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The Impact of Socio-Political Integration and Press Freedom on Corruption in Developing Countries

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Abstract

Do domestic institutions filter the effects of international openness on levels of government corruption? The analyses in this study demonstrate a more nuanced understanding of a previously understood phenomenon — that while openness has a negative relationship with corruption, sometimes this relationship is substantially influenced by the domestic context, a relationship that has been underdeveloped by previous empirical studies. However, as opposed to mainly economic factors of openness such as levels of trade or capital freedom, I highlight another salient type of globalization — social and political integration. Focusing exclusively on a sample of over 90 developing countries, I find that on the effect of openness on corruption is conditioned by domestic institutions. Namely, I examine the level of press freedoms in a country as an intervening variable. The empirical evidence suggests that while freedom of the press is less important for political openness to have a significant impact in combating corruption, a free press is essential for social openness to effect negatively government corruption.

Keywords: *Corruption, Good Governance, Development, Openness, Globalization, Free Press*

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Introduction

"My message is: it is through openness and good governance at all levels of society, right down to the grass roots, that people will be empowered; change takes root and development sustained."-Gordon Brown, 2006

"A popular government, without popular information, or the means of acquiring it, is but a prologue to a farce or a tragedy; or, perhaps both"
James Madison, 1832

In recent years, numerous academic empirical studies have been devoted to understanding the determinants of corruption. On the policy side, international organisations (IO's) such as the World Bank, WTO and the IMF have made significant strides in attempting to curb world-wide corruption, particularly in developing countries[1]. A consensus is emerging in the academic and policy worlds on improving our understanding of corruption by using cross-national variations. While institutional and cultural factors have received a considerable amount of attention as key explanatory variables, a subset in the corruption literature has focused on the effects of international openness on government corruption (Krueger 1974; Ades and Di Tella 1997 and 1999; Wei 1999; Wei and Sheifler 2000; Bonaglia et al. 2001; Lambsdorff, 2004; Gatti 2004; Torrez 2002; Sandholtz and Gray 2000 and 2003). Among the analyses in the openness-corruption nexus, the empirical findings have mainly been supportive of the positive relationship between openness and good governance. Thus among many economists and political scientists there is a general agreement in the empirical literature, in economic and political science, that openness has a negative relationship with corruption.

However, as some scholars aptly point out, beginning with the work of Rose-Ackerman (1978) and subsequently Sanholtz and Gray (2003), the effect of "openness"

on corruption can also come from normative effects. It is argued that growing interdependence among states politically, through international organisations (IGO's, NGO's, etc.) and socially, through the diffusion of technology, media and migration, may have a significant impact on spreading anti-corruption norms. Along with a substantial increase in economic interdependence over the past few decades, states have experienced a substantial rise in political and social interdependence as well. However, the impact of the socio-political side of openness on corruption remains largely unexplored empirically. While this analysis also takes into account variations in economic openness, I contribute to the openness-corruption nexus by mainly focusing upon the effect of openness by non-economic factors. Such factors include membership, cross-boarder communications and UN mission participation.

A second important contribution that this study adds to the literature is the attention on the interplay between openness, an international variable, and domestic institutions of transparency. Specifically, I seek to understand how the level of press freedom in a country might inhibit or encourage the spread of anti-corruption norms as social and political interactions increase. Often, previous empirical studies on openness have ignored or divided the potentially significant effects into domestic institutions. Thus, this study seeks to provide information about the following empirical question: does the impact of international openness in influencing levels of corruption depend on the level of the press freedom present in that country? Further, does social and political openness have different effects depending on the domestic context of the press in developing countries?

Finally, this study contributes to the literature by focusing exclusively on developing states. I test these questions empirically on over 90 developing countries using two widely used measures of corruption. I estimate the results with both cross-sectional and panel time series regressions to assure a level of robustness in the results. The evidence I report corroborates previous empirical studies in that there is a significant and negative relationship between openness and corruption. However, this relationship is nuanced. While social factors have a strong, negative impact on corruption scores in the sample of developing states, such factors have either no significant effect, or are found to exacerbate corruption when press freedoms are low. Conversely, political openness is a negligible determinant in the full sample, yet its impact is strongest in fighting corruption in the countries that maintain the most restrictive with domestic press freedoms.

This analysis is developed as follows. First, I review the empirical literature which has focused on the determinants of corruption, focusing primarily on the relationship between openness and corruption and elucidate my testable hypotheses. Second, I discuss and display recent trends in both socio-political openness and press freedoms over the past 10 to 15 years. Third, I discuss data and specifications of the models. Fourth, I present the empirical findings. I end this study with some concluding remarks and interpretations of the results.

Determinants of corruption

Whether focusing on domestic political institutions (Meyerson 1993; La Porta et al 1998; Persson et al 1997 and 2004; Persson and Tabellini 2003; Treisman 2000; Dreyer 2004; Andrews and Montinola 2004; Norris 2004; Charron 2007), press freedoms

(Brunetti and Weder 2003; Lindstedt and Naurin 2005) or factors of international openness (Kreuger 1974, Di Tella 1997 and 1999, Leamer 1988, Torrez 2002, Treisman 2000, Wei 1999; Sanholtz and Koetzle 2000, Gatti 2004, Sandholtz and Gray 2003) there is a strong and consistent empirical consensus that expanding powers away from the executive, and increased accountability and openness have a negative relationship with corruption. Scholars have generally found that countries with strong executive branches, limited opposition parties, low degrees of democratic accountability, low economic development and are relatively closed to international competition and ideas are more corrupt, *ceteris paribus.*

Specifically regarding openness, though different measures of corruption indicators are often employed in various empirical studies, the statistical relationship appears generalizable – countries that are more 'open' often exhibit less corruption. A common argument asserts that in closed states, political elites can more easily manipulate information and deal in bribes and patron-client-type exchanges that are less visible relative to more open societies. In explaining this trend in the data, scholars have mainly posited two somewhat compatible hypotheses. First of which are rationalist, economic reasons as to why openness reduces corruption. Bonaglia et al. (2001) argue economic openness reduces corruption through three distinct mechanisms: first, when trade restrictions become less restrictive (Krueger, 1974 and Gatti, 1999). Second, openness increases the level of foreign competition (Ades and Di Tella, 1999); and third, this in turn draws in more international investors (Wei, 2000; Wei and Sheifler 2000). Ades and Di Tella argue that "competition from foreign firms reduces the rents enjoyed by domestic firms, and this reduces the reward of corruption". They posit that as foreign

competition increases in a country, demands for more efficient business practices increase, which in turn compels corruption to decrease. Rent-seeking and kickbacks, which can lead to sub-optimal economic outcomes, are discouraged due to transparency, in what Gatti (2004) labels the 'foreign competition effect'[2].

The socio-political ('anticorruption norm') hypothesis focuses mainly on non-economic factors such the spread of anti-corruption norms and rule-following behaviors, for example through increased international interactions and membership in IO's and NGO's (Rose-Ackerman 1978; Abbot and Snidal 2001; Bukovansky 1999; Sanholtz and Gray 2003). However, this side of the coin is much less empirically developed than that of the trade openness- corruption nexus. Largely based on developments from the constructivist perspective in international politics, transnational actors project new norms and behaviour into the system and as states become more open to international influences, they become more open to adopting such behaviour. According to this ideational-type hypothesis, it is through the norms proliferated by the entrepreneurs in IO's (Finnemore 1993; Finnemore and Sikkitk 1998; Sanholtz and Gray 2003), or other forms of information proliferation (i.e., contact with foreign governments, U.N. participation, increase in Internet and foreign communication sources, etc.) that pressure will be placed upon governments to reduce corruption due to the diffusion of condemnation against corruptive practices. Whether from international sources (I.O.'s, etc.) or from citizens (spread of technological media sources) the number of international interactions increase, which serve as mechanisms of change in the communication of practices and values in politics and business transactions. Though it argues through the lens of cultural and normative reasoning rather than focusing primarily on economic

incentives, the 'anticorruption norm' hypothesis is certainly compatible and possibly serves as a compliment rather than a rival to the rationalist hypothesis of openness and corruption.

Previous research has demonstrated that the diffusion of norms in the international system has an effect on states regarding a number of issues, such as women and minority rights, land mines, weapon proliferation and decolonization (Finnemore and Sikkink 1998; Dubois 1994, Price 1998). Pertinent to this analysis, such scholars also speak to how domestic institutions and politics, mainly democratic, 'filter' the effect of such international norms in such ways. Finnemore and Sikkink (1998) write, "International norms must always work their influence through the filter of domestic structures and domestic norms, which can produce important variations in compliance and interpretation of these norms" and that "there is a two-level norm game occurring in which the domestic and the international norm tables are increasingly linked" (Finnemore and Sikkink 1998: 893; also see Putnam 1998). Under this logic it is clear that certain domestic structures must be taken into account when assessing the possibility of 'norm acceptance' of a trend such as anti-corruption.

Though both the economic and normative hypotheses are plausible and have received some degree of development in the literature, previous analyses are overlooking a salient factor that might allow or inhibit such proliferation of anti-corruption behavior – domestic institutions of transparency. I maintain that there is a degree of over simplicity in the theoretical design of a number of such analyses that argue international transparency (structural, interstate variables) determine change in government behavior (agent-centered, domestic variables) without accounting for potentially salient domestic

institutions which might possibly assist or inhibit the proliferation of anti-corruption norms, irrespective of increases in international openness. What this analysis argues is that without certain domestic conditions of transparency, such as a free press to serve as a conduit through which the new norms of anti-corruption are spread, little political pressure is applied to domestic leaders to actually reduce corruption. If the citizens of a country where corruption is rampant amongst state leaders are not properly informed of the economic and political behaviors of their leaders, or do not know that anti-corruption work is a priority in many countries, then leaders can continue to mask corruptive actions from their citizens. They thus have little incentive to alter economic and political behaviors for which they have benefited over time.

The norm hypothesis postulated by Sandholz and Gray (2003) asserts that countries with higher levels of transnational interactions, such as participation in international organizations, are expected to be on average less corrupt. This hypothesis obviously implies that international factors have a significant influence on a domestic dependent variable. Yet this type of openness is not directly related to economic market forces and is socio-political in nature, thus its impact will be through the spread of information. It is therefore the purpose of this analysis to test the impact of international social openness on levels of domestic corruption, taking into account the level of a state's press freedom. This study therefore argues that while the normative hypothesis of anti-corruption norm proliferation is entirely plausible, there are certain domestic variables such as a free press that need to be present in order for the structural variables to have a significant influence in altering the behavior of domestic leaders. Without the proper channels in place to allow for the spread of such information, elites have no pressure on them to decrease

corruption. Consequently, this analysis argues that there are mitigating domestic forces which may or may not allow for the proliferation of such norms within countries. Specifically, without unbiased domestic institutions that can help foster the spread of such international norms as anti-corruption, the effect of openness is expected to be negligible. Such unbiased institutions of information are found in a free press, without which, openness plays a small role, if any, in reducing corruption.

I thus test the following hypotheses empirically on a number of developing states:

H1: As social openness increases, the level of corruption in a country is expected to decrease, given that press freedoms are present, ceteris paribus.

H1a: Given that press freedoms are absent in a country, social openness is not expected to have an effect on the level of a country's corruption

H2: As political openness increases, the level of corruption in a country is expected to decrease, given that press freedoms are present, ceteris paribus.

H2a: Given that press freedoms are absent in a country, political openness is not expected to have an effect on the level of a country's corruption

Trends in Openness, Press Freedom and Corruption

In the post-war and in particular in the post Cold War era, states have become more open by most measures of international openness. The *KOF Index of Globalisation* (Drehler 2006), which distinguishes among three components of openness — economic, social and political — demonstrates that every region in the world has experienced increases in their respective aggregate openness scores over the last two decades. For example, between the years of 1984 and 2004, the aggregate score of the African social openness index rose from 21 to about 36, or a 71.5% increase, and similarly political

openness increased by 62.5%, from 32 to 52. Similar increases can be observed in every other developing area for both types of openness, which are shown in aggregate form in figure 1. Though OECD states have mainly recorded relatively high openness scores in all areas since the beginning of the OF data, it is developing areas that have seen stark transformations in the recent years regarding openness. According to the openness-corruption hypothesis, whether economic or normative, this increase should significantly reduce corruption in developing areas. While the rationalist and economic hypothesis have been explored by a number of previous studies, the impact of cultural and political openness remains largely unexplored, in particular when taking into account certain domestic institutions that can either enhance or hinder the proliferation of anti-corruption ideas. Thus, I employ the two measures of openness — social and political — to serve as proxies for exposure to international norms and ideas. The full list of indicators in each index, along with respective weights, is located in table 1 in the ensuing section. The aggregate trends in social and political openness from 1990-2004 are displayed in figure 1 below:

****Figure 1 Here****

Table 1displays a brief preliminary analysis which is intended to demonstrate the trends over the last decade in social and political openness in both sub-sets of developing countries concerning press freedoms — free, partially free and not free. The number of observations coded for each of the two groups is listed on the right-hand side of the table[3]. While countries with more press freedoms recorded significantly higher social

openness scores throughout the time period, aggregate scores in both groups experienced substantial increases in openness over time. Concerning political openness, the same can be said of the general pattern of increase. However, there is no statistical difference in aggregate political openness scores between states with press freedoms and those that lack a free press throughout the sample of developing states. These figures are simply meant to demonstrate that there are no increases in either type of openness that have been skewed toward one of the two sub-sets of states — both states with and without press freedoms in the aggregate experienced increased exposure to social and political internationalisation. Furthermore, while states with greater press freedoms had higher social scores, the difference between the two groups in their I.O. participation, embassy count and U.N. Security Mission participation was negligible. Since differences at levels of openness negligible between the two groups, then the press-freedom variable may play a significant mitigating role at levels of corruption within developing states according to the empirical hypotheses.

****Table 1 Here****

In figures 2 and 3, I separate press freedom and corruption scores into the aggregate total by region[4]. In figure 2, clearly outside the West (West Europe, North America, Australia, New Zealand and Japan) significant variation is observed. Data in figure 2 for press freedoms has been inverted so that higher scores indicate more freedom. Clearly, Latin America (including the Caribbean), the Pacific Islands and post Soviet states and Eastern Europe rank among the higher of the developing areas in press freedom according to the Freedom House data from 1994-2004. Conversely, Middle Eastern

(includes North Africa), South East Asian and African countries rank among the lowest in freedom of the press, all with average aggregate scores below 50.

****Figures 2 and 3 here****

Moving to the dependent variable, a regional breakdown of PRS Group corruption scores is provided in figure 3. Again, states from the West display scores significantly higher than those from developing regions where variation is again significant among such areas. Corruption scores over the decade between 1994 and 2003 show that developing areas range between 0.42 and 0.61 on a scale of '0' to '1.' African states lag significantly behind, recording the lowest average of any of the regions. Post Soviet and East European and South Asian states demonstrate the highest averages of all developing areas with approximately 0.61.

Specification and Methodology

The primary focus of this analysis is to test whether social openness and political openness have a negative impact on corruption and if there is an intervening effect on this relationship depending on the level of a country's press freedom. To present a parsimonious model while simultaneously reducing the likelihood of potential omitted variable bias I include the following indicators in the full regression.

Given that data on the dependent variable can be somewhat unreliable, I employ two common measures to check for robustness in the results. The first measure of corruption

is taken from the *International Country Risk Guide*, the PRS Group of financial risk indicators. The PRS Group, a think tank specialised in economic and political risk assessment internationally, has published monthly data for business and investors on over 140 countries since 1980. The PRS measure is primarily concerned with accounting for "excessive patronage, nepotism, job reservations, 'favor-for-favors', secret party funding, and suspiciously close ties between politics and business."[5] The period ranges from 1984-2003 and has up to 139 countries. The data in the analysis has a finite range from '0' — '1', with higher scores indicating lower levels of perceived corruption. There are several advantages to this measure. One, it is available for 20 years, which allows for any institutional reform of a country's vertical or horizontal power sharing structure or structural shifts in the domestic fractionalisation. Second, it includes some wide scope of developed and developing countries so that the results of this analysis are highly generalizable. It has been used by other recent empirical studies (Ades and Di Tella 1999; Gatti 2004; Persson, Tabellini and Trebbi 2003).

The second measure of corruption is taken from the World Bank (Kaufmann et al. 2006). The data seeks to capture the perception of a government's "control of corruption", conventionally described as seeking private gain from public resources. The data range from-2.5 to 2.5, with higher scores indicating lower levels of corruption. Due to incomplete data, I employ an unbalanced, pooled data set, which allows for greater observations through more cases and thus increases reliability of the estimates (Globerman and Shapiro 2003).

The key domestic institution in the study is the level of a country's press freedom. Freedom House International has annually coded the level of press freedom from 1994-

2006 on a scale of 0-100, with lower scores indicating more freedom of the press. Freedom House has also trichotomised the data into 'not free' (61-100), 'partially free' (31-60) and 'free' (0-30). The organisation as recorded press freedom scores for more than 190 countries. All three variables were taken from the Quality of Government Institute database (Teorell, Holmberg and Rothstein 2007). A more detailed description of the summary statistics is located in the appendix.

The primary international variable in the model tries to capture the proliferation of the anti corruption norm. I attempt to proxy this process in two ways. Using the *KOF Index of Globalisation* Data (Dreher 2006), I use two measures of openness, social and political. First of which, social openness, is an index of three broad measures which account for the level of "personal contacts, information flows and cultural proximity (to other countries)." This measure is intended to capture whether the spread of ideas through personal and media contacts influence the corruption level of a country. The second is political openness, which tries to capture the diffusion of government policies through the amount of interaction each state has with each other and with international organisations. Included in the political openness index are the numbers of international organisations to which each country belongs, the number of embassies and high commissions in each country and the number of U.N. Peacekeeping missions in which a country participates. A full description of each component of the social and political openness indices is shown in the appendix.

Regarding the control variables in the model to account for rival hypotheses, studies have shown that there is a strong and robust relationship between the strength of democratic institutions and levels of corruption (Ades and Tella 1997; Fisman and Gatti

2002; Gatti 2004, Sandholz and Gray 2003, La Porta et al 1999). I therefore include a country's democracy level in the analysis that incorporates two widely used measures of democratic strength, *Polity* and *Freedom House* (see Teorell, Holmberg and Rothstein 2007). Second, I account for the economic development of a country, as measured by the log of GDP per capita taken from the *United Nations* 'National Accounts' data set. Most empirical studies demonstrate that higher degrees of wealth are associated with lower degrees of corruption, thus I anticipate this relationship to be robust in this analysis as well. Studies have also shown that highly divided states are more prone to corruption compared to more homogenous one (Mauro 1995; Alesina et al. 2003; Charron 2007), so I include a measure to account for the level of a state's ethnic fractionalisation, as coded by Alesina et al (2003). I also include a number of dummy control variables in the model, the first of which indicates whether a country is involved in a conflict — either domestic or external. I anticipate that if a country is involved in some type of military conflict, then corruption is likely to increase. Some scholars have asserted that internal and external conflicts have a positive relationship with human rights violations. As for cases of conflicts, corruptive practices and human rights violations might be the only way in which a government thinks it can sustain order (see Apodaca 2001; Blanton 1999; Poe and Tate 1994). This factor is thus controlled for. I also include a number of regional dummy controls to account for geopolitical factors. Certain regions such as Africa, have higher aggregate levels of corruption scores than the mean scores in the universe sample. Such differences need to be accounted for in the model. Finally to check for the alternate hypothesis, economic openness, I include an indicator that captures a country's level of

trade openness, measured as imports plus exports/ GDP, taken from the *KOF Index of Globalisation*. A full list of the descriptive statistics is located in the appendix (Table B).

When estimating the determinants of a variable such as corruption, careful analysis is clearly needed. Thus I run multiple models in this analysis to test the robustness of the results. The empirical field of scholarship mainly has reservations about running time series, panel analyses with corruption indicators as the dependent variable though multiple years exist for each indicator. Therefore, I report the estimated results of cross-sectional averages in the first section of the results. However, due to the diachronic variance in openness measures, along with PRS and World Bank corruption scores, I report the results of time series, panel data regressions as well to increase the number of observations. The unit of analysis is thus the state-year in the panel, time series data and I use a generalised *least squares* (GLS) regression analysis for the time series data and account for potential problems of first series autocorrelation within panels and cross-sectional correlation and heteroskedasticity across panels. The estimated model with controls is thus:

Corruption = bo + b1(social or political openness) + b2(trade openness) + b3(democracy) + b4 (economic development) + b5 (fractionalisation) + b6 (conflicts) +b7(Africa) + b8 (Middle east) + b9(S.E. Asia) + ei

Results

Tables 2 and 3 display both cross-sectional and time series analyses for the entire sample of developing states[6], then a stratified sample of states for which press freedoms were coded as 'not free'. As stated, two measures of corruption are employed to check

for consistency in the findings. As a reminder, both corruption indices are coded such that positive coefficients indicate better governance, or a reduction in corruption. As mentioned, there are a number of empirical analyses that utilise cross-sectional data exclusively when studying corruption as the dependent variable. Yet, due to both sources of data containing diachronic variance as well, both cross sectional and panel time series regressions are listed to use the most variance possible. Table 2 reports the results using the PRS Group data on corruption. Models 1 and 4 report the general bivariate baseline relationship between social openness and corruption levels in developing states, while models 2 and 5 report the estimates along with a series of control variables to account for rival hypotheses, including the effect of trade openness. According to these models, the expectation that the higher the level of the social openness index, the lower the corruption level, finds strong empirical support both in country averages and over time. The relationship is stronger in the time series models as the number of observations increases relative to the panel analysis. Interestingly, in models 2 and 5, which control for a number of alternative determinants, the impact of social openness on corruption is 4 and 2 times greater respectively than that of trade openness. However, increased levels of democracy and GDP per capita, are clearly the two leading deterrents of corruption in the models. Other significant determinants of corruption include the strength of democratic institutions, economic growth, trade openness and ethnic fractionalisation. However, as anticipated, when estimating the effects of social openness on states without press freedoms, a substantially different result is found. In model 3, with cross-sectional averages of the variables, the coefficient estimate drops from 95% significance from model 2 to statistically indistinguishable from '0'. Moreover, in model 6, using the time

series data, the relationship between social openness and corruption becomes negative and the coefficient is significant at the 99% level of confidence, demonstrating that as social indicators of openness increase, levels of corruption are actually likely to *rise* as a function of social openness at a rate .014 for each standard deviation increase, even when including the control variables.

****Table 2 About Here****

Models 7-12 analyse the effect of political openness on corruption using the PRS Group data. Interestingly the models analysing this type of openness report starkly different results from those reported in the social openness models as the two types of interdependence clearly have distinguishable effects from one another on the dependent variable. While each of the baseline models finds a positive bivariate relationship between political openness and a reduction of corruption (yet only in model 10 is this relationship significant), neither estimate reaches a statistical significance in models 8 and 11 when all the control variables are included into the analysis. Surprisingly, trade openness, while in the expected direction, is not a significant determinant of corruption when accounting for political openness in models 8 and 11. However, it appears that political openness is a significant factor in reducing corruption in states with low press freedoms. In both models 9 and 12 the estimates are significant at the 90% and 95% levels of confidence respectively and indicate that a one unit increase in the political openness index reduces PRS corruption scores (or improve government impartiality) ranging from '0' to '1' by .001. It is also noteworthy that while trade openness is a positive and significant determinant for reducing corruption levels in models 8 and 11,

which employ a full sample of developing states, such openness drops from significance in samples where the press is not free (models 9 and 12). In all models where control variables are included, such determinants as democracy level and economic development demonstrate robust findings throughout.

****Table 3 about Here****

Table 3 reports results using corruption data from the World Bank in order to check for consistency in the estimates from the PRS data. In general, similar estimates are observed between the models regardless of using the different data sources of corruption, yet significance levels are slightly weaker, throughout which could be due to more missing data and less overall observations compared with the PRS Group corruption measure. Again, a strong bivariate relationship exists between social openness and lower corruption and this relationship is positive and significant at the 95% level of confidence in the time series model. Moving to models 2 and 5 in Table 3, results are slightly weaker than in table 3, yet the social openness coefficient is positive and strongly significant in the panel, time series model. Again, the coefficient for social openness demonstrates a much greater impact on corruption than that of trade openness. For example, this relationship is over 10 times stronger in model 5. However, the impact of social openness indicators on corruption is significant and negative in both the cross sectional and the panel, time series estimates when countries do not have a free press. On explanation for this may be that the spreads of such international influences are countered by strong state-run propaganda which reinforces the corruptive behaviour of the state.

Moving to political openness with the World Bank data, which mainly captures a country's involvement with IO's and UN missions abroad, again a marginally positive and insignificant relationship is present in models 8 and 11 when controlling for economic development, trade openness, democracy level, conflicts, fractionalisation and region for the entire sample of developing countries. On the other hand, the two regressions in models 9 and 12 that include only states with severely limited press freedoms (and state-years in the time series model) find a strongly positive and significant relationship with political openness and curbing corruption even when accounting for rival factors. Thus, it appears that while domestic elite in countries without a free press can successfully filter information in their favour when it comes to social openness, more pressure is placed on them when confronted with international elite as they become more *politically* open. These results support some of the findings in Sandholtz and Gray (2003) yet go farther in considering the domestic context of press rights. Table 4 lists a complete summary of the findings and the empirical support for the hypotheses according to the results in tables 2 and 3.

****Table 4 Here****

Conclusion and Discussion

This analysis has examined the relationship between two non-trade forms of international openness and corruption while taking into account the level of press freedoms for a large sample of developing states. The results found in this analysis

demonstrate clearly the complex relationship between openness and corruption that has remained largely unexplored in previous analyses. This study has contributed to the literature in a number of interesting ways. One though many studies have committed substantial empirical study to the economic side of the openness-corruption nexus (trade, trade barriers, capital freedom, etc.) this analysis gives further insight into other important components of globalisation — namely the spread of socio-political forces. Second, due to the data availability on social and political openness, I have been able to parse out their individual effects on the dependent variable in question. Third, this analysis pays specific attention to how international variables (socio-political openness) are impacted by domestic institutions (the level of press freedom) in their impact on government corruption. Previous studies have treated openness whether economic or socio-political, as independent of domestic institutions which may or may not filter their effects on such dependent variables as corruption and other domestic behaviour. Finally, this study restricts the sample to developing states exclusively. It is widely known among scholars and policy makers that the OECD 24 exhibit better scores on fighting corruption no matter which source of data are employed. Studies on combating corruption also infer heavily that their purpose is to aid developing and transitioning countries battle this dilemma. Thus this analysis has sought to parse out the differences in the sample of states and focus on only those outside the OECD 24 to offer specific utility for transitioning states.

Social and political openness increase information to a number of new actors in politics. Yet according to the empirical findings their impact on corruption is not monolithic. As countries become more involved in formal international networks (IO's,

UN missions, embassy exchange) the impact of *political* openness on domestic corruption requires less domestic freedom of information because of the pressure to govern better come directly from international actors such as IO members and foreign diplomats. Such direct interaction from abroad compels corrupt elites in developing states to conform to the 'rules of the game', and in turn make efforts to curb corruption to avoid a backlash from their international counterparts. This type of integration should continue to be encouraged by the international community as it appears to have a significant impact on corruption, especially in cases where the freedom of the press is heavily censured by governments.

On the other hand, as *social* openness increases, information about anti corruption norms is also proliferated. However, while direct contact with international elites is made with increases in political openness, social openness relies on everyday citizens becoming more and more informed through new channels of information taking shape such as new technology coming from international sources. Through the increased use of the Internet, telephones, foreign newspapers, tourism, and contact with foreigners, people obtain more information and in turn are more likely to pressure their government to become less corrupt. However, the relationship between these two variables is not directly related as evidenced by the lack of any significant relationship between social openness and corruption in cases of low press freedoms. For social openness to be an effective tool in fighting corruption, a certain level of domestic press freedoms must first be in place, otherwise information is censured and people do not become informed. Thus, policy-wise, this type of integration should be highly encouraging as an effective means of fighting corruption in transitioning countries when the press has a substantial

degree of freedom from the government. If not, advocating the flow of international information channels into states with limited press freedoms is shown to be highly ineffective. According to the evidence, such openness can even make matters worse for government quality

Tables and Figures

Table 1 - Trends and Annual Means Comparison of Openness Between Free/ Partially
Free Press vs. Not Free Press : 1994-2004 - 95 Non-OECD States Only

	Level of Social Openness			**Level of Political Openness**			**Observations**	
Year	*Free*	*Not Free*	*T significance*	*Free*	*Not Free*	*T significance*	*Free*	*Not Free*
1994	36.5	27.7	2.49	46.1	43.5	0.43	73	22
1995	39.6	31.7	2.04	43.5	50.5	-1.34	67	27
1996	42.2	31.6	2.71	43.0	50.9	-1.54	69	26
1997	43.0	33.9	2.37	44.3	47.8	-0.65	67	28
1998	44.4	34.5	2.62	43.7	50.3	-1.31	67	28
1999	44.5	36.8	2.01	46.7	50.1	-0.64	65	30
2000	45.8	36.0	2.60	47.3	48.5	-0.14	65	30
2001	50.1	38.8	3.01	52.9	45.5	1.42	68	27
2002	50.1	38.9	3.01	51.9	46.7	1.02	68	27
2003	49.9	42.4	2.05	52.5	51.7	0.15	63	32
2004	49.7	42.4	2.03	55.4	53.0	0.49	61	34

Note: data on press freedoms taken from Freedom House while Openness was data taken from the KOF Index

Table 2 - The Effect of Social and Political Interdependence and Openness on Corruption at Various Levels of Press Freedom: PRS Group

	Social Openness						Political Openness					
	Cross-Section			Time series, Panel Data			Cross-Section			Time series, Panel Data		
	Baseline	*Full Model*	*Low Press*	*Baseline*	*Full Model*	*Low Press*	*Baseline*	*Full Model*	*Low Press*	*Baseline*	*Full Model*	*Low Press*
Variable	1	2	3	4	5	6	7	8	9	10	11	12
Social Openness	.006***	.004**	.001	.004***	.002***	-.003***						
	(9.41)	(2.48)	(0.36)	(19.55)	(5.43)	(-3.60)						
Political Openness							.002	.001	.001*	.001***	.0003	.001**
							(1.61)	(1.01)	(1.81)	(3.72)	(1.63)	(2.70)
Trade Openness		.001*	.001		.001**	.000		.002**	.002		.001***	.0004
		(1.93)	(0.49)		(2.07)	(0.68)		(2.65)	(0.85)		(4.61)	(0.71)
Democracy Level		.012*	.019**		.007***	.001		.006*	0.14*		.004**	.003
		(1.83)	(2.09)		(3.56)	(1.12)		(1.81)	(1.91)		(2.65)	(0.75)
Log GDP per cap.		.029*	.087**		.058***	.132***		.072***	.101***		.070***	.074***
		(1.91)	(2.00)		(10.11)	(9.06)		(5.87)	(3.95)		(16.87)	(9.80)
Ethnic Frac.		-.003	-.037		-.074***	-.034		-.037	-.005		-.065**	.075
		-(0.17)	(-0.51)		(-3.60)	(-1.09)		(-0.50)	(0.15)		(-2.76)	(1.51)
Conflicts		-.005	-.001		-.006	-.003		-.008	-.010		.003	-.007
		(-0.75)	(0.11)		(-1.44)	(1.41)		(1.02)	(0.51)		(0.77)	(-1.00)
Constant		-.102	-.336	.293***	-.055	-.316***	.419***	-.264**	-.384	.415***	-.097**	.104
		(-0.85)	(-1.20)	(34.24)	(1.50)	(3.85)	(10.41)	(-2.25)	(1.36)	(40.34)	-(2.39)	(-1.41)
Rsq.	.58	.58	.75				.02	.56	.77			
# of Obs.				835	791	226				835	791	226
Num. Of Countries	85	85	23	86	86	40	85	84	23	86	86	40

note: p*<.10, p**<.05, p***<.01. Dependent variables are PRS Group Measure of corruption, measured from '0' to '1', lower scores indicating more corruptio

All standard errors in cross-sectioal models are robust and corrected for heteroskadasticity and autocorrelation in time series, panel regression.

'Basline' represents the bivariate relationship between openness and corruption.

Full Model' represents includes the entire sample with the full set of controls.

Low Press' is a stratified sample that includes only those states (and state-years) in which press freedoms are 'not free'.

All models run with area dummies to control for geography. 'Number of Countries' indicates the number of countries with at least '1' state-year as either coded 'not-free' or 'free'.

t-statistics in parenthases.

Time series data from 1994-2003. Cross sectional averages from 1995-2003.

Table 3 - The Effect of Social and Political Interdependence and Openness on Corruption at Various Leves of Press Freedon: World Bank Data

	Social Openness						Political Openness					
	Cross-Section			Time series, Panel Data			Cross-Section			Time series, Panel Data		
	Basline	*Full Model*	*Low Press*	*Basline*	*Full Model*	*Low Press*	*Basline*	*Full Model*	*Low Press*	*Basline*	*Full Model*	*Low Press*
Variable	1	2	3	4	5	6	7	8	9	10	11	12
Social Openness	.016***	.011	-.074*	.007***	.011**	-.014**						
	(3.38)	(0.94)	(-1.93)	(3.08)	(2.44)	(-2.00)						
Political Openness							.009**	.006	.023**	.002	.002	.007**
							(2.28)	(1.06)	(2.06)	(1.17)	(1.04)	(2.15)
Trade Openness		.001	.030**		.001	.002***		.003	.004		.001	.011**
		(0.23)	(2.15)		(0.64)	(3.19)		(0.48)	(0.33)		(0.09)	(2.42)
Democracy Level		.151***	.158*		.119***	.045		.137**	.075		.118***	.008
		(3.26)	(1.72)		(5.51)	(0.35)		(2.87)	(0.66)		(5.46)	(0.22)
Log GDP per cap.		.114	.765		.158**	.015		.026	.287*		.080	.191**
		(0.65)	(1.65)		(2.26)	(1.37)		(0.30)	(1.87)		(1.57)	(2.31)
Ethnic Frac.		.041	1.688**		.196	.133			1.296**		.317	.145
		(-0.09)	(-2.79)		(0.83)	(-0.37)			(-2.22)		(1.41)	(-1.54)
Conflicts		.028	.233		.102**	.091		.199	.238		.120**	.065
		(-0.41)	(-0.52)		(-2.05)	(-1.67)		(-1.38)	(0.86)		(-2.42)	(1.08)
Constant	.695**	.751	5.044*	.334**	.250n	.213n	3.74***	.722	4.089*	.126	.511	.041
	(-2.93)	(-0.83)	(-1.91)	(-3.03)	(-0.60)	(-0.27)	(-9.74)	(-0.88)	(-1.96)	(-1.33)	(-1.41)	(-0.09)
Rsq.	.11	.21	.45				.04	.13	.41			
# of Obs.	95	85	19	566	382	97	88	80	19	560	382	97
Num. Of Countries	95	85	19	96	80	32	88	80	19	95	80	32

note: p*<.10, p**<.05, p***<.01. Dependent variables are World Bank measurement of corruption, measured from '-2.5' to '2.5', lower scores indicating more

All standard errors in cross-sectioal models are robust and corrected for heteroskadasticity and autocorrelation in time series, panel regression.

'Basline' represents the bivariate relationship between openness and corruption.

Full Model' represents includes the entire sample with the full set of controls.

Low Press' is a stratified sample that includes only those states (and state-years) in which press freedoms are 'not free'.

All models run with area dummies to control for geography. 'Number of Countries' indicates the number of countries with at least '1' state-year as either coded 'not-free' or 'free'.

t-statistics in parenthases.

Time series data from 1994-2003. Cross sectional averages from 1995-2003.

Table 4 - Summary of Results					
Effect of Openness		PRS Group		World Bank	
on Corruption		*Full Sample*	*Low Press*	*Full Sample*	*Low Press*
Social	x-sec.	Positive/ 95%	Not Sig.	Not Sig.	Negative/ 90%
	Time	Positive/ 99%	Negative/ 95%	Positive/ 95%	Negative/ 95%
Political	x-sec.	Not Sig.	Positive/ 90%	Not Sig.	Positive/ 95%
	Time	Not Sig.	Positive/ 95%	Not Sig.	Positive/ 95%
note: 'Positive' implies lower corruption (better governance). Full sample indicates a sample of exclusively non-OECD 24 states.					
All results reported are with the inclusion of control variables. Direction of estimates and level of significance reported					

Figure 1

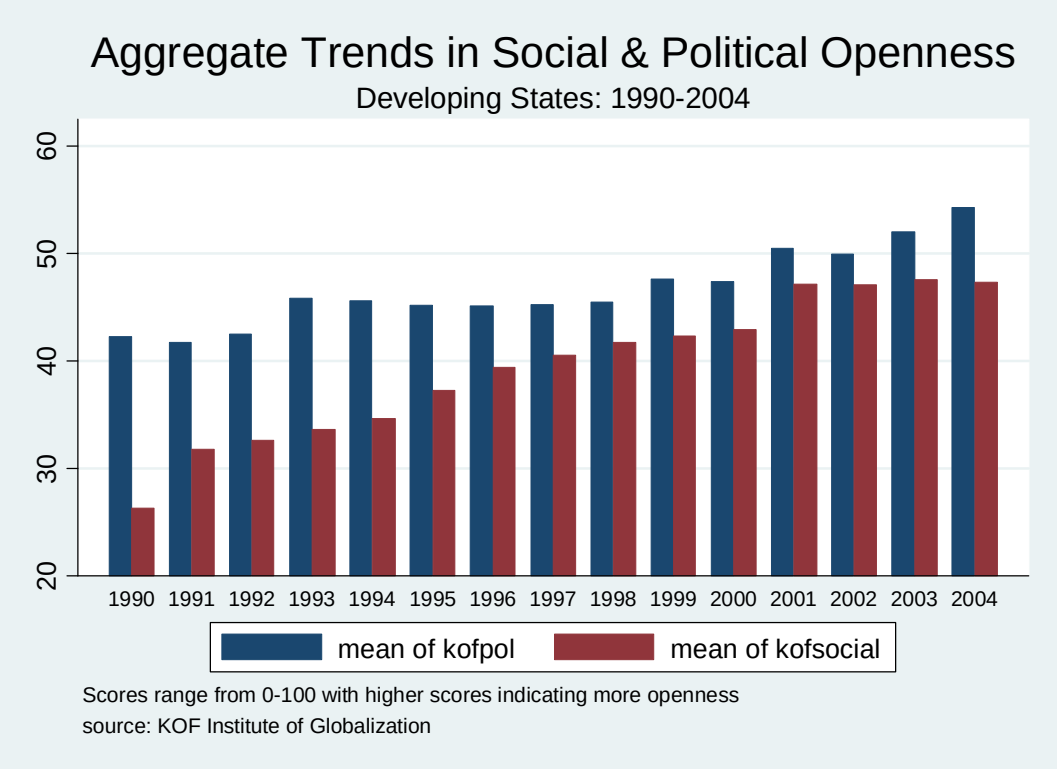


Figure 2

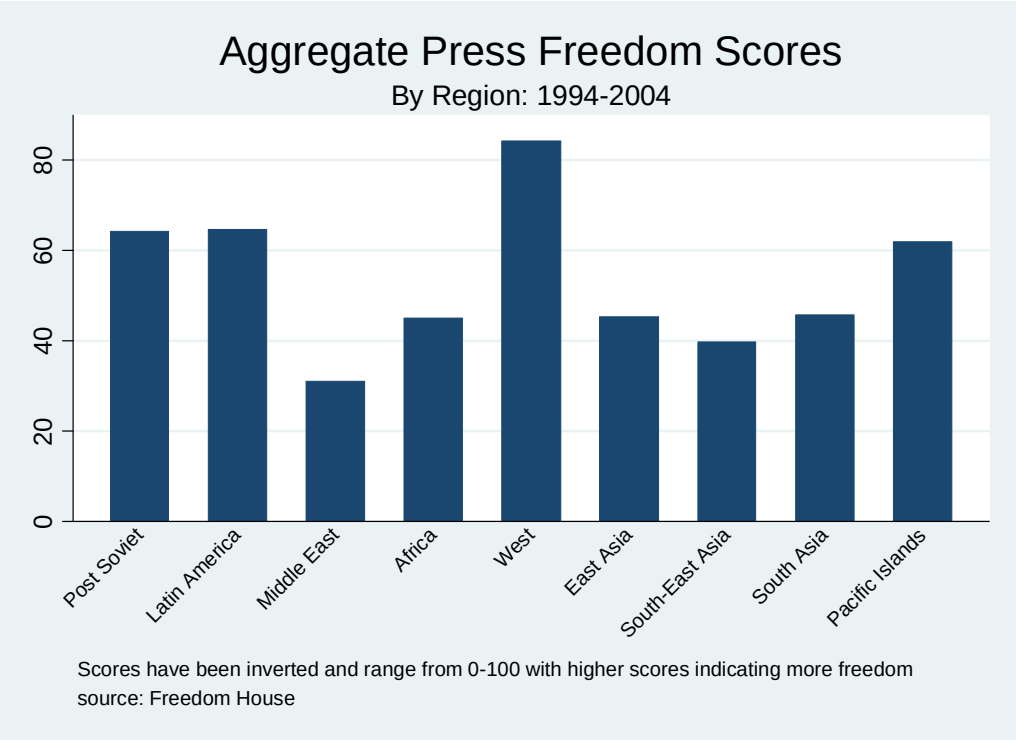
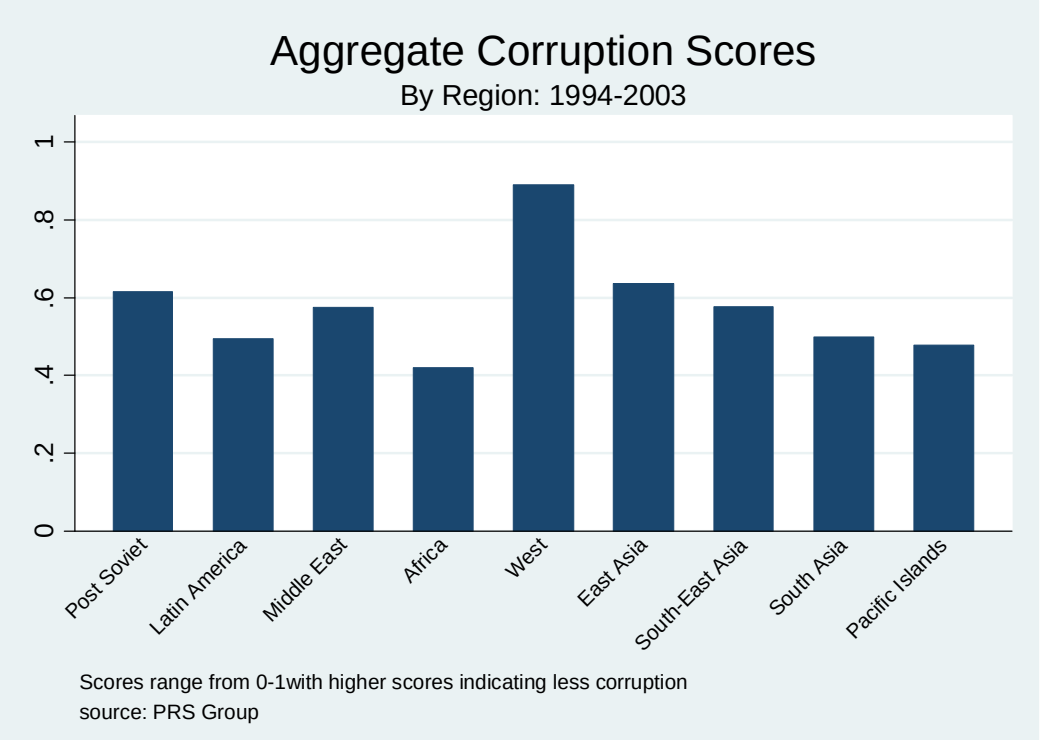


Figure 3



Appendix

A) Social and Political Openness Indicators

KOF Components of Social and Political Openness Indices

Openness	*Indicator*	*% Weighted*
1) Social		
a) Data on Personal Contact		29%
	Outgoing Telephone Traffic	14%
	Transfers	8%
	International Tourism	27%
	Foreign Population	25%
	International letters	27%
b) Data on Information Flows		35%
	Internet Hosts (per 1000 people)	20%
	Internet Users (per 1000 people)	24%
	Cable Television (per 1000 people)	20%
	Trade in Newspapers (percent of GDP)	14%
	Radios (per 1000 people)	23%
c) Data on Cultural Proximity		36%
	Number of McDonald's (per capita)	40%
	Number of Ikea (per capita)	40%
	Trade in books (percent of GDP)	20%
2) Political		
	Embassies in Country	35%
	memberships in I.O.'s	36%
	Participation in U.N. Sec. Council Missions	29%

note: source is the KOF Index of Globalization (Dreher 2006)

B) List of States

Albania**	Gabon	Guyana
Algeria**	Ghana**	Papua New Guinea
Argentina	Haiti**	Paraguay
Bahamas	Honduras	Peru**
Bahrain**	Hungary	Philippines
Bangladesh**	India	Poland
Barbados	Indonesia**	Guinea-Bissau*
Bolivia	Iran**	Romania
Botswana	Israel	Russian Federation**
Brazil	Cote d'Ivoire**	Rwanda**
Belize	Jamaica	Saudi Arabia**
Bulgaria	Jordan**	Senegal
Burma/ Myanmar**	Kenya**	Sierra Leone**
Burundi**	Korea, South	Singapore**
Cameroon**	Kuwait**	Slovakia
Central African Republic**	Latvia	Slovenia
Sri Lanka	Lithuania	South Africa
Chad**	Madagascar	Zimbabwe**
Chile	Malawi	Syria**
China**	Malaysia**	Thailand
Colombia**	Mali	Togo**
Congo**	Malta	Oman**
Congo, Democratic Republic**	Mauritius	Trinidad and Tobago
Costa Rica	Mexico	United Arab Emirates**
Croatia**	Morocco**	Tunisia**
Cyprus	Namibia	Turkey**
Czech Republic	Nepal**	Uganda
Benin	Nicaragua	Ukraine**
Dominican Republic	Niger**	Egypt**
Ecuador	Nigeria**	Tanzania
El Salvador	Pakistan**	Uruguay
Estonia	Panama	Venezuela
Fiji	Guatemala	Zambia**

***Indicates at least 1 year coded as 'Not Free' Press*

C) Summary of Variables

Variable	Obs.	Mean	St. dev.	Min	Max
PRS Corruption	1590	.483	.175	.055	.944
World Bank Corruption	566	-.025	.965	-2.129	2.515
Social Openness	3143	30.58	16.21	1.93	92.75
Political Openness	3143	39.75	21.55	1	96.04
Trade Openness	2689	46.30	20.44	4.25	97.78
Log GDP	3178	6.88	1.26	4.04	10.31
Democracy	2877	4.89	3.16	0	10
Ethnic fractionalization	3358	.494	.241	.001	.931
Conflicts	3136	.337	.818	0	8
Press Freedom	1055	48.32	21.01	7	100
High Press Freedom	1055	.299	.458	0	1
Middle Press Freedom	1055	.405	.491	0	1
Low Press Freedom	1055	.294	.456	0	1
Africa	3358	.302	.459	0	1
Middle East	3358	.135	.342	0	1
S.E. Asia	3358	.065	.242	0	1
Latin America	3358	.261	.439	0	1

Endnotes

[1] See Sandholtz and Gray (2003: 769-773) for a thorough overview of IO commitment to fighting corruption

[2] See Gatti (2004: 853)

[3] There is a small degree of variance in the numbers due to changes in press freedom scores over time as recorded by Freedom House. Thus, some might be recorded as 'not free' one year and then make improvements enough to increase their score, or vice versa.

[4] Regions are based on the data from Hedenius and Teorell (2005)

[5] See http://www.prsgroup.com/ICRG_Methodology.aspx

[6] Developing states are those that were not in the OECD 24. A full list is located in the appendix. Such models are run using GLS estimates which account for first order autocorrelation and heteroskedasticity between panels.

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