48% expressed support, and support was lowest among the more educated (Russo 2016, 3). Certain government programs enjoy robust support, such as *Bolsa Familia*, however, there too, there is a split between the more educated and the less. Almost nine out of ten Brazilians who were not educated beyond primary school thought that the program had been good for the country, whereas just over half of those with a post-secondary education thought the reverse. Overall, the military was viewed as a positive influence on the country by 49%, the national government 47%, police 33%, and the courts 25% (Gallup 2014, 4-5). Despite this dissatisfaction with Brazilian institutions, the indicators typically included in the comparative Latin American protest literature are not consistent with the explosion of protests that Brazil experiences in this time.

# Post-materialism

The concept of post-materialism or materialism value orientation coined by Inglehart (1971, 1977) has been widely used in social science research. Post-materialism emphasizes self-expression and quality of life over economic and physical security. Postmaterialist theory asserts that in traditional societies, individuals are generally focused on fulfilling fundamental needs such as economic and physical safety, housing, food and other basic necessities. However, once economic development leads to a prosperous economic society where basic needs are met, individuals begin to preoccupy with newer, nonmaterial values (Inglehart 1971). These values include personal emancipation, aesthetic satisfaction and other issues correlated to quality of life, such as personal freedom, equal rights, women's empowerment and environmental sustainability. According to Inglehart post-materialists support, for example, egalitarianism and social justice rather than "direct economic self-interest" (1981, 90), and consequently advocate social change to a higher extent than materialists do.

Year	Global Competitiveness Report's score of 1 <sup>st</sup> pillar, institutions (Higher is better)	Fraser Institute of Economic Freedom Report's measure of judicial independence (Higher is better)	International Country Risk Guide's measure of bureaucratic quality (Higher is better)
1995	-	5.55	-
1996	-	-	0.75
1997	-	-	-
1998	-	-	.5
1999	-	-	-
2000	-	5.51	.5
2001	-	5.30	-
2002	-	4.83	.5
2003	-	5.17	.5
2004	-	3.34	.5
2005	-	3.03	.5
2006	3.29	3.57	.5
2007	-	4.69	.5
2008	3.56	4.31	.5
2009	3.5	4.20	.5
2010	3.58	4.56	.5
2011	-	4.58	.5
2012	3.78	4.78	.5
2013	3.73	-	.5

#### Table 2. Cross-National Measures of Institutional Quality

Sources: Global Competitiveness reports, scores refer to the first year of the report, for example the 2006 score refers to the 2006-2007 report. Fraser Institute (2014 dataset) <u>http://www.freetheworld.com/ release.html</u>, PRS, International Country Risk Guide's measure of bureaucratic quality (government effectiveness).

These attitudes are favorable to a "wide variety of activities among which politics is one possibility. (...) In short, the post-materialists have a larger amount of psychic energy available for politics; they are less supportive of the established social order; and subjectively, they have less to lose from unconventional political action than materialists. But while the first point might be conducive to higher rates of participation in any kind of political action, the second and third points are particularly conducive to unconventional political action, or political protest" (Inglehart 1990, 310-311). There has been some resistance to the application

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For example, Reiter (2011, 164) argues that the of this approach to Latin America. "theoretical frameworks developed to explain social and political phenomena in Europe cannot readily be applied elsewhere," specifically in regards to indigenous or black mobilization in the region. However, other scholars have identified the emergence of postmaterialism in current Brazilian protests. For example, Singer (2014, 35) observed that the "June protests revealed the existence of a new agenda and stance which I believe are typical of what Inglehart terms post-materialism." In addition, Gatto and Power (2016) have successfully used Inglehart's theory to study the political elite in Brazil using similar data to ours. Although the earlier literature on postmaterialism focused exclusively on highly developed industrial countries in Europe, the theory is appropriate in examining Brazil because it is a theory of *change* in which the baseline condition is a society dominated by materialistic values. According to the 2014 World Value Survey, Brazil possessed one of the highest materialism indicators among Latin American countries, with only 12 percent of respondents exhibiting postmaterialist value priorities. This indicates that although Brazil might exhibit a value condition that is heavily materialistic at the country level, we can still test for with-in-society variation, and we expect that individuals holding postmaterialistic values will emerge from among the more socioeconomically privileged (De Graaf and Evans 1996, Gatto and Power 2016). In the last decade, Brazil experienced a significant social economic improvement. As indicated by Figure 1, unemployment levels have been declining and reached a record low level in 2013. Likewise, as shown in Figure 2, inflation levels have been constantly low since 2006. In addition, poverty rates have dropped from 35.73 percent in 2003 to 15.96 percent in 2012 after the implementation of social programs such as *Fome* Zero and Bolsa Família (IBGE). Based on Inglehart's theory, even though post materialism is not widespread among the general population in Brazil, we expect it to be predominant among Brazilians who display propensities to be involved in social movements and political protest.

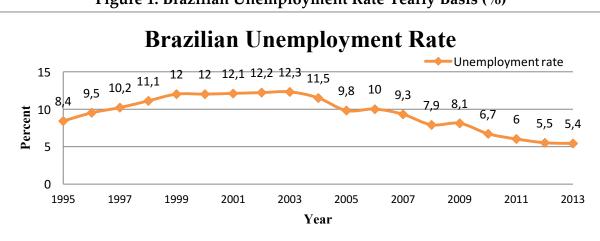
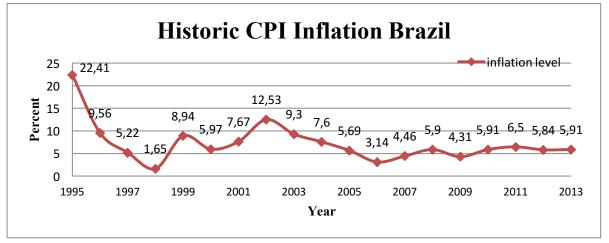


Figure 1. Brazilian Unemployment Rate Yearly Basis (%)

Source: Pesquisa Mensal de Emprego - IBGE 2014

### Figure 2. Historic Inflation Brazil Yearly Basis



Source: inflation.eu worldwide inflation data

# Method

The World Values Survey provides the most precise assessment of protest around the globe that has ever been conceived (Dalton and Sickle 2005). We used the first (1991), fifth (2006) and last (2014) waves of survey conducted in Brazil to analyze whether or not being post-materialistic could in fact be indicative of protests in the Brazilian context. For our dependent

variable *protest*, we used responses that indicated participation to peaceful demonstrations.<sup>3</sup> In the WVS datasets the dependent variable protest is a binary variable---that is, there are only two levels of the dependent variable (attended peaceful protest, 1=yes, 0=no). Thus, we estimate the models using logistic regression (Scott, 1997).<sup>4</sup>

Our main independent variable is the *post-materialism* variable, which measures the extent to which respondents give priority to autonomy and self-expression rather than economic and physical security. This variable is based on Inglehart's (1971, 1977) four-item materialism/post-materialism index<sup>5</sup> using the following instructions:

People sometimes talk about what the aims of Brazil should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important?

- 1. Maintaining order in the nation
- 2. Giving people more participation in important government decisions
- 3. Fighting rising prices (inflation)
- 4. Protecting freedom of speech

The first and third options indicate materialist priorities, while the second and fourth show post-materialist priorities. Thus, a *post-materialism* dummy was created to indicate post-materialistic values (1=yes, 0=no) in order to test Inglehart's theory. The level of citizen's interest in politics is used in many studies and shown to be indicative of political participation (Almond and Verba 1989; Verba et al. 1995; Inglehard 2001), thus we include *political interest*, in our model. In addition, high levels of frustration and dissatisfaction are believed to be conducive of protest (Gurr 1968). To test this hypothesis, we selected two variables: one to test financial satisfaction, *financial satisfaction*, and another to analyze life satisfaction, *life satisfaction*. It is also thought that institutional mistrust and distrust in other people may affect individual's participation in protests (Norris 2007; Inglehart and Welzel 2009). We included the variable *institutional trust* and *interpersonal trust* to test these relationships and the variable *religious* to see whether or not being religious would impact political participation (Verba et al. 1995).

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<sup>&</sup>lt;sup>3</sup> Question stated: I'm going to read out some forms of political action that people can take, and I'd like you to tell me, for each one, whether you have done any of these things, whether you might do it or would never under any circumstances do it (read out and code one answer for each action): Attending peaceful demonstrations

<sup>&</sup>lt;sup>4</sup> For a detailed overview of logistic models, see Long and Freese (2006).

<sup>&</sup>lt;sup>5</sup> To learn more about the validity of this measurement in a Brazilian context, see Ribeiro (2007)

Besides these variables, we control for standard individual characteristics: education, income, educational levels, gender, age, race, and unemployment. Two additional controls are added because of theoretical interest, corruption and if the individual is associated with a minority or opposition party, *minority party*. Taylor and Buranelli (2007, 60) note that "corruption is a recurring political issue in Brazil." In fact, corruption scandals have plagued the Sarney, Collor (impeached), Franco, Cardoso, and Lula administrations. Direct experience with corruption has been shown to increase the likelihood of protest, especially when "corruption victimization is intensely experienced by a subset of the population and/or when particular instances of corruption victimization are easily attributable to the ruling government" (Gingerich 2009, 2). We also control for whether the respondent finds it justifiable to accept bribery. Finally, Anderson and Mendez (2005) found a significant and strong relationship between the propensity to participate in political protest and voting for a political minority party. The effect is particularly stronger in young democracies (Anderson and Mendez 2005, 108). Therefore, we control for voting for minority party as well. Table 3 describes all variables used in our models. The data come from different years, thus all models also include time fixed effects. Such a specification simply tests whether there are contextual effects unaccounted for due to yearly differences.

Variable	Definition			
Protest	Political Action: Attending peaceful demonstrations: 1(yes); 0(no)			
	Educational level: 0 (no education); 1(primary school); 2 (secondary			
Education	school); 3 (university education)			
Income	10 income categories: 1 (low) 10 (high)			
Male	1(male); 0 (female)			
Age	Respondents' age			
Non-white	Non-white (Black, Pardo or Mulatto): 1(yes); 0(white)			
Religious	Do you consider yourself to be religious? 1(yes); 0(no)			
Unemployed	Employment status: unemployed 1 (yes); 0 (no)			
Min orito Dorato	Past vote choice does not match party that controlled executive branch at			
Minority Party	the time the survey was conducted 1(yes); 0 (no)			
Corruption	Accepting bribery is justifiable 1 (yes), 0 (no)			
Political Interest	Combined variables			
Interested in Politics	4 categories: 1(no at all interested) to 4 (very interested)			
Importance of Politics	4 categories: 1(not important) to 4 (very important)			
Association Participation	Sum of Are you a member of the following orgs?			
	Scale from 0 to 18			

Variable	Definition			
Religious Organization	0 (not a member); 1 (inactive member); 2 (active member).			
Sport or recreation	0 (not a member); 1 (inactive member); 2 (active member).			
Art, Music or educ.	0 (not a member); 1 (inactive member); 2 (active member).			
Labor Union	0 (not a member); 1 (inactive member); 2 (active member).			
Political Party	0 (not a member); 1 (inactive member); 2 (active member).			
Environmental Org.	0 (not a member); 1 (inactive member); 2 (active member).			
Professional Org.	0 (not a member); 1 (inactive member); 2 (active member).			
Humanitarian Org.	0 (not a member); 1 (inactive member); 2 (active member).			
Consumer Org.	0 (not a member); 1 (inactive member); 2 (active member).			
Life Caliefastian	How satisfied are you with your life?			
Life Satisfaction	10 categories: 0(dissatisfied) to 9 (satisfied)			
	Satisfaction with the financial situation of household.			
Financial Satisfaction	10 categories: 0 (dissatisfied) to 9 (satisfied)			
Institutional Trust	Sum of <i>Confidence level</i> . Scale from 0 to 21			
Armed Forces	4 categories: 0 (none) to 3 (a lot of confidence)			
Press	4 categories: 0 (none) to 3 (a lot of confidence)			
Union	4 categories: 0 (none) to 3 (a lot of confidence)			
Judiciary	4 categories: 0 (none) to 3 (a lot of confidence)			
Government	4 categories: 0 (none) to 3 (a lot of confidence)			
<b>Political Parties</b>	4 categories: 0 (none) to 3 (a lot of confidence)			
Congress	4 categories: 0 (none) to 3 (a lot of confidence)			
Interpersonal Trust	<i>Most people can be trusted</i> : 1(yes); 0(no)			
	Would you please say which one of these you consider the most important?			
Post-materialism	Give people more say and Protecting Freedom of Speech (1=yes);			
	Maintaining order and fighting rising prices (0=no)			

Table 3. Respondents – level variables

Source: World Values Survey 1990-2014

#### Results

We ran several models to test the robustness of our results. Model 1 only analyzed whether political interest, association participation, financial and life satisfaction were important factors in determining respondents' participation in protest. Model 2 only focused on institutional and interpersonal trust and post-materialism. The full model is present in Model 3, and Model 4 was run with only variables that were significant the previous models. The results are presented in Table 4 along with the percentage changes in odds. The coefficients in these models are odds ratio, where a value greater than one indicates a positive relationship and a value less than one points to a negative relationship.

	Mod	el 1	Mod	lel 2	Mod	el 3	Mod	el 4
Variables	Odds	%	Odds	%	Odds	%	Odds	%
	Ratio		Ratio		Ratio		Ratio	
Education	1.833***	83.3			1.741***	74.1	1.874***	87.4
	(0.122)				(0.121)		(0.115)	
Income	1.020	2.0			1.012	1.2		
	(0.024)				(0.024)			
Male	1.115	11.5			1.098	9.8		
	(0.098)				(0.100)			
Age	0.997	-0.3			0.998	-0.2		
	(0.003)				(0.003)			
Non-white	1.003	0.3			1.056	5.6		
	(0.098)				(0.107)			
Religious	0.647***	-35.3			0.643***	-35.7	0.623***	-37.7
	(0.077)				(0.079)		(0.072)	
Unemployed	0.955	-4.5			0.967	-3.3		
	(0.131)				(0.135)			
Minority party	1.197***	19.7			1.191***	19.1	1.199***	19.9
	(0.053)				(0.054)		(0.051)	
Corruption	0.918	-8.2			0.957	-4.3		
	(0.107)				(0.115)			
Political Interest	1.284***	28.4			1.270***	27.0	1.260***	26.0
	(0.033)				(0.034)		(0.032)	
Association	1.146***	14.6			0.156***	15.6	1.146***	14.6
Participation	(0.021)				(0.023)		(0.021)	
Financial	0.958*	-4.2			0.964	-3.6	0.951**	-4.9
Satisfaction	(0.018)				(0.018)		(0.016)	
Life Satisfaction	0.968	-3.2			0.960	-4.0		
	(0.020)				(0.021)			
Institutional			0.990	-1.0	0.987	-1.3		
Trust			(0.009)		(0.011)			
Interpersonal			1.330*	33.0	1.224	22.4	1.274	27.4
Trust			(0.185)		(0.195)		(0.192)	
Post-materialism			2.335***	133.5	1.574***	57.4	1.682***	68.2
			(0.188)		(0.145)		(0.147)	
year dummies	Yes		Yes		yes		Yes	
N	4226		4359		3946		4410	

Table 4. Logit Regression Outp	ut with Percent Probabilities -	- All Waves Combined

Standard errors in parentheses \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Additional tests were ran for each year individually and are presented in Appendix A.<sup>6</sup> Based on these results the following factors were significant in explaining participation in protest: Educational level, being religious, voting for a minority party, political interest index, association participation index, financial satisfaction, and post-materialism values (see Model 4).

The odds ratios for a unit increase of each covariate of the response variable in Model 3 indicate that the odds of participating in protest are 57.4 percent more for respondents who possess post-materialistic values than for those who display materialistic values. The concept of post-materialism is strongly significant and seems to be particularly an important variable in explaining political participation in Brazil. In light of the fact that Brazil's economic status only improved since these surveys happened, this suggests that the current protests are linked to a change in values, as opposed to economic conditions or reforms. Contributing to Brazilians' dissatisfaction are high levels of corruption, wasteful spending, and inequality. Citizens are starting to hold current elected officials responsible. The results provide strong support for our original proposition that post-materialist values are a significant explanatory force in determining political participation in Brazil. It follows that robust support exists for Inglehart's theory. It is important to note that the relationship is not necessarily causal<sup>7</sup> (Dolan et al. 2008). In other words, we cannot say that having post-materialistic values will make or cause someone to protest. However, in this case, it seems more reasonable to conclude that individuals with post-materialistic values are more likely to protest in Brazil than individuals with materialistic values.

Other interesting results emerged from our control variables shedding light on the characteristics and motivations for protest in Brazil. The results indicate for instance that Brazilians with higher level of education, who participate in associations and are interested in politics, vote for the minority parties, are also more likely to engage in political protest. In fact, the higher the respondents' education level, the higher the odds of participating in protest. This is consistent with findings in Nicaragua, where more educated people were found to be more likely to protest in 2010 (Booth 2011). Similarly, Model 3 indicates that being interested in politics increases the odds of protest participation by 27.0 percent, participating in an association increases the odds by 15.6 percent and belonging to a minority party increases the odds by 19.1 percent, *ceteris paribus*. Whereas, being religious reduces the odds of participation by 35.7 percent (see Model 3). Surprisingly, several variables were not

<sup>&</sup>lt;sup>6</sup> Collinearity diagnostics are provided in Appendix B indicating that multicollinearity was not present in our analyses.

<sup>&</sup>lt;sup>7</sup> The relationship is not necessarily causal for two main reasons: data is cross-sectional, and it is not entirely clear what the direction of the causality is.

statistically significant as we expected. Although Gingerich (2009) predicts that corruption may increase the likelihood of protest participation, our corruption variable was not statistically significant. However, the negative sign on the *corruption* variable indicates that those who believe accepting bribery is justifiable were less likely to protest. Particularly interesting, unemployment and income in this case were not significant in predicting protest participation, albeit financial satisfaction was in Model 1 and 4. Moreover, institutional trust is not significant as well, in opposition to previous predictions that it would be (Norris 2007; Inglehart and Welzel 2009). Race, gender, and age were also not significant. As we saw in the most recent protests, students, professionals, the middle class, and residents of favelas were all joined in protest against the government. Though their motivations may have been different, the protests included a broad spectrum of the population. Together these findings indicate that something new is emerging in Brazil in regards to protest participation. The recent protests show a new agenda and attitude typical of what Inglehart terms postmaterialism.

# Conclusion

We conclude that among Brazilians *post-materialistic* values is a strong and significant indicator of participation in protests. The relationship is not necessary causal for two reasons: data is cross-sectional, and the direction of causality is not entirely clear. In this case however, it seems more reasonable to conclude that *post-materialistic* values make Brazilians more likely to protest, as opposed to the alternative explanation that protesting makes people' values change to post-materialistic. As more data become available, future work could investigate the impact the protests had, if any, in Brazilian politics. Similarly, promising avenues of research include investigating whether the movement experienced in Brazil was an isolated event or is the beginning of a much larger movement emerging in the streets. Given the current political crisis in Brazil, it is possible that the 2013 protests and a change in Brazilian values are much more significant than first anticipated.

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Variables	Model 1		Model 2		Model 3		Model 4	
Variables	Logit	%	Logit	%	Logit	%	Logit	%
Education	0.475*** (0.124)	60.9			0.398** (0.128)	48.9	0.465*** (0.113)	59.3
Income	0.042 (0.038)	4.3			0.030 (0.039)	3.1		
Male	-0.108 (0.145)	-10.2			-0.127 (0.148)	-11.9		
Age	-0.014* (0.006)	-1.3			-0.013 (0.007)	-1.3	-0.010 (0.006)	-1.0
Non-white	-0.245 (0.218)	-21.7			-0.198 (0.220)	-18		
Religious	-0.637*** (0.193)	-47.1			-0.608** (0.196)	-45.5	-0.597*** (0.181)	-45.0
Unemployed	-0.222 (0.257)	-19.9			-0.223 (0.261)	-20		
Minority Party	0.175*** (0.050)	19.2			0.161** (0.051)	17.5	0.177*** (0.047)	19.3
Corruption	0.082 (0.209)	8.6			0.138 (0.212)	14.8		
Political Interest	0.245*** (0.041)	27.7			0.230*** (0.042)	25.9	0.207*** (0.038)	23.0
Association Participation	0.194*** (0.040)	21.4			0.210*** (0.043)	23.3	0.208*** (0.040)	23.1
Financial Satisfaction	-0.040 (0.030)	-3.9			-0.044 (0.030)	-4.3		
Life Satisfaction	-0.033 (0.033)	-3.3			-0.032 (0.034)	-3.2		
Institutional Trust			-0.0492** (0.0153)	-4.8	-0.019 (0.019)	-1.9	-0.037* (0.017)	-3.6
Interpersonal Trust			-0.0382 (0.256)	-3.7	-0.420 (0.332)	-34.3		
Post- materialism			1.028*** (0.129)	179.7	0.574*** (0.153)	77.5	0.641*** (0.141)	89.8
_cons	-1.773*** (0.426)		-1.397*** (0.148)		-1.621*** (0.475)		-2.067*** (0.392)	
Ν	1516		1714		1484		1690	

#### Appendix A. Additional Robustness Tests Table A1. Logit Regression Output with Percent Probabilities – Protest 1990

Standard errors in parentheses, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

	Model 1		Model 2		Model 3		Model 4		
Variables	Logit	%	Logit	%	Logit	%	Logit	%	
E das estisas	0.605***	02.1			0.563***	75 5	0.542***	71.0	
Education	(0.107)	83.1			(0.113)	75.5	(0.101)	71.9	
Incomo	0.027	2.8			0.015	1 5			
Income	(0.039)	2.0			(0.041)	1.5			
Male	0.265	30.4			0.222	24.9			
wate	(0.151)	50.4			(0.160)	24.9			
A	0.006	0.6			0.007	0.7			
Age	(0.005)	0.0			(0.005)	0.7			
Non-white	0.160	17.3			0.219	24.5			
Non-white	(0.156)	17.5			(0.163)	24.5			
Religious	-0.185	-16.9			-0.165	-15.2			
Religious	(0.235)	10.7			(0.246)	10.2			
Unemployed	0.301	35.1			0.285	32.9			
enempioyeu	(0.209)	00.1			(0.216)	02.9			
Minority	0.697	100.7			0.694	100.2			
Party	(0.463)	1000			(0.470)	100.2			
Corruption	-0.139	-13.0			-0.071	-6.8			
	(0.175)				(0.182)				
Political	0.261***	29.8			0.249***	28.2	0.241***	27.2	
Interest	(0.049)				(0.053)		(0.050)		
Association	0.110***	11.6			0.119***	12.7	0.103***	1	10.9
Participation	(0.027)				(0.028)		(0.026)	10.9	
Financial	-0.067*	-6.5			-0.057	-5.6			
Satisfaction	(0.033)				(0.035)				
Life	-0.044	-4.3			-0.058	-5.7			
Satisfaction	(0.038)		0.000		(0.041)				
Institutional			0.023	2.3	0.003	0.3			
Trust			(0.017)		(0.020)		0 (22**		
Interpersonal			0.586**	79.8	0.603*	82.8	0.632**	88.1	
Trust			(0.214)		(0.245)		(0.232)		
Post-			0.875***	139.9	0.559***	74.9	0.640***	89.7	
materialism	-4.237***		(0.141) -2.109***		(0.161) -4.425***		(0.154) -3.917***		
_cons									
N	(0.697) 1350		(0.182) 1378		(0.727) 1264		(0.252) 1357		
N andard orrors i					1264		1557		

#### Table A2. Logit Regression Output with Percent Probabilities – Protest 2005

Standard errors in parentheses, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

	Model 1		Model 2		Model 3		Model 4	
Variables	Logit	%	Logit	%	Logit	%	Logit	%
	0.715***	70	LUGI	70	0.679***	70	0.775***	70
Education	(0.121)	104.3			(0.127)	97.3	(0.107)	117.0
	0.024				0.027		(0.201)	
Income	(0.045)	2.5			(0.047)	2.7		
	0.229				0.257			
Male	(0.165)	25.7			(0.171)	29.3		
	-0.005	- <b>-</b>			-0.003			
Age	(0.006)	-0.5			(0.006)	-0.3		
NT 1.4	0.033	2.2			0.0964	10.1		
Non-white	(0.164)	3.3			(0.172)	10.1		
Religious	-0.329	-28.1			-0.356	-29.9		
Keligious	(0.206)	-20.1			(0.214)	-29.9		
Unemployed	-0.382	-31.8			-0.337	-28.6		
Unemployed	(0.270)	-31.0			(0.274)	-20.0		
Minority	0.140	15.1			0.173	18.9		
Party	(0.110)	15.1			(0.118)	10.9		
Corruption	-0.096	-9.2			-0.137	-12.8		
contuption	(0.244)	).2			(0.252)	12.0		
Political	0.257***	29.3			0.258***	29.4	0.267***	30.6
Interest	(0.047)	27.0			(0.051)	27.1	(0.047)	00.0
Association	0.134***	14.3			0.138***	14.8	0.109***	11.6
Participation	(0.035)	11.0			(0.036)	11.0	(0.032)	11.0
Financial	-0.033	-3.3			-0.024	-2.3		
Satisfaction	(0.034)				(0.036)			
Life	-0.013	-1.3			-0.025	-2.5		
Satisfaction	(0.040)				(0.041)			
Institutional			0.009	0.9	-0.022	-2.2		
Trust			(0.017)		(0.021)			
Interpersonal			0.158	17.1	0.127	13.5		
Trust			(0.272)		(0.289)			
Post-			0.535***	70.7	0.165	17.9	0.232	26.1
materialism	<b>2 F</b> 0.0***		(0.152)		(0.171)		(0.160)	
_cons	-3.588***		-1.892***		-3.487***		-4.229***	
NT	(0.539)		(0.173)		(0.570)		(0.255)	
N Standard array	1370		1267		1208		1396	

Table A3. Logit Regression	<b>Output with Percen</b>	t Probabilities -	Protest 2014
0 0	1		

Standard errors in parentheses, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

# **Appendix B. Collinearity Tests**

Variable	VIF	1/VIF
Education	1.50	0.666976
Age	1.28	0.780360
Income	1.28	0.782459
Political Interest	1.24	0.808021
Financial Satisfaction	1.18	0.850282
Life Satisfaction	1.17	0.857644
Institutional Trust	1.13	0.887398
Minority Party	1.12	0.894432
Post-materialism	1.08	0.925087
Association Participation	1.08	0.927317
Unemployed	1.08	0.929108
Male	1.04	0.964555
Religious	1.04	0.965430
Corruption	1.03	0.971076
Non-white	1.02	0.983026
Interpersonal Trust	1.01	0.987720
Mean VIF	1.14	

#### Table B1. Collinearity Diagnostics for Variables in Model 3 - 1990

\*A VIF greater than 10 would indicates significant multicollinearity

Variable	VIF	1/VIF
Education	1.29	0.775112
Financial Satisfaction	1.26	0.795086
Income	1.24	0.808443
Age	1.17	0.855542
Association Participation	1.16	0.865639
Political Interest	1.15	0.872669
Life Satisfaction	1.14	0.874634
Institutional Trust	1.10	0.906441
Unemployed	1.10	0.911355
Post-materialism	1.08	0.927318
Non-white	1.08	0.928048
Religious	1.06	0.938985
Corruption	1.05	0.956276

#### Table B2. Collinearity Diagnostics for Variables in Model 3 – 2005

Interpersonal Trust	1.03	0.969156
Male	1.03	0.973071
Minority Party	1.01	0.987471
Mean VIF	1.12	

\*A VIF greater than 10 would indicates significant multicollinearity

Variable	VIF	1/VIF
Education	1.36	0.735424
Age	1.27	0.787721
Income	1.26	0.796698
Financial Satisfaction	1.24	0.808275
Politics Interest	1.23	0.814763
Association Participation	1.15	0.868209
Life Satisfaction	1.13	0.882420
Institutional Trust	1.13	0.885415
Religious	1.11	0.903870
Corruption	1.07	0.935809
Non-white	1.06	0.940936
Male	1.05	0.951854
Post-materialism	1.05	0.952349
Unemployed	1.05	0.955415
Interpersonal Trust	1.03	0.971754
Minority Party	1.02	0.984813
Mean VIF	1.14	

### Table B3. Collinearity Diagnostics for Variables in Model 3 – 2005

Variable	VIF	1/VIF	
1990	2.70	0.370418	
Minority Party	1.91	0.523347	
2005	1.53	0.652675	
Income	1.46	0.684737	
Education	1.36	0.734001	
Association Participation	1.31	0.760486	

1.24	0.803560
1.22	0.821602
1.19	0.840714
1.19	0.841245
1.14	0.874429
1.10	0.907817
1.07	0.932034
1.07	0.934148
1.07	0.937107
1.07	0.938434
1.03	0.967216
1.01	0.987082
1.32	
	1.22 1.19 1.19 1.14 1.10 1.07 1.07 1.07 1.07 1.03 1.01

