

Corruption and Re-election Chances of Incumbent Parties in Developing Countries

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Abstract

Possible explanations for re-electing corrupt incumbents are that elections are not free and fair, or that voters are uninformed or misinformed about incumbents' corruption. After adjusting for election freedom and press freedom, this study addresses (1) whether voters in developing countries punish incumbent parties for corruption, (2) whether information broadcast on radio enhances the re-election chances of the incumbent parties in developing countries and (3) whether information about corruption changes the response of voters. Using probit models to analyze 48 elections from 33 developing countries, the study finds that: (1) corruption does not affect the re-election chances of incumbent parties in developing countries, (2) radio broadcasts enhance the re-election chances of incumbent parties in developing countries and (3) under certain circumstances, there is some evidence that information about corruption affects re-election chances of incumbent parties. The effect of information about corruption depends on whether the incumbent parties field different candidates from those in previous elections. In Africa, South and Central America, however, the effect also depends on whether the elections are free or fair. A key finding is that press freedom reduces the re-election chances of corrupt incumbent parties' presidential candidates.

Keywords: *Corruption, Re-election, Electoral Fraud, Radio, Press Freedom*

Introduction

A large literature shows that corruption slows economic growth, resulting in high poverty levels. Transparency International defines corruption as the abuse of public resources for private gain. Mauro (1995) finds that the main channel through which corruption affects the poor is through its effect on economic growth. Corruption lowers investment and hence slows down economic growth. Mo (2001) finds that corruption has a negative and significant relationship with human capital, measured by the average schooling years in the population over age 25. Tanzi and Davoodi (1997) find that corruption negatively affects the quality of public investments. Gupta, Davoodi and Tiongson (2001) examine the effect of corruption on the quality of public health care provision, and find that child mortality rates in highly corrupt countries are about one-third higher than in less corrupt countries.

Despite the evidence that corruption is detrimental to the well-being of the poor, people still engage in corruptive practices, causing some to wonder whether corruption might be beneficial. Huntington (1968) argues that in over-centralized, dishonest bureaucracies, political bribes and kickbacks can help cut through bureaucratic red tape and improve government efficiency. Liu (1985) shows in a formal model that corruption can efficiently reduce time spent on queues. Another reason some view corruption as beneficial hinges on the key economic assumption that self-interest enhances prosperity because competition ensures that a product is

purchased by those who value it the most; thus firms that are willing to pay more in bribes are awarded contracts. However, as Lambsdorff (2001) argues this type of invisible hand may not exist when private actors deal with the government to provide products to the state or to demand publicly controlled services. This study views corruption as bad for the majority of people not directly involved in corruptive activities, and as detrimental to economic development.

If corruption negatively affects voters, they should punish incumbent parties for corruption by voting them out of office. It is not uncommon, however, to see corrupt incumbent parties reelected in developing countries. Chad, for example, is ranked the third and eighth most corrupt country in Africa and in the world (TI Annual Report, 2010) respectively, and yet in the 2011 presidential elections, the incumbent party's candidate was reelected. Across empirical literature, the results on the effect of corruption on election outcomes are mixed. For example, in Brazil's mayoral elections, voters punish corrupt officials by withdrawing their vote (Ferraz and Finan, 2008); while in Italy's legislative elections, Chang and Golden (2004) find that there is no significant difference in the re-election chances of corrupt officials and non-corrupt ones. However, the existing literature has focused on developed countries with the exception of Ferraz and Finan (2008) who conduct a country specific study in Brazil. Another exception is Krause and Mendez (2007) who combine developed countries and developing countries from South America. The current study adds to the literature by focusing only on developing countries from Africa, South America and Central America.

The intertwined nature of the causes and solutions of corruption makes institutions established to fight corruption less trustworthy than other institutions, especially in emerging democracies. It may be in the interest of a corrupt government to keep these institutions weak so that government officials can continue to reap the benefits of corruption without paying the electoral consequences. Exposing corruption may be risky in such an environment due to inadequate legal protection for the whistleblowers in a system that is very protective of the politicians in the incumbent party. In democratic nations, elections may, therefore, offer opportunities for voters to express their attitudes toward corruption without directly being labeled as whistleblowers. However, the Rundquist and Hansen (1977) model suggests that voters may vote for a corrupt incumbent party because they are uninformed or misinformed about the extent of corruption and its consequences for their well-being.¹ Voter access to information in developing countries may be an important element in explaining the re-election of corrupt incumbents.

In developing countries, radio broadcasts are a more important source of information to the rural masses than is television or the internet. The levels of per capita income in developing countries make it difficult for people in rural areas to purchase televisions and computers and to access internet in their homes. In addition, the lack of electricity in rural areas makes it harder to own appliances like televisions and personal computers. The *Economist* (Q3, 2010) reports that around 1.5 billion people in the world do not have access to electricity, with 85 percent of that population living in rural areas. According to the International Telecommunications Union-Development sector (ITU-D), as of 2012, in developing countries, just 27.6 percent of people have computers in their homes and 24 percent have access to internet in their homes. In addition, only 27.5 percent have access to internet individually. **Table 1** (Some Telecommunication Statistics in Developed and Developing Countries) provides statistics for households with computers, households with internet at home, and individuals with internet

¹The other reasons suggested by Rundquist and Hansen (1977) are: (1) voters may view corruption as necessary to speed up economic activities when government agencies are not able to fulfil specific demands, and (2) voters may be trading their vote for some material and/or financial advantage.

access. It shows the disparity that exists between developed and developing countries with regard to telecommunication statistics.

Table 1: Some Telecommunication Statistics in Developed and Developing Countries (per 100 People)

	<u>Households with computers</u>		<u>Households with internet at home</u>		<u>Individuals with Internet access</u>	
	Developed	Developing	Developed	Developing	Developed	Developing
2005	55.5	14.6	44.7	8.1	50.9	7.8
2006	58.6	15.8	48.2	9.6	53.5	9.4
2007	62.3	17.6	53.4	11.2	59.0	11.9
2008	66.1	19.6	57.7	12.5	61.3	14.7
2009	69.1	21.4	62.6	14.1	62.9	17.5
2010	71.4	22.8	66.3	16.4	67.3	21.2
2011	73.2	25.4	70.2	20.2	70.5	24.5
2012	75.5	27.6	74.0	24.0	73.4	27.5

Source: *International Telecommunications Union-Development sector*

Even though developing countries have registered some improvements since 2005, the disparity with developed countries is still huge. It is highly likely, therefore, that people in rural areas get informed mostly through radio broadcast because radios are affordable and can easily be powered by batteries or by solar and manual (wind up) means. Therefore, the analysis of voter information about political corruption should explicitly include radio.

Scope of the Study

Using a data set compiled from various data sources (this study models the re-election chances of an incumbent party's presidential candidate as a function of corruption, information variables, and various control variables. (A detailed specification of the econometric model is provided in section 4). Corruption is measured by the Corruption Perception Index (CPI) compiled by Transparency International (TI). The key questions this study seeks to address are: (1) whether voters in developing countries punish incumbent parties for corruption, (2) whether radio broadcasts enhance the re-election chances of incumbent parties in developing countries and (3) whether information about corruption changes the response of voters. A key innovation of this study is to include a term that interacts a radio broadcast variable and corruption, allowing one to analyze the effect of information dissemination on re-election chances of incumbent parties' presidential candidates. Therefore, in part, this study seeks to investigate whether radio broadcast is an effective way of disseminating information on corruption to the rural masses in developing countries. Establishing the effectiveness of radio broadcast can guide institutions established to fight against corruption in the way they should disseminate information about corruption.

This study attempts to make three other contributions to the election-corruption literature. First, the study assesses the election chances of incumbent presidents using a set of developing countries only. The extant literature is limited to developed countries. Second, electoral fraud in developing countries is included in the model as an explanatory variable. If electoral fraud plays a role in altering voters' preferences, omission of the variable has serious consequences on the reliability of the estimates. In most developing countries, election outcomes are disputed because of alleged electoral fraud. In the Kenyan 2007 elections, for example, the

opposition refused to accept the election results, claiming the Electoral Commission of Kenya (ECK) manipulated the results in favor of the incumbent party's candidate. Similarly, in the 2013 Kenyan elections, the losing candidate again challenged the results in court. Third, the current study includes voter turnout, which the other studies do not do.

The rest of the paper is organized as follows: Section 2 reviews the literature; Section 3 discusses the data; Section 4 discusses the methodology and the results while Section 5 concludes and proposes a future direction.

Corruption and Economic Growth

Despite the evidence that corruption is detrimental to the well-being of the poor, people still engage in corruption. This has caused some to wonder whether corruption might be beneficial. This section provides a brief review of studies that have investigated the effect of corruption on society and have found a negative impact on the well-being of citizens.

Using a sample of 67 countries, Mauro (1995) finds that the main channel through which corruption affects economic growth is by lowering the investment rate. Mauro (1995) finds that a one-standard deviation increase in the corruption index is associated with an increase in the investment rate by 2.9 percent of GDP. Mauro (1995) uses an older corruption index provided by Business International (BI). Many other studies that use other indices² of corruption support Mauro's findings. Knack and Keefer (1995) use data from the Political Risk Service's International Country Risk Guide (PRS/ICRG). Brunetti, Kisunko and Wader (1998) use the corruption index by the World Bank and University of Basel.

Wei (2000a) detects a significant negative impact of corruption on Foreign Direct Investment (FDI). Lambsdorff and Cornelius (2000) show an adverse impact of corruption on FDI for African countries. Other studies that find similar results include Smarzynska and Wei (2000); Henisz (2000); Wei (2000b); Abed and Davoodi (2002); Doh and Teegen (2003); and Straub (2003).

With regards to the quality of the services provided, Tanzi and Davoodi (1997) examine the effect of corruption on the quality of public investments while Gupta, Davoodi and Tiongson (2001) support Tanzi and Davoodi (1997) with a study that examines the effect of corruption on the quality of public health care provision. These studies provide evidence that corruption negatively affects economic growth and human well-being, directly or indirectly. Of particular importance to this study is the voting behavior of the citizens when the public officials running for re-election are perceived to be corrupt. A considerable scholarly effort in public choice has been devoted to studying the relationship between corruption and voter turnout, but not so much on the corruption-election outcome relationship. The next section discusses studies that investigate the turnout-corruption relationship.

Corruption and Voter Turnout

In the African context, the increased effort might include politicians bribing voters. Fatton (1986) argues that such a link between corruption and voter turnout exists because Africans are embedded in a network of relationships in which patrons bribe the citizens to participate in elections.

Karahan, Coats, and Shughart (2006) recognize that the demanders of the votes (candidates) play a crucial role in mobilizing voters. While their view is that mobilization stems from the politicians' effort, others contend that mobilization is a result of disgruntled voters seeking to remove the corrupt leaders from office. Bratton *et al.* (2005) argue that citizens want clean and accountable governments, and if they do not find transparency and effectiveness, they

²Svensson (2005) finds a correlation coefficient of at least .86 between CPI, ICRG and CCI.

may turn out in large numbers to cast a protest vote. Inman and Andrews (2010) find that citizens in Senegal tend to show up in higher numbers when faced with corrupt governments.

The essence of politicians engaging in electoral engineering, however, is to mobilize voters to vote for them and win elections so that they can continue maximizing the benefits of holding office. While politicians hope that campaigning increases voter turnout, to the extent that elections are not rigged outright they have no control over what happens in the polling booth. This is where the current study departs from studies that seek to investigate the turnout-corruption relationship. The current study focuses on the re-election-corruption relationship instead.

Corruption and Election Outcome

Chang and Golden (2004) study the fate of members of the Italian lower house in the first eleven post-war legislatures (1948-94) using survival analysis techniques and logistic regressions. They find that judicial allegations for serious transgressions significantly lower the probability of re-election by 7 percent. However, when they look at the eleven post-war legislatures separately, they find that in only two out of the eleven post-war legislatures do voters punish members of the legislature for serious wrongdoing by not voting for them. Their results show that 51 percent of those charged with serious wrongdoing get reelected to national office, compared to 58 percent of their honest counterparts, leading Chang and Golden (2004) to conclude that corrupt officials are not severely punished by the voters. The major difference between Chang and Golden (2004) and the current study is that the Chang and Golden (2004) study is country-specific while this study is cross-country. Another country-specific study that supports Chang and Golden (2004) is that by Reed (1999). Reed (1999) finds that Japanese legislators lose only a few percentage points over their previous vote shares when they are indicted or convicted of corruption. Sixty-two percent of legislators convicted of corruption over the period from 1947 to 1993 were subsequently re-elected.

Other country specific studies have established that voters do punish corrupt public officials. Peters and Welch (1980) assess the electoral impact of corruption on accused candidates in the U.S. House of Representatives from 1968 to 1978. They isolate and determine the degree to which specific corruption allegations diminish the electoral success of candidates. In their study, they consider the victory or defeat of allegedly corrupt candidates and examine the impact of corruption charges on both electoral turnout and the percentage of votes received by the accused candidates. Their results show that not only does a significant number of accused candidates get defeated at the polls or resign before risking defeat, but also accused candidates suffer a significant loss of votes in re-election bids. Overall, candidates accused of corruption appear to suffer a loss of 6-11 percent from their expected vote.

Another cross-country study that supports Peters and Welch (1980) and Ferraz and Finan (1980) is by Krause and Mendez (2007). Krause and Mendez evaluate the question whether voters reduce their support for an incumbent whenever they perceive an increase in corruption. Their sample includes 28 countries and 93 election periods covering the period between 1995 and 2007. Krause and Mendez (2007) sample includes European and North and South American countries. They use the Corruption Perception Index (CPI) for their measure of corruption. The dependent variable in their model is the gain (or loss) in the share of votes received by the incumbent party with respect to the previous election. The difference between the current study and Krause and Mendez is that the current study focuses on developing countries only while Krause and Mendez combines developed and developing countries. Another difference is that this study tests the effect of corruption information on re-election chances. Furthermore, the current study uses a categorical variable, re-election, as the dependent variable.

Controlling for both economic and political variables, Krause and Mendez (2007) find that a perceived rise in corruption in public office is effectively punished by voters in an election. Furthermore, they find strong evidence that voters punish corrupt practices more in the parliamentary form of government than the presidential form of government. The reasoning behind this is that in presidential systems, voters perceive corruption as an individual flaw, while for legislative systems, voters view the entire party as being corrupt. Krause and Mendez (2007) also find that corruption is punished more severely in newer democracies than established ones.

In conclusion, studies that use the change in the share of votes as the dependent variable seem to suggest that voters punish the corrupt officials by withdrawing support (Peters and Welch, 1980, Ferraz and Finan, 1980, and Krause and Mendez, 2007). Those that use categorical dependent variables seem to establish that voters do not punish the corrupt officials. In order to reconcile the two, one can conclude that the loss in the share of votes for corrupt officials may not be big enough to make the corrupt officials lose re-election.

Data Description

This study uses data from 48 elections in 33 developing countries over the period 2000 to 2010. The sample period is determined by the availability of the Corruption Perception Index, which was first compiled in 1995, but data for most developing countries have been available only since 2000. The 33 countries include 15 African countries, seven South American countries and eight Central American countries³. Twenty-two elections are from Africa, while 14 are from South America, and 12 elections are from Central America. **Table 2** (Descriptive Statistics on Dependent and Independent Variables) shows the descriptive statistics for the variables used in the study.

Table 2: Descriptive Statistics on Dependent and Independent Variables

Name	Definition	Mean	Std. Dev.	Min.	Max.
Re-election	1 if reelected and 0 if not	0.625	0.489	0.000	1.000
Δ in corruption	Calculated from change in CPI	-0.078	0.572	-1.800	1.300
Radios	# of radios per 1000 of population	311.563	219.829	19.000	793.000
Press freedom	Higher number means more freedom	54.333	15.652	21.000	83.000
Turnout	percent that vote divide by registered voters	65.139	14.735	36.240	94.550
Electoral Fraud	1 if election fraudulent and 0 if not	0.250	0.438	0.000	1.000
Level of democracy	Higher means more democratic	6.063	3.398	-4.000	10.000
Δ in GDP per capita	The change between two elections	96.435	318.346	-906.360	991.620
# of challengers	# of opposition presidential candidates	6.000	5.838	1.000	34.000

³The African countries are: Algeria, Benin, Cameroon, Central African Republic, Gabon, Ghana, Kenya, Malawi, Mali, Mozambique, Namibia, Senegal, Tanzania, Uganda and Zambia. The Central American countries are: Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico and Nicaragua. The South American countries are: Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay and Uruguay.

Same candidate	1 if sitting president runs and 0 if not	0.438	0.501	0.000	1.000
Region	1 if Africa & 0 if South and Central Am	0.458	0.504	0.000	1.000

Re-election

Re-election is a dummy variable that takes the value of 1 if the incumbent party's presidential candidate wins an election and 0 if not. Thus, in order to be assigned the value of 1, the winner must either be an incumbent president or be from the same party as the incumbent when the incumbent is not allowed to contest. Most democratic nations place a constitutional limit on the number of terms a president can serve. So, the incumbent does not contest⁴ after completing the maximum number of terms provided for by the constitution. The maximum number of terms varies from one to an open-ended arrangement like in the case of Zimbabwe, which does not impose a limit on the number of terms. From **Table 2**(Descriptive Statistics on Dependent and Independent Variables), it can be seen that in 62.5 percent of the elections in the sample, the incumbent party's presidential candidate gets reelected. The data for re-election are obtained from three main sources, the Electoral Commissions of the various countries, Psephos: Adam Carr's Election Archives⁵, and the Center on Democratic Performance (CDP).⁶

Voter Turnout

Voter turnout can be measured as the number of voters that turns out to cast a vote as a percentage of registered voters or alternatively as a percentage of the voting age population (VAP). Using the number of registered voters as the denominator leaves out eligible voters who may not have registered to vote, while using VAP includes those that are not eligible to vote, such as non-citizens. The current study uses the former, but it would be interesting to test whether the results would change if VAP is used instead. **Table 2** (Descriptive Statistics on Dependent and Independent Variables) shows that the mean of turnout out in developing countries is 65.14 percent.

It is important to note that different countries use different voting systems for the presidential elections. Some countries use the plurality system while others use the majority system. The majority system requires a runoff when no candidate reaches 50 percent plus one of the votes. In case of a runoff, this study uses the second round turnout. The data sources for turnout are the African Elections Database⁷, Adam Carr's Archives, the CDP, the Institute for Democracy and Election Assistance⁸ (IDEA) and the Electoral Commissions, in the respective countries.

⁴The incumbent may also be forced out of power if there was a military coup. Natural death or assassinations may also force the incumbent party to have a different candidate.

⁵This is an online archive of election statistics created in 1985 by an Australian journalist Adam Carr. Currently the archive covers statistics for 182 countries.

⁶The CDP was established in 1999 at Binghamton University as the Research Foundation Center for the State University of New York. The center generates an Election Results Archive for 130 countries for the period between 1974 and 2002.

⁷Created in 2004, the online database provides a comprehensive archive of past and present election results from 48 countries of the Sub-Saharan Africa. The data sources for the database include local online Newspapers from country of research, official Government documents from country of research, Electoral Observer mission reports and Web Archive (<http://web.archive.org/>)

⁸Started in 1995, IDEA is an intergovernmental organization headquartered in Stromsburg, Sweden. The original members of IDEA were Australia, Barbados, Belgium, Chile, Costa Rica, Denmark, Finland, India, The Netherlands, Norway, Portugal, South Africa, Spain and Sweden. Currently it has 27 members.

A priori, there is no way of knowing the direction of the influence of voter turnout on election outcomes. If a large turnout is a result of one side being able to mobilize its base and new voters, then that side may stand a better chance of winning an election. In some countries, for example, access to remote areas may require a lot of resources, and the incumbent may have an advantage over the opposition because the incumbent can use government resources to campaign in those areas. The increase in voter turnout may increase the incumbent's chances in this case, but still there is no guarantee that the voters will vote for any particular candidate since the voting is done secretly. Grofman, Owen, and Collet (1999) argue that a higher voter turnout may be bad news for the incumbent party because core voters usually differ from peripheral voters. Peripheral voters are defined as those voters that do not like the status quo (Grofman *et al.*, 1999). Therefore, the more involved the peripheral voters become, the worse the incumbent party will fare in a fair election. The expected sign for voter turnout is, therefore, inconclusive.

Corruption Perception Index and its Validity

Corruption is defined as the abuse of entrusted public power for private gain. The examples include bribing of public officials, kickbacks in public procurement, or embezzlement of public funds. This study utilizes the measure of corruption compiled by Transparency International⁹ (TI). Since 1995, TI has scored and ranked countries from around the world according to perceptions of the extent of corruption in the public sector. The CPI ranges from 0 to 10. A higher score is an indicator that the respondents perceive the public officials as less corrupt, while a lower score suggests the opposite. This study uses the change in CPI between two elections to measure corruption by a particular ruling party. An alternative to using the CPI is the Corruption Control Index compiled by the World Bank. The CPI measures corruption in the public sector while the CCI includes corruption in the private sector. For the purpose of this study, CPI is more appropriate than CCI because this study emphasizes corruption in the public sector and not in the private sector. **Table 2** (Descriptive Statistics on Dependent and Independent Variables) shows that the mean of the change in CPI is -0.078 indicating that on average corruption decreased over the sample during the sample period.

By its very nature, corruption is deliberately hidden, making gathering information problematic. Other studies have used the number of prosecutions in a country as a measure of the level of corruption. Lambsdorff (2008) argues that the number of prosecutions does not reflect actual levels of corruption but the quality of prosecutors. With regards to validity, Lambsdorff (2008) argues that the credibility of the CPI is increased by the fact that its construction is based on a combination of different data sources. Furthermore, being able to obtain information about particular cases depends on freedom of information, the quality of anti-corruption legislation and the effectiveness of the laws and institutions in terms of holding guilty parties accountable. Given the fundamental challenges of gathering evidence-based data on corruption, the CPI takes a different approach. This index brings together a number of different data sources,¹⁰ which capture *perceptions* of the extent of corruption in the public sector of a country/territory. Perceptions data have been shown to correlate very well with other indicators that use a more evidence-based approach.¹¹

⁹TI was founded in 1993 by Peter Eigen, a former regional director of the World Bank. Headquartered in Berlin, German TI has 90 locally established national chapters. TI develops tools for fighting corruption and works with other civil society organizations, companies and governments to implement them.

¹⁰In 2011, seventeen separate surveys and assessments were used.

¹¹For example, Transparency International's Global Corruption Barometer 2010 asked people from 86 countries whether they had paid a bribe for public services. The results show that ordinary people are more likely to have to pay a bribe to access basic public services where corruption is perceived to be more prevalent. Similarly, International's Bribe Payers Index (BPI) captures perceptions of the likelihood of companies to pay bribes when doing business overseas and the 2011 edition finds that in countries where the Corruption Perceptions Index scores

Electoral Fraud

It is not uncommon for the defeated candidate to refuse to accept the outcome of an election, citing electoral fraud as the cause of the defeat. In the 2012 Ghanaian elections, for example, the opposition candidate refused to accept the results, claiming that they were manipulated in favor of the incumbent. In Malawi, no major losing candidate has accepted defeat since 1994 when Hasting Kamuzu Banda conceded to Bakili Muluzi. Kenya is also an interesting case. In 2007, the opposition led by the candidate Raila Odinga claimed that the elections were rigged in favor of the incumbent. This resulted in an ethnic conflict that left over 1000 people dead. For the 2013 election, in order to avoid a repeat of the 2007 events, an independent body, Independent Electoral and Boundaries Commission (IEBC), was hired to conduct the election. Yet the losing candidate did not accept the results, arguing that the failure of the biometric machines, which led to the manual count was a deliberate ploy to manipulate the results in favor of the winner. The matter was resolved in Kenyan Supreme Court in favor of the IEBC.

Electoral fraud is, therefore, one of the control variables, but measuring it is not easy because of its covert nature. Moreover, people may question the motive of complainants, since they have an interest in having the results overturned. This study utilizes a measure compiled by the World Bank political database, which rates elections as free and fair or fraudulent. A fraudulent election takes the value of zero while a free and fair election takes the value of 1. Using this measure of fraud has the advantage that it is available over the period of this study, and it is from an outside source, which supposedly has no interest in influencing the outcome of elections directly. **Table 2**(Descriptive Statistics on Dependent and Independent Variables) shows that in developing countries, only 25 percent of the elections are free and fair.

Level of Democracy

The availability and quality of democratic institutions can influence the outcome of an election. This study uses the democracy level of a country to control for the quality of institutions on the premise of a positive relationship between the level of democracy and the quality of those democratic institutions. The Polity IV index is used to measure a country's level of democracy. Ranging from -10 for an extreme autocracy to +10 for the most democratic, the Polity IV index measures democracy by competitiveness of political participation, competitiveness of executive recruitment, openness of executive recruitment, and constraints of the chief executive. A score of +10 indicates a strongly democratic state; a score of -10 indicates a strongly autocratic state. This variable is listed in the Polity IV dataset as *polity*. One weakness of the index is that it does not distinguish between a monarchy and a single party regime. However, for this study that is not a problem because the countries included in the study have indexes ranging from -6 to 10. The mean the democracy variable is 6.06, an indication that the developing countries in the sample are reasonably democratic.

Level of Competition Faced by the Incumbent

A fragmented opposition increases the chances of an incumbent getting reelected. A large number of opposition candidates may even be part of the incumbent's strategy to divide the opposition. With government resources to use, the incumbent can sponsor smaller parties in opposition strongholds in order to increase the chances of winning the election. The number of opposition candidates is used as a proxy to measure the strength of opposition an incumbent faces. On average, in developing countries, there are six presidential candidates running against

are low (highly corrupt) companies from these countries are seen as more likely to pay bribes when doing business overseas.

an incumbent. Just like voter turnout, it is important to note that some countries require a 50+1 majority to win an election, so the number of challengers is reduced to one (1) in the runoff. The major data source for the number of challengers is Psephos: Adam Carr's Election Archive, while data on population were obtained from IDEA.

Economic Performance as Measured by Change in GDP Per Capita

Research has shown that economic conditions shape electoral outcomes. Good economic performance keeps parties in power, and bad ones cast them out (Lewis-Beck and Stegmaier, 2000). The findings are founded on the premise of economic voters who hold the government responsible for the state of the economy. The present study uses the change in real GDP per capita between two elections to capture how well an incumbent performed economically. In developed countries, the unemployment rate plays a crucial role in informing the electorate on the economic condition of a country. The unavailability of unemployment data in developing countries leaves per capita GDP as the best indicator for economic performance. The reason for using the change in per capita GDP is the idea that in considering whether to reelect an incumbent, voters consider how well off they were before the incumbent came to power and how much their lives have improved. The mean of the change in real GDP per capita in developing countries is 96.44, indicating an improvement in economic performance on average. The data for GDP per capita are obtained from the World Bank.

Amount and Quality of Information

The amount and quality of information made available to the voters play a role in determining the electoral outcome. If the incumbent is corrupt, it is to his advantage if the corruption is not exposed. The media, therefore, plays an important role in influencing the election outcome through the type of information that is disseminated. For the majority of the poor people in rural areas, radios are the best means through which information is passed. This study uses the number of radios per thousand of population as a proxy for the amount information. In order to control for the quality of information, an interaction term between the number of radios per thousand of population and the corruption perception index is included. This is done to test whether corruption is exposed or not. In addition, press freedom index is also used to control for the ease with which reporters are able to expose corruptive practices without fear of being persecuted. The mean of radios per 1000 of a population is 312, indicating that at least 30 percent of the people in developing countries have access to information from radio broadcasts. Data on the number of radios were gathered from the World Resource Centre. Data on press freedom came from the Freedom House.

Power of Incumbency

An incumbent president has an advantage over her competitors because she is already known and can also use government resources for her campaign. Incumbent presidents can easily disguise a political function as a state function and, in the process, use government resources to finance their campaigns. In addition, the voters already know the incumbent president, so it is easier for the ruling party than the competitors to sell their candidates. In order to control for the power of incumbency, this study uses a dummy variable taking the value of 1 if the ruling party features a sitting candidate and 0 if the incumbent party changes its presidential candidate. **Table 2**(Descriptive Statistics on Dependent and Independent Variables)shows that in 42.8 percent of the elections, the incumbent party fields the same candidate.

Estimation Results

The dependent variable in this study is categorical. The estimation method is the probit maximum likelihood estimator (MLE). **Table 3** (PROBIT Estimation: Dependent Variable=Re-election) provides results for probit estimation method. Models 1 and 2 include the number of radios per 1000 of a population as a proxy for radio broadcasts. In Model 2, the number of radios per 1000 is interacted with corruption. The interaction ensures that information on corruption aired on the radios is controlled for. In Models 3 and 4, the freedom of press index is used to capture the quality of information to which voters are exposed. A free media allows for information to be relayed to the voters without fear of persecution. Just like Model 2, Model 4 introduces an interaction term between the freedom of press index and corruption. Also included in **Table 3** (PROBIT Estimation: Dependent Variable=Re-election) are the marginal effects of the variables that are not interacted.

Table 3: PROBIT Estimation (Dependent Variable=Re-election)

	(1)		(2)		(3)		(4)	
	Coeff.	AME	Coeff.	AME	Coeff.	AME	Coeff.	AME
Change in corruption	0.303	0.051	-0.889		0.616	0.122	-2.896*	
	(0.331)	(0.054)	(0.755)		(0.424)	(0.085)	(1.545)	
# of radios per 1000 pop.	0.004**	0.0007**	0.004**					
	(0.002)	(0.0002)	(0.002)					
Radio* change in corruption			0.003					
			(0.002)					
Press freedom					-0.037	-0.007*	-0.053**	
					(0.023)	(0.004)	(0.026)	
Press freedom*change in corruption							0.067**	
							(0.031)	
Turnout	-0.034*	-0.006**	-0.029	-0.005*	0.005	0.001	0.018	0.003
	(0.019)	(0.003)	(0.019)	(0.003)	(0.016)	(0.003)	(0.018)	(0.003)
Electoral fraud	N	N	N	N	N	N	N	N
Democracy	N	N	N	N	N	N	N	N

Change in GDP per capita	N	N	N	N	N	N	N	N
# of challengers	Y	Y	Y	Y	Y	Y	Y	Y
Same candidate	Y	Y	Y	Y	Y	Y	Y	Y
Region	Y	Y	Y	Y	Y	Y	Y	Y
Wald chi2 (k+1)	26.85		23.23		24.57		23.14	
Robust standard errors in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								
n= 48								
AME=Average Marginal Effects, N=not significant, Y means significant								

Not included in **Table 3**(PROBIT Estimation: Dependent Variable=Re-election) are the marginal effects of corruption and the information variables, which are interacted and require a separate calculation. These are reported in **Table 4** (Marginal Effects of the Information Variables for Probit Models with Interaction Terms). In Models 1 and 3, there is no evidence that in developing countries corruption affects the re-election chances of an incumbent party's presidential candidate. In Model 1, one can argue that in developing countries, programs that are broadcast on radio stations do not expose corruption and its impact on the well-being of the voters. In countries where governments have substantial amount of control of public radio stations, radios can be used as propaganda tools for the incumbent party. Even in countries with private radio stations, there is a possibility that broadcasting licenses are issued to those that are sympathetic with the incumbent party. A positive and significant coefficient on radio supports the reasoning that information disseminated through radios enhances the re-election chances of an incumbent by 0.07 percent.

The control variables electoral fraud, democracy, and change in GDP per capita are insignificant in all the models. Turnout is significant in Models 1 and 2, where the information variable used is the number of radios per 1000 of a population. The re-election chances of an incumbent party's presidential candidate are reduced by about 0.5 percent for every 1 percent increase in voter turnout. This may explain why the incumbent party would employ tactics to discourage voter turnout, especially in opposition strongholds. In Zimbabwe, in 2006, for example, it was alleged that war veterans, who were supporters of the incumbent, were intimidating voters in opposition strongholds. When information is controlled for by the freedom of press index (Models 3 and 4), turnout is no longer significant. The joint significance test between freedom of press and turnout yields a chi 2 equal to 3.18, which is insignificant.

Three control variables, namely number of challengers, same candidate, and region, are significant in Model 1. Notice also that the same three variables are significant in all four models reported in **Table 3** (PROBIT Estimation: Dependent Variable=Re-election). If one more candidate decides to run for the presidency, the re-election chances of the incumbent party's presidential candidate increase by between 3 and 4 percent. It seems the extra candidate splits the opposition vote, allowing the incumbent party's presidential candidate an easier path to victory. It is not surprising, therefore, that the ruling party can use this as a strategy to retain power by sponsoring smaller parties in the opposition strongholds in order to increase the chances of

winning re-election. Such parties usually disband or end up joining the ruling party after the elections.

Fielding a sitting president is advantageous for the incumbent party. The results show that the likelihood of an incumbent party winning re-election is 30 percent higher if the incumbent party fields a sitting president than when the party changes its presidential candidate. Holding everything else constant, a sitting president is already well known and therefore easier to sell than a different candidate. This may explain why after serving the maximum number of terms allowed for by the constitution, some ruling parties try to manipulate the constitution to allow the same candidate to run for office. In Zambia in 2002, for example, the incumbent president tried to change the constitution to run for a third term but failed. Similarly, in Malawi in 2004, the incumbent party made two attempts to manipulate the constitution to allow for an open term and then to a third term but failed in both cases. As for the comparison between developing countries in Africa and those in the Americas, holding everything constant, incumbent presidents in Africa are about 30 percent more likely to get reelected than those in South and Central Americas.

In Models 2 and 4, interaction terms are introduced to test the response of the voters when radios disseminate information on corruption (Model 2) and when the media personnel can freely expose corruption without fear of persecution (Model 4). The calculated marginal effects of information about corruption are shown in **Table 4** (Marginal Effects of the Information Variables for Probit Models with Interaction Terms). Recall that there are three dummy variables that have to be accounted for.

Table 4: Marginal Effects of the Information Variables for PROBIT Models with Interaction Terms

	Region=1				Region=0			
	Fraud=1		Fraud=0		Fraud=1		Fraud=0	
	(2)	(4)	(2)	(4)	(2)	(4)	(2)	(4)
Same candidate = 1	0.0001	-0.0049	0.00001	-0.0009	0.0015**	-0.0232*	0.0009	-0.0172
	(0.0001)	(0.0066)	(0.00019)	(0.0011)	(0.0008)	(0.0107)	(0.0007)	(0.0122)
Same candidate= 0	0.0013*	-0.0229*	0.0005	-0.0151*	0.0004	-0.0061	0.0011**	-0.0161*
	(0.0008)	(0.0107)	(0.0004)	(0.0075)	(0.0005)	(0.0062)	(0.0004)	(0.0072)
Robust standard errors in parentheses								
*** p<0.01, ** p<0.05, * p<0.1								

The results in **Table 4** (Marginal Effects of the Information Variables for Probit Models with Interaction Terms) show that in Africa (region=1) when the incumbent party fields the sitting president (same candidate=1) and the elections are declared fraudulent (fraud=1), exposing corruption has no effect on the election outcome. However, when the incumbent party changes the candidate (same candidate=0), information on corruption has a significant effect on election outcome. When radio is interacted with corruption (Model 2), the marginal effect of

radios is 0.0013. This may seem like a surprising result because the expectation is that when corruption is exposed, the voters should punish the incumbent party. However, this variable may be capturing the extent to which the incumbent party can go to exert pressure on the radio stations to manipulate the information to its advantage. One possible way the incumbent party can do this is to stop government agencies from advertising on the radio stations that broadcast information against it. When the press is free to expose corruption, the information variable has a significant and negative effect on the re-election chances of the incumbent party's presidential candidate. The incumbent's chances are reduced by about 2.3 percent. For a non-fraudulent election in Africa, with the same candidate for the incumbent party, information on corruption has no effect on election outcomes. When the incumbent fields a different candidate, radio has no effect; but freedom of press does affect the incumbent party's presidential candidate negatively, so probability of winning an election is reduced by about 1.5 percent. In conclusion, in Africa, information on corruption does not change the re-election chances of an incumbent party's presidential candidate when the incumbent party fields a sitting president. In eighteen African elections in the sample for which a sitting candidate runs for re-election, the incumbent party wins in all of them. When the candidate is changed, the incumbent party's chances of re-election are reduced when the media is free to expose corruption.

Unlike Africa, in South and Central Americas, information on corruption does have an effect on election outcome when an incumbent party fields the same candidate, depending on whether or not an election is fraudulent. For a fraudulent election, radio increases the incumbent's probability of winning by about 0.15 percent. Freedom of press reduces that probability by about 2.3 percent. For a non-fraudulent election in South and Central Americas, information on corruption does not have any effect on the re-election chances, just as in Africa. If the incumbent party fields a different candidate in South or Central America and there is fraud, information on corruption does not affect the outcome of an election. For a different candidate both radio and freedom of press have a significant effect. Information on corruption on radios increases the probability of winning re-election by 0.11 percent while the media's freedom to expose corruption reduces the chances by about 1.6 percent. Notice that for Africa only freedom of the press matters in this case.

Therefore, when the media is free to expose corrupt practices without fear of being persecuted, information on corruption affects the incumbent party negatively. The variable number of radios per 1000 of a population has a positive sign, which implies that radios are beneficial to the incumbent party. Notice that this variable may be capturing corruption at the broadcasting houses that favor the incumbent party. For Africa, information on corruption matters only when the incumbent party changes its candidate while for South and Central Americas, it depends also on whether or not the election is declared free or fair.

Conclusion

The study set out to answer three questions (1) whether or not voters in developing countries punish incumbent parties for corruption, (2) whether information broadcast on radios enhances the re-election chances of incumbent parties and (3) whether or not information about has an effect on re-election chances of incumbent parties. The study employs a probit model to analyze the three questions with re-election (taking the value of 1 the incumbent party is reelected and 0 if not) as the dependent variable. A key premise of this study is that corruption, defined by the International Transparency as the abuse of public resources for private gain, negatively affects the economic well-being of the citizens. A brief review of studies have found that corruption affects economic growth through its negative effect on investment. The current study finds that (1) corruption has no effect on re-election chances of incumbent parties, (2) information aired on radios enhances re-election chances of incumbent parties, (3) even when

corruption is interacted with the number of radios per 1000 of a population, information broadcast on radios enhances re-election chances of incumbent parties and (4) press freedom has a negative and significant marginal effect on re-election chances of incumbent parties.

One of the challenges encountered in the study is the dearth of data in developing countries. For most developing countries, data for the key variable, corruption, are only available from 2000 even though the Transparency International started compiling the corruption index in 1995. Since the sample period for this study is 2000-2010, an improvement to this study will be to extend the sample period to include elections that have taken place after 2010.

Another challenge is the inappropriateness of measure of fraud used in the current study. Because of the lack of an objective measure of fraud this study utilized an indicator from the World Bank political institutions database, which categories elections as free and fair or not free. Interestingly, despite the claims of electoral fraud by the losers and sometimes independent observers, electoral fraud does not have an effect on elections' outcomes. This is another area that will require further investigation. One possibility is to check at constituency level for voter turnout that is close to or over 100 percent.

Future areas this study could be extended to include studying the effect of corruption on re-election chances of members of parliament in developing countries. The challenge at the moment is lack of information on members of parliament who are convicted of corruption in developing countries. This may be due to the ineffectiveness of the legal system or it may be because those that engage in corruption are from the party in power and are, therefore, being protected by the system.

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