Political Corruption and Fractionalization in the United States:
Federal Convictions, Public Perceptions, and Societal Diversity

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Abstract

In this paper, I examine political corruption as a consequence of societal fractionalization in the 48 contiguous United States. I employ three measures of societal fractionalization—income inequality, racial fractionalization, and religious fractionalization—in an effort to determine whether the demographic characteristics of a given state can predict the amount of corruption it reports. I examine two measures of corruption—federal convictions, and perceived corruption. I find strong support for a connection between income inequality and both measures of corruption, such that increased income inequality is associated with an increase in both real and perceived corruption. Racial and religious fractionalization are both positively and significantly correlated with at least one measure of corruption, but not to the extent of income inequality. I control for several combinations of variables designed to examine different aspects of the United States, particularly with respect to the differences in racial diversity, religious diversity, and key differences between the northern and southern regions of the country. I conclude with a brief discussion of my results and their implications for future study.

Keywords: Corruption, Diversity, Fractionalization

1. Introduction:

This paper will examine political corruption in the United States as a function of social fractionalization, analyzing the effects of individual states' socioeconomic, religious, and racial characteristics on real and perceived levels of political corruption. While several other works have detailed connections between income, education, and corruption,[1][2] heterogeneity and corruption,[3][4] and the economic costs of corruption,[5] this analysis seeks to build upon the findings and implications of the existing research in a new framework that examines the prevalence of political corruption in the United States as a product of social characteristics. I follow Meier and Holbrook[6] in seeking historical, cultural, political, structural, and racial motivations for corruption. I derive my "real corruption" data from Justice Department's *Report to Congress on the Activities and Operations of the Public Integrity Section*, calculating *Ln(Conviction Rate),* the natural log of corruption convictions in each of the 48 contiguous American states from 2001-2010. To measure "perceived corruption," I utilize *Corruption Score*, a measure of the perceived levels of legal and illegal political corruption taken from a survey of political journalists.

The political and economic history of the United States is wrought with abuses of power justified on socioeconomic, ethnic, or religious bases, and as such, I anticipate that societal divisions along those lines will contribute to political corruption. To identify determinants of corruption, I begin with three of Sandholtz and Koetzle's[7] foundational hypotheses—that higher levels of corruption are associated with [1] lower average incomes, [2] weaker democratic norms and practices, and [3] a smaller share of the population with a Protestant affiliation (that is, higher levels of religious diversity). I adopt a similar framework, investigating the prevalence of corruption through the lens of three separate measures of fractionalization: [1] income inequality by state in 1999, as measured by *Gini99,*

as well as [2] *Racial Fractionalization* and [3] *Religious Fractionalization* by state in 2000 and 1990 respectively, both calculated as modified Herfindahl-Hirschman indices.

I anticipate that fractionalization of all types will be positively correlated with corruption, following Mauro[8] and Alesina et al.[9], which link ethnic fragmentation with increased corruption and inefficient allocation of resources, as well as Glaeser and Saks[10] which establish that in areas with ethnic fragmentation, leaders are more likely to redistribute resources to their own ethnic groups. While little work has been done on religious diversity and corruption in the U.S., I anticipate that the informal ties created by religion will compete with the formal obligations of public office in a manner similar to the racially-linked tendency towards redistributive policies articulated by Glaeser and Saks.[11] From this model, I develop my primary hypothesis, *H1: Income inequality, religious fractionalization, and racial fractionalization are all positively correlated with political corruption in the United States, as measured by federal convictions and reported journalistic perceptions of the prevalence of corruption.* The social and political implications of our findings will be discussed throughout this paper.

2. Literature Review:

2.1 The Detrimental Effects of Corruption:

Political corruption has been a topic of considerable focus in political science and economics for decades. Economists have traditionally viewed government institutions as vessels established to address market failures or constraints on destructive human tendencies that detract from the public good, and as such, political corruption remains a central enemy of political stability and social efficiency. The negative effects of corruption have been well-documented; Shleifer and Vishny[12] and Mauro[13] articulated a detrimental effect on growth and investment, while LaPorta et al.[14] revealed that politically fractionalized countries are more likely to display high levels of corruption. Alesina and Angeletos[15] found that more corruption leads to higher inequality in the future. Corruption increases the wellbeing of only those in a position to take advantage of government misdeeds, while the majority of the burden falls on the general population. As noted in Glaeser and Saks[16] corruption can also perpetuate ethnic tensions when they are focused on returning resources to their own demographic.

In terms of international comparisons, Alesina and Angletos note that poorer countries often have small, economically intrusive, and corrupt governments. In some cases, these countries may get stuck in the "corruption-induced poverty trap," whereby corruption continues to keep poverty levels high. In addition, Vito Tanzi[17] points out the fiscal effects of corruption. On average, corruption decreases public revenue and increases public spending, thus contributing to larger fiscal debts. As previously mentioned, growth rates also appear to be negatively correlated with corruption, possibly from reductions in foreign investment and the increasing possibility that public projects can be manipulated for personal gain. Several common threads that run through the literature on corruption have linked economic theories of corruption[18] to theories of crime, while additional research has linked ethnic fragmentation with high levels of corruption and inefficient allocation of public resources[19 20]. Glaeser and Shleifer[21] have also suggested that as the size of an economy increases, so too do returns to corruption. Despite the breadth and depth of this work linking large economic systems, growth, investment, and even ethnic fragmentation, surprisingly little work has been done using the United States as a testing ground for comparative analyses of corruption in a federal system.

2.2 Contextualizing Corruption in America

Despite a dearth of academic work, political corruption has long been a point of public focus in the United States. From the blatant fraudulence of the late-19th and early-20th century political machines to the more subversive tactics of modern big-city mayors and crooked state officials, the misdeeds of the allegedly infallible American system of governance have been chronicled in the news, and immortalized in popular culture. While its cultural narrative connotes images of smooth-talking public officials and "connected" members of the public openly buying and selling votes on the streets of a gritty, industrializing city, the historical and academic narratives of corruption have followed a more values-based, socioeconomically driven model.

Glaeser and Saks[22] focus on three theories that detail the causes of corruption which, taken together, comprise a fairly complete view of the developments of political corruption in American history. The first theory, following Lipset[23] is that higher levels of income and education are associated with lower levels of corruption. The logic goes that wealthier, more educated voters will be more vigilant in their monitoring of public officials, and therefore more responsive to and less tolerant of corruption. Glaeser and Saks find "significant support" for this hypothesis, noting

that both richer and more educated states are less corrupt, with a "stronger and more robust" impact from education than from income.[24] The authors also identify evidence supporting a second hypothesis following Mauro[25] and Alesina et al.[26] that heterogeneity—evaluated as the level of income inequality and racial diversity in a state—increases corruption. The suggested relationship here holds that more diverse voting blocs will inevitably come to focus more on policies of redistribution, and therefore less on government transparency and efficiency. The obvious step of investigating the relationship between size and corruption that develops from this hypothesis—more diverse areas tend to also be more densely populated, and therefore simply feature more people and bigger governments—leads to only weak evidence linking government size or regulation with corruption. Considering that states may be less likely to support a large government if it is known to be corrupt, Glaeser and Saks interpret this relationship as potentially reverse-causal. The third theory they consider—that "places with more government revenues or regulations will have higher levels of corruption, as these places will have more assets to steal and more rules to subvert"—offers the least in terms of empirical support, finding no statistically significant effects once other factors limiting growth and correlated with corruption were controlled for.

One of the biggest challenges to studying corruption is defining and describing "corruption" effectively. In the United States in particular, widespread geographic, socioeconomic, and religious diversity exacerbate these challenges; political power in a West Coast city, for instance, may rest with a small group that is all but completely disenfranchised or nonexistent altogether in a Midwestern suburb. Harrison (2007) argues that destabilizing the "taken for granted" qualities of corruption "might help us to better identify where corruption hurts, and whom. This means understanding what corruption means for different people, who is able to define an act as corrupt or not, and who is included in or excluded from discourses of corruption."[27] While my model may not be able to econometrically distinguish between such nuanced details as *actual* levels of local political influence for ethnic minorities, for instance, or the impact of political corruption on one marginalized group over another, my hope is that it will reveal some trends that could guide a more detailed, qualitative investigation of corruption.

2.3 Identifying a Model Definition of 'Corruption':

For the purposes of this paper, the term *corruption* must be defined so that it can be measured comparably across cities, counties, and states in the U.S. As Harrison notes, there is already a "well-developed literature on the definition and meaning of corruption," one that seeks to define the abstract term by comparing "the nuances between bribery, nepotism, graft, extortion and so on, and reflect[ing] on the relationships between people and bureaucracies (for example, Leys 1965; Olivier de Sardan 1999; Gupta 1995; Miller et al. 2001; Parry 2000)."[28] These distinctions tend to hold only for social anthropology, however; "when it comes to the control of corruption in development policy making and public statements, such nuance tends to disappear."[29] Glaeser and Saks (2005)[30] defer to the widely-accepted definition of corruption first articulated by Rose-Ackerman, which holds that corruption is defined as "crimes by public officials for personal gain."[31] Similarly, Alt and Lassen[32] follow Treisman[33] in defining corruption as "the misuse of public office for private gains." While I generally accept and agree with this definition of corruption, I must first reconcile regional differences in the expectations and definitions of corruption with our broader, final definition of *corruption* in the context of my model.

Sandholtz and Koetzle address this issue in the international arena. Their paper defines corruption as Alt and Lassen do—"the misuse of public office for private gain."[34] This is a useful definition in that it captures the nuances of corruption under the broad term, "misuse of public office," but falls short in failing to establish a framework for identifying whether the acts in question are acceptable in that particular culture. Sandholtz and Koetzle recognize this as a problematic trend in the existing research, that "scholarship on corruption has been bedeviled by the apparent dilemma that general definitions founder on the cultural specificity of norms of corruption."[35] My model is limited in its ability to effectively compare motivations across regions within states—urban versus rural, for instance—because I lack localized data on corruption. I am also limited by the finality of my data, which specifically measures the absolute number of public officials convicted in *federal* court on corruption charges. This standardizes my measure of corruption to some degree in that it establishes one standard of corruption—conviction in a federal court. However, this definition is undoubtedly too specific to effectively capture all of the sentiments expressed by my *perceived* corruption variable. My model requires a definition which is specific enough to identify corruption universally in some respects, but distinguish between regionally accepted differences in other cases.

While the United States as a whole accepts some broad "Western" norms of corruption, differences in political histories, income disparities, or even ethnic variations may predispose one region to accept certain behaviors that would be classified as "corrupt" in other areas. The motivations of political actors are shaped by their local politics, constituent demographics, and even histories of political corruption, but the differences in the details of those factors

produce different results. Even operating in a model where *federal* convictions are used as a measure of actual corruption, it's likely that local norms could still prevent a case from ever going to court, even if another region would denounce the same behavior as blatant corruption. Bearing these considerations in mind, I will proceed in a framework which defines *corruption* as *any misuse of the powers of public office which violates locally-accepted standards of conduct for public officials, undertaken to pursue personal, political, or social gain.*

3. Data Sources and Methodology:

The purpose of this investigation is to explore the relationship between societal fractionalization and political corruption. This study is motivated by the question of whether a society's descriptive characteristics—that is, the demographic makeup of its residents—can predict the level of political corruption within that society. The inherent assumption here is simple and straightforward—a society's tolerance for, and therefore prevalence of, corruption will be shaped by what *type* of people live in that area. The less defined element at play here has to do with *how* and *why* different combinations of groups produce different levels of corruption, and whether that corruption is associated with different levels of fractionalization. In one instance, there could be narratives of subjugation, wherein the dominant group does as it pleases no matter the level of diversity, free to manipulate the political system for its own gain while smaller groups remain powerless. However, I may find a success story of the pluralist model instead, wherein increased diversity helps to preserve the integrity of the democratic system.

As stated in our primary hypothesis, I generally expect that higher levels of heterogeneity will be associated with higher levels of corruption. In order to develop a multi-faceted analysis, I have gathered data from several studies to compile four measures of corruption and three measures of heterogeneity. Table 1, below, reports the summary statistics of my primary dependent and independent variables.

Table 1. Summary statistics of primary dependent and independent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Ln(Convictions)	48	4.717	1.127	2.708	6.547
Corruption Score	47	14.447	4.226	6.000	23.000
Gini99	48	0.447	0.021	0.410	0.499
Racial Fractionalization	48	0.369	0.170	0.055	0.718
Religious Fractionalization	48	0.495	0.133	0.205	0.662

3.1 Measures of Corruption:

My corruption variables are derived from two differing data sources. The "real" measure of corruption, *Ln(Convictions),* is taken from the Justice Department's 2012 *Report to Congress on the Activities and Operations of the Public, Integrity Section.* I simply calculated the natural log of federal corruption conviction totals for each state from 2001 to 2010. The "perceived" measure of corruption, *Corruption Score*, is taken from a 2014 study by Harvard professors Oguzhan Dincer and Michael Johnston. Dincer and Johnston surveyed 280 state political reporters around the country, asking them to rank how corrupt they felt each of the three branches of their state governments were on a 1 to 5 scale. Their survey made the distinction between illegal forms of corruption—described as "the private gains in the form of cash or gifts by a government official, in exchange for providing specific benefits to private individuals or groups"—and legal corruption, described as any "political gains in the form of campaign contributions or endorsements by a government official, in exchange for providing specific benefits to private individuals or groups, be it by explicit or implicit understanding."[36] I tabulated all six components of corruption in each state, calculating a value of total corruption ranging from 0 to 30.

3.2 Measures of Fractionalization

Like my corruptions variables, the three measures of social fractionalization in this study are all taken from different sources. The first of these variables, *Gini99*—a Gini index of income inequality in 1999—was the easiest to prepare,

as it required no calculation. Intuitively, Gini coefficients are a measure of income distribution wherein a value of 0 indicates perfect equality and a value of 1 indicates perfect *in*equality.

The second and third fractionalization measures—*Racial Fractionalization* and *Religious Fractionalization*—are both expressed here as modified Herfindahl-Hirschman indices. A commonly accepted measure of market concentration, Herfindahl-Hirschman indices are calculated by squaring the market share of each firm competing in a market, then summing the squares. In a conventional Herfindahl-Hirschman Index, markets that are closer to being dominated by a single monopoly will reflect higher index values, as a single firm controls a large portion of the marketplace. The racial and religious indices calculated here simply reverse this principle; in both cases, the shares of each category—religion or race—were squared, summed, and *then* subtracted from one. Intuitively, the value of each index ranges from 0 to 1, where 0 indicates perfects homogeneity—essentially a state comprised of a single racial or religious group—and a value of 1 would represent perfect diversity, effectively a society with equal proportions of many groups.

Racial data for the year 2000 was collected from the 2000 census. The data for the religion variable is derived from a 2009 report on the American Religious Identification Survey from Trinity College's Barry A. Kosmin and Ariela Keysar. Their report drew on data from ARIS 2008, the third in a series of large, nationally representative surveys of religious identification among the U.S. adult population from 1990 to 2008. Each iteration of the survey employed the same methodology, using random-digit-dialed telephone interviews (RDD) and one unprompted, open-ended question—"What is your religion, if any?" Responses were recorded from 113,713 Americans in the 48 contiguous states in the 1990 survey.[37]

Table 2. Pairwise correlation matrix of social fractionalization

	Gini99	Racial Fractionalization	Religious Fractionalization
Gini99	1		
Racial Fractionalization	0.584***	1	
Religious Fractionalization	-0.190	0.032	1

While there is notably strong correlation between *Racial Fractionalization* and *Gini99*, it appears that my fractionalization measures generally assess very different dimensions of social diversity. In each of my investigations of heterogeneity and corruption, I build in a consistent progression beginning with my baseline regression model, then incorporating two groups of control variables targeting [1] racial demographics and [2] religious demographics.

3.3 Baseline Control Variables:

3.3.1 ln(income00)

This variable refers to the natural log of state median income, as reported in the 2000 census. This variable is denominated in thousands of U.S. dollars, unadjusted for inflation.

3.3.2 ln(pop00)

This variable refers to the natural log of the number of thousands of residents in each state's population in 2000.

3.3.3 education00

Following Glaeser and Saks, I calculated the share of people in each state holding a Bachelor's degree or higher as of the 2000 census. This variable is presented as a decimal between 0 and 1, such that a state where 20 percent of the population held a Bachelor's and 7 percent held an advanced degree would report a value of 0.27.

3.3.4 urban

This variable refers to the share of each state's population which resides in urban areas as of the 2000 census. This data was taken from the Iowa State University's Community Indicators Program. The "Urban" definition included all populations in "urbanized areas," densely settled territory with specific population thresholds, as well as incorporated or Census Designated Places (CDPs) with populations of 2,500 or more.

3.3.5 gov't size

This variable refers to the number of legislative seats in each state as of 2008. While this is certainly not the ideal year to use for my purposes, 2008 does fall within our observation window, and the number of legislative seats available in each state did not change drastically between 2000 and 2010. The purpose of this variable was to provide another secondary check on population effects, as states with higher populations—and therefore, large voting constituencies—tend to have larger governments. However, there is no linear relationship between population size and legislature size; New Hampshire's legislature employs 424 members, while California has only 120.

3.3.6 sdpolviews

This variable refers to the standard deviation of each state's political views, as reported in the GSS data set spanning 1974-2012. I aggregated responses from each state—except Nevada and Nebraska—and averaged the standard deviation from each year. Generally, states with very little differentiation in political orientation are relatively more homogenous, whereas states with more diverse in its political perspectives are, predictably, more diverse.

3.3.7 old south

This variable refers to a 0-1 dummy variable indicating an affiliation with the Confederacy during the American Civil War. The judgement here was whether or not these states actually voted to join the Confederacy; simply sending troops to Lee's army, as several Border States like Missouri did, was not enough to earn a 1 value here. This variable was incorporated largely to control for corruption in the Deep South.

3.4 Race-Related Control Variables:

3.4.1 race shares—black, white, and other

Column 2 in each of my regressions controls for race shares, derived from the 2000 census. I control for the share of the population identifying as *Black, White* (non-Hispanic), and *Other* (including Native Americans). These shares are expressed as a decimal between 0 and 1.

3.4.2 bwseg

This variable refers to the degree of black-white separation in each state as of 2000. The data is derived from a report by William H. Frey of the Brookings Institution which examined data from the 2000 census and the 2005-09 ACS, assessing changes in the degree of racial separation. I incorporate this control primarily to examine the Old South, a model I will explain in the following section. Expressed as a whole number, this variable may take on any value from 0 to 100, where 100 indicates complete segregation.

3.5 Religion-Related Control Variables:

3.5.1 religion shares—christian, catholic, and no religion

Several of our regressions also control for religion shares, derived directly from Kosmin and Keysar's (2009) report. I left out the "other religion" category as it had the least variation. These shares are expressed as decimals, 0 to 1.

3.5.2 imprelig

This variable refers to the percentage of people in each state who said that religion was an important part of their daily life. Taken from a 2008 Gallup survey, this variable may also take on any value from 0 to 100, where 100 indicates that the entire population believes religion to be important in their daily lives.

3.5.3 attend

This variable was also derived from the GSS, and refers to an average in respondents' religious attendance from 1974-2012. Coded on a 1 to 7 scale where 7 indicates the attendance of religious services every day of the week, the values of this variable generally ranged from 2 to 5.

3.6 Regression Models

My models are informed by Sandholtz and Koetzle's design which pitted the motivations for corruption against pre-existing social norms that predict a tolerance for corruption. I attempt to account for these regional differences in corruption tolerance by controlling for the aforementioned measures of racial and religious diversity. I present our regression results in three tables, one for each of my three measures of fractionalization. In each of the three tables of results, I present six specifications—three using *Ln(Convictions)* as the dependent variables, and three using *Corruption Score*. Columns 1 and 4 always contain my baseline controls, Columns 2 and 5 add racial controls, and Columns 3 and 6 add religious controls.

4. Data Presentation and Discussion:

4.1 Income Inequality and Corruption

In this section, I examine political corruption as a potential result of income inequality. Keeping in line with my main guiding hypothesis, I offer my first sectional hypothesis, *H2: Gini coefficients from 1999 are positively correlated with political corruption in the United States, as measured by federal convictions and reported journalistic perceptions of the prevalence of corruption, such that higher levels of income inequality are associated with high levels of corruption.* These are OLS regressions, using both real and perceived corruption as dependent variables. My baseline controls are annotated below as X. This specification is expressed in Equation 1:

$$Corruption = \alpha + \beta_1 * X + \gamma_1 * Gini99 \tag{1}$$

Table 3. Income inequality and political corruption, OLS regression results

Dependent Variable:	Ln(Convictions)			Corruption Score		
	1	**2**	**3**	**4**	**5**	**6**
Gini99	*15.86****	*11.34**	*6.23*	*101.50***	*45.52*	*77.57*
(P-Value)	(0.00595)	(0.0988)	(0.368)	(0.0145)	(0.343)	(0.156)
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes
Race-Related Controls	No	Yes	No	No	Yes	No
Religion-Related Controls	No	No	Yes	No	No	Yes
Observations	46	46	46	45	45	45
R-Squared	0.853	0.872	0.882	0.462	0.561	0.519

In my baseline regression, I identify a statistically significant coefficient on *Gini99* regardless of the dependent variable in question suggesting that income inequality is positively and significantly correlated with both real and

perceived corruption. In the case of *real* corruption, *Gini99* is actually most significant when only the baseline controls are in play, such that a 10 percent increase in income inequality is associated with a 158.6 percent increase in federal corruption convictions. This is a staggering and significant positive correlation. Controlling for either race- or religion-related variables dilutes the effect of *Gini99*, but in the former case its effect remains significant. In the case of *perceived* corruption, a 10 percent increase in income inequality is associated with an increase of about 10.15 *Corruption Score* points, which effectively translates to a 33.83 percent increase in perceived corruption.

While I observe some clear relationships between Gini coefficients and federal corruption convictions, that dependent variable is standardized across the country, whereas *Corruption Score* measures are subject to individual variances in the *interpretation* of corruption, as well as differences in regional tolerance levels of corruption. In short, my findings in this section do indicate a relationship between income inequality and political corruption, but not necessarily a robust relationship. Where inequality exists, corruption likely follows, but it seems that considering a state's racial or religious characteristics dilutes the connection between *Gini99* and corruption, real or perceived.

4.2 Racial Diversity and Corruption

In this section, I examine political corruption as a potential result of racial diversity. Keeping in line with my first two hypotheses, I offer our second sectional hypothesis, *H3: Racial fractionalization is positively correlated with political corruption in the United States, as measured by federal convictions and reported journalistic perceptions of the prevalence of corruption, such that higher levels of racial fractionalization are associated with high levels of corruption.* These are OLS regressions, using both real and perceived corruption as dependent variables. This specification is expressed in Equation 2:

$$\text{Corruption} = \alpha + \beta_1 * X + \gamma_1 * \text{Racial Fractionalization} \tag{2}$$

Table 4 below reports the results of this model. It is surprising to note that in all but one of the specifications reported in Table 4, *Racial Fractionalization* exhibited virtually no relationship with either real or perceived corruption at first glance. However, noting the highly significant, positive coefficient in Column 4, it appears there is a relationship worth exploring between *Racial Fractionalization* and *perceived* corruption.

Table 4. Racial fractionalization and political corruption, OLS regression results

Dependent Variable:	Ln(Convictions)			Corruption Score		
	1	**2**	**3**	**4**	**5**	**6**
Racial Fractionalization	*1.048*	*-4.682*	*-0.205*	*17.78****	*9.532*	*13.80*
(P-Value)	(0.255)	(0.221)	(0.847)	(0.005)	(0.743)	(0.112)
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes
Race-Related Controls	No	Yes	No	No	Yes	No
Religion-Related Controls	No	No	Yes	No	No	Yes
Observations	46	46	46	45	45	45
R-Squared	0.825	0.867	0.879	0.489	0.550	0.527

Examining the P-values, it appears that the real story in this section is the continued significance of the relationship between fractionalization and *perceived* corruption. In Column 4, a 10 percent increase in racial fractionalization is associated with a 1.78 point increase in perceived corruption, about 5.93 percent. While this is a substantially smaller effect than *Gini99,* it is somewhat persistent in Column 6. It makes sense that controlling for race shares and black-white segregation would dilute the significant of *Racial Fractionalization* in Column 5, but the effect in Column 6, with a P-Value of 0.112, indicating an 89.89 percent level of statistical significance. This suggests that while I do not identify any link between *Racial Fractionalization* and *Ln(Convictions)*, there is nonetheless a persistent, if weak correlation between racial fractionalization and perceived corruption.

4.3 Religious Diversity and Corruption

In this section, I examine political corruption as a potential result of religious diversity. While I initially expected higher levels of fractionalization in *all* respects would be positively correlated with corruption, I eventually came to question whether the corruption in the Bible Belt—easily the least religiously diverse region of the country, dominated by Protestant Christians—would lead to a *negative* coefficient on *Religious Fractionalization* using either dependent variable. However, given the relative insignificance of racial fractionalization—which is comparatively high in the South due to a significant African-American population—I reconsidered the notion that high corruption and low religious fractionalization in the South alone would be enough to drive a significantly negative relationship. Bearing these considerations in mind, I return to my first rationale, which holds that religious diversity will be *positively* correlated with corruption due to in-group driven tendencies towards redistributive policies, leading to political corruption. I offer my third sectional hypothesis here, *H4: Religious fractionalization is positively correlated with political corruption in the United States, as measured by federal convictions and reported journalistic perceptions of the prevalence of corruption, such that higher levels of religious fractionalization are associated with high levels of corruption.* Once again, these are OLS regressions, using both real and perceived corruption as dependent variables. The baseline specification for this model is expressed in Equation 3:

$$Corruption = \alpha + \beta_1 * X + \gamma_1 * \text{Religious Fractionalization} \qquad (3)$$

Table 5 below reports the results of this specification. It appears that *Religious Fractionalization* is a much stronger predictor of *real* corruption than *perceived* corruption, in direct contrast to the results of the racial fractionalization specifications in the previous section. This time, in the case of real corruption, religious fractionalization exhibits a fairly consistent positive, significant correlation with *Ln(Convictions)*. Conversely, religious fractionalization appears to have virtually no significant relationship with *Corruption Score*.

Table 5. Religious fractionalization and political corruption, OLS regression results

Dependent Variable:	Ln(Convictions)			Corruption Score		
	1	**2**	**3**	**4**	**5**	**6**
Religious Fractionalization	1.436	2.239**	2.652*	-4.281	-6.688	-0.898
(P-Value)	(0.125)	(0.0162)	(0.0973)	(0.549)	(0.381)	(0.946)
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes
Race-Related Controls	No	Yes	No	No	Yes	No
Religion-Related Controls	No	No	Yes	No	No	Yes
Observations	46	46	46	45	45	45
R-Squared	0.830	0.884	0.889	0.370	0.559	0.486

The divergence in the effects of religious fractionalization on real and perceived corruption is striking, particularly given that both income inequality and racial fractionalization are both positively correlated with perceived corruption. I suspect that difference is due to the relative invisibility of religious fractionalization, especially compared to income inequality and racial fractionalization. Recent trends and data suggest that Americans are indeed aware of both rising racial diversity[38,39] and income inequality,[40,41,42] and the insurgent candidacies of populist figures like Donald Trump and Bernie Sanders indicate a frustrated desire to step away from traditional norms of government for reasons centering on nativist and socialist policies, respectively. In the context of my data, I believe that sense of discontent could show up in the *Corruption Score* variable. Religious fractionalization, on the other hand, is more difficult to register in daily life, so it stands to reason that it would be uncorrelated with perceived corruption.

Pinpointing the reason why religious fractionalization is positively correlated with *real* corruption, on the other hand, is not so simple. While it is possible that the effect is largely driven by a handful of states with high religious fractionalization and a large number of corruption convictions, six of the ten *least* religiously fractionalized states all report above-average levels of corruption. Instead, I contend that this relationship is largely a result of historical norms which divided political spheres along religious lines, particularly in cities like New York, Chicago, New Orleans, and Los Angeles, which all make up significant portions of their respective state's population. In those areas in particular,

I believe that Glaeser and Saks' second hypothesis—that more diverse voting blocs will inevitably come to focus more on policies of redistribution, and therefore less on government transparency and efficiency—was especially true throughout history. Today, those areas continue to report high levels of corruption, potentially the result of a delayed crackdown of sorts on decades of corruption. On this point, further research is certainly needed to pinpoint the significance of religious fractionalization's relationship with corruption convictions.

5. Conclusions

The purpose of this investigation was to examine the potential relationship between societal heterogeneity—as measured by income inequality, racial fractionalization, and religious fractionalization—and political corruption. While I initially expected that all measures of diversity would be associated with higher levels of political corruption, I seemed to identify strong support for that hypothesis only with respect to income inequality. While it stands to reason, both colloquially and empirically, that areas with high income inequality would also be hotbeds of corruption—for causal reasons in both directions—it's interesting that income inequality is also correlated *perceived* corruption. With more recent data, these correlations may appear even stronger. Income inequality has grown rapidly since the 1990s, as has awareness of its effects, and for that reason one of the many potential avenues for future research to emerge out of this project could involve the evolution of public opinion on issues of inequality, wealth distribution, and the growing push for government action to address those issues.

The finding that both racial and religious fractionalization register only moderate, if any, correlations with corruption is intriguing, and frankly, more difficult to explain. Self-selection of social circles may help to blur the lines of awareness when it comes to those two measures, and admittedly, it's more difficult to establish a direct connection between racial or religious diversity and corruption than it is to link corruption to socioeconomic inequality, which is likely to have more significant impacts on daily life than the demographic makeup of one's home state. Income inequality creates frustrations that either racial or religious fractionalization is simply less likely to promote, and yet, both measures have at least *some* positive correlation with *perceived* corruption. Perhaps there are other factors at play, but further research is needed to root out just what those might be.

Another potential wrinkle in this analysis is the availability of data on real corruption that doesn't show up in the form of federal convictions. I grew up in New England, where it seems the conventional manner of dealing with public corruption often involves a quiet dismissal of the official in question, rather than a full-blown federal investigation. In the future, I would like to include other measures of corruption, perhaps including state and local conviction rates, as well as the number of public officials who were "dismissed" before any crimes could be brought to the public's attention, though the difficulty of identifying accurate data sources for those measures will likely prove a daunting task. But in any case, this investigation has certainly revealed that a relationship exists between societal heterogeneity and public corruption. The details of that relationship have yet to be deciphered, but the opportunities for future scholarship on this topic are virtually limitless.

6. Acknowledgements

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