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Financial Reforms and Corruption: Which Dimensions

Matter?*

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Abstract

This paper investigates the effects of reforms in different dimensions of the financial

sector on corruption in a panel of 85 countries. It finds that several, but not all, of

the policies targeted towards liberalizing financial sector reduce corruption. Specifi-

cally, entry barriers, credit controls, and reserve requirements along with the securities

market development and the extent of banking supervision are significantly associated

with corruption. The effects of reforms in different dimensions of the financial sector

also depend on the quality of the governance (bad vs. good governance) and whether

the country is an advanced or a non-advanced economy. Finally, a stronger democracy

and better law and order are found to be associated with lower levels of corruption.

JEL classification codes: D73; G28; K42; O16

Keywords: Corruption; Banks; Financial Reforms; Liberalization; Regulation; Law

and Order; Democracy

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1

The empirical literature identifies a wide range of positive effects of financial liberalization on economic outcomes such as investment and economic growth (see Levine (2005) for a review of related literature). Corruption, on the other hand, has opposite effects on the economy and it adversely affects investment and economic growth (Mauro, 1995). Linking these two strands of literature, Ahlin and Pang (2008) show that financial development and the absence of corruption are substitutes for growth. Furthermore, Boerner and Hainz (2009) argue that the lack of economic and financial reforms weakens the political support for anti-corruption measures and, using a probabilistic voting model, show that economic liberalization improves the support for anti-corruption policies. Hence, looking at the relationship between financial reforms and corruption may provide important insights. This paper contributes to these two strands of literature by investigating the link between reforms in different dimensions of the financial sector and corruption. Using an unbalanced panel of 85 underdeveloped, developing, and developed countries for 1984–2005, I find that reforms targeted towards liberalizing several, but not all, dimensions of the financial sector negatively impact corruption.

This paper uses the financial reforms data from Abiad et al. (2010) that cover the following dimensions of the financial system: entry barriers to the financial system, credit controls, interest rate controls, securities market policy, banking sector supervision, financial sector privatization, and international capital flows. Reforms in several of these financial sector dimensions can potentially negatively impact corruption because of at least two important reasons. First, reforms in certain dimensions of the financial system are likely to influence financial sector corruption and hence overall corruption in the country. For instance, uplifting the barriers to entry for domestic and foreign banks will increase competition among the banks forcing them to reduce inefficiencies in a bid to keep costs low. As a result, there will

¹ Note that although it is commonly viewed that financial liberalization increases the likelihood of banking crisis, Angkinand et al. (2010) find that this is true only up to a partial level after which an increase in liberalization reduces the probability of a crisis.

be a lower scope of corruption within banks since corruption increases the cost of providing services. Hence, policy reforms that ease the entry and exit of banks are likely to negatively impact banking sector corruption. Second, mandating banks to provide accurate information mitigates the obstacles faced by firms seeking finance as a consequence of corruption (Beck et al., 2006). Hence, an appropriate degree of banking supervision is likely to lower corruption in the banking sector.² Further, privatization of banks would likely lower banking sector corruption since corruption tends to be more prevalent in the public sector.³

Second, studies, such as McKinnon (1973), have argued that a restricted access to credit markets limits entrepreneurial development which, in turn, creates more space for rent seeking and corrupt activities. Financial sector reforms can enhance entrepreneurial development and market competition in multiple ways, and a greater competition has been found to be negatively associated with corruption (Ades and Di Tella, 1999). Studies, e.g., Tressel and Detragiache (2008), find that financial sector reforms promote financial development, which, in turn, has been shown to promote the entry of new firms and entrepreneurship and enhance competition (Guiso et al., 2004). Next, since a well-developed securities market promotes savings and investment (Henry, 2000), financial sector reforms targeted towards developing the securities market will also enhance market competition resulting in lower corruption. Furthermore, the privatization of banks increases lending (Berkowitz et al., 2014) and, hence, is likely to increase market competition by promoting entrepreneurship. Finally, reforms that relax excessive reserve requirements and provide greater autonomy to banks in credit allocation decision will lead to a grater amount of funds to be available to be lent to

² The importance of banking sector supervision has also been noted in the context of bank performance: Barth et al. (2002) find that banks' non-performing loans tend to be greater in countries where central banks supervise banks. They also find that the existence of multiple supervisors is negatively associated with bank capital ratios while positively associated with the liquidity risk.

³ For instance, in India, public sector bankers often make quid-pro-quo deals with politicians, who appoint banks chiefs and influence promotions. Loans are made to undeserving borrowers and at cheaper rates in exchange for 'gifts' or outright bribes. See http://www.livemint.com/Opinion/VbBYxr8BfVtqFdD6uphD3M/How-to-deal-with-corrupt-PSU-bank-bosses.html (retrieved August 8, 2017).

worthy borrowers resulting in greater entrepreneurial activity and hence a greater market competition. Consistent with the above discussion, this paper finds that reforms in several dimensions of the financial sector and in the financial sector as a whole are negatively related to corruption.

Rest of the paper is organized as follows. The next section describes the data sources and outlines empirical strategy. In section B, results are reported and section C concludes with a discussion of main results and avenues for future research.

A Data and Empirical Specification

To investigate the effect of reforms in different financial sectors on corruption, I estimate the following specification using the fixed effects estimator

$$Corruption_{it} = \alpha_i + \beta \Delta Reforms_{it-1} + \delta_1 \log(Income_{it-1}) + \delta_2 \log(Income_{it-1})^2 + \delta_3 Govt. Size_{it-1} + \delta_4 Openness_{it-1} + \delta_5 t + \varepsilon_{it}$$
 (1)

where i and t denote country and year respectively. Following Agnello et al. (2012), reform variables ($\Delta Reforms_{it}$) are defined as the change in the policy index occurring in country i between time t and time t+1 using data from Abiad et al. (2010). The financial liberalization index takes values in the range of 0 implying a fully repressed financial sector to 21 meaning the financial sector is fully liberalized. An increase in the index over the year thus measures a policy reform during the year. Abiad et al. (2010) database consists of nine different dimensions of financial sector policy and, following Agnello et al. (2012), I also investigate the relationship between reforms in these dimensions and corruption. A greater score in each dimension implies a greater liberalization and hence a greater difference between the indices of any two consecutive years implies a greater degree of reform. δ_5 captures the time trend.

Furthermore, I lag all the control variables by a year to avoid the problem of simultaneity.⁴

The paper utilizes the well-known International Country Risk Guide's (ICRG) corruption index that takes values in the range of 0 to 6, where greater values indicate lower corruption.⁵ The ICRG corruption index takes into account various types of corruption including financial corruption, special payments and bribes associated with import and export licenses, taxes, exchange controls, and the police.⁶ Although the Abiad et al. (2010) data are available for 1973–2005, the earliest year the ICRG corruption data is available for is the year 1984 restricting the analysis in this paper to the 1984–2005 period. Purchasing power parity adjusted Per capita GDP, government size, and the degree of openness, defined as the share of imports in GDP, are taken from the World Development Indicators. Summary statistics are reported in Table 1.

⁴ Lagging the control variables is a standard practice to avoid the problem of simultaneity (see, for example, Buch et al., 2013).

⁵ Refer to https://www.prsgroup.com/wp-content/uploads/2012/11/icrgmethodology.pdf for the ICRG methodology.

⁶ Please note that the other widely-used measures of corruption are available for a much shorter period of time. For instance, the Control of Corruption Index (CCI) published by the World Bank is available beginning the year 1996 and it was published only every other year until 2002. As a result, use of the CCI would restrict the analysis of this paper to only 7 years (1996, 1998, 2000, and 2002-2005) causing the number of observation to drop from over 1700 to below 700. Corruption Perception Index (CPI) published by Transparency International, on the other hand, is available from the year 1995, but until 2012, CPI is not comparable across time and hence inappropriate to be used in a panel analysis (see https://www.transparency.org/files/content/pressrelease/2012_CPIUpdatedMethodology_EMBARGO_EN.pdf for details (footnote 1)). This has also been noted by some of the recent studies (e.g., Jha and Sarangi (2017).

B Results

The main results are presented in Table 2.7 In column 1, consistent with the hypothesis, the coefficient of the financial reforms index is positive and statistically highly significant indicating that financial sector reforms are positively related to the absence of corruption. A positive and statistically significant coefficient on entry barriers in column 1 indicates a positive relationship between the removal of entry barriers (for domestic and foreign banks) and the absence of corruption. The banking sector supervision dimension is also significantly negatively related to corruption (column 10). This is consistent with the discussion in the Introduction that such reforms may result in lower corruption in the financial sector and hence overall corruption in the country. Furthermore, positive and statistically significant coefficients in columns 3 and 6 indicate that both less stringent reserve requirements and a greater autonomy of banks regarding credit supply are negatively associated with corruption. Finally, corruption is also negatively associated with improvements in the securities market development in column 7. These results are consistent with the above discussion that suggests that reforms in different financial sectors are likely to enhance competition in the market resulting in lower corruption. Moreover, the time trend is negative and statistically significant at conventional levels in each column suggesting that, holding other factors fixed, corruption has been increasing over time.

On the other hand, the absence or presence of restrictions on the expansion of bank credit and whether the government or the market determines the interest rates are not sig-

⁷A toal of 85 countries are included in the baseline sample (all columns except column 4 of Table 2): Albania, Algeria, Argentina, Australia, Austria, Azerbaijan, Bangladesh, Belarus, Belgium, Bolivia, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Germany, Ghana, Greece, Guatemala, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea, Republic of, Latvia, Lithuania, Madagascar, Malaysia, Mexico, Morocco, Mozambique, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Pakistan, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Senegal, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Tanzania, Thailand, Tunisia, Turkey, Uganda, Ukraine, United Kingdom, United States, Uruguay, Venezuela, Vietnam.

nificantly associated with corruption. Corruption is also not significantly associated with either the privatization of banks or the restrictions on international capital flows. The findings also suggest that neither government spending nor openness is significantly associated with corruption.

Robustness to Additional Controls

Cultural, legal, political, and democratic factors are among the most significant determinants of corruption (Treisman, 2000; Serra, 2006). Although the fixed effects estimation ensures that the estimates reported in Table 2 are not biased due to the omission of countryspecific cultural factors, which tend to be fixed in the short- to medium-run (Jha and Panda, 2017 and references therein); the omission of legal, political, and democratic factors may lead to biased estimates. Hence, next I control for a number of variables that capture the legal, political, and democratic aspects of the country in order to minimize the possibility of omitted variable bias. More specifically, I use the widely-used *Polity2* index from the Polity IV database as a measure of democracy that takes values in the range of -10 to 10 with the higher number indicating stronger democracy. ICRG's Law and Order and Government Stability indices and the Independence of the Judiciary from the CIRI Human Rights Data Project are included in the model to capture the impacts of the stability of government and the effectiveness of law and order and the legal system.⁸ These results are presented in Table 3. The negative relationship between all but one dimension of financial reforms and corruption remains robust to the inclusion of these variables: the credit control dimension is now statistically insignificant at conventional levels (p < 0.14). Consistent with the expectations and the findings of the previous studies, the extent of democracy and the quality of law and order are both found to be associated with lower levels of corruption.

Several studies have implied that financial liberalization may have more favorable effects

⁸ For more details on CIRI Human Rights Project, visit http://www.humanrightsdata.com/p/data-documentation.html.

for developed economies than for underdeveloped and developing ones (see Blackburn and Forgues-Puccio (2010) for a discussion). Using the classification of Abiad et al. (2010), I look at the relationship between different dimensions of financial reforms and corruption for the subsets of advanced and non-advanced economies. The results presented in Table 4 show that the relationship between financial reforms index and corruption is stronger for non-advanced economies than advanced economies. While reforms towards entry barriers, directed credit, securities market development, and banking supervision are associated with lower corruption in non-advanced economies, only reforms towards credit control and directed credit dimensions are significantly associated with lower corruption in advanced economies at conventional levels. Though some other variables such as financial reforms index, credit controls, and banking supervision are also associated with lower corruption in advanced economies, these are significant only at 15%.

Furthermore, it has been argued that financial liberalization may increase corruption in countries with bad governance (Blackburn and Forgues-Puccio, 2010). This is so because in financially liberalized countries, it may be easier to hide illegal income by sending it abroad. I check this issue by dividing the countries in two sub-samples: countries with bad governance are defined as countries that have an ICRG corruption index of less than 3, other countries are defined as having good governance. This paper does not find empirical evidence to support this prediction: though international capital flows dimension does have a negative coefficient for the sub-sample of countries with bad governance (as opposed to positive coefficient for the set of countries characterized by good governance), the coefficient is not statistically significant at conventional levels. It is noteworthy, however, that the reforms in the financial sector as a whole has a positive coefficient for countries with both types of governance (though statistically insignificant for countries with bad governance)

⁹ Corruption is widely recognized as an important dimension of governance (see for instance, World Bank: http://info.worldbank.org/governance/wgi/index.aspx#home).

suggesting that while reforms towards liberalizing the financial sector reduce corruption in countries with good governance, reforms do not worsen corruption in countries with bad governance. Additionally, while securities markets development is associated with lower corruption regardless of the quality of governance, banking sector supervision is associated with lower corruption only in the presence of good governance.

C Discussion and Conclusion

The results of this study reveal an important concern for policymakers: corruption has been increasing over time. The World Bank seems to recognize the severity of this issue and identifies corruption as "the single greatest obstacle to economic and social development". This paper identifies several dimensions of the financial sector, reforms in which are negatively related to corruption and, therefore, provides a guide to policymakers as to which policies might work best if the objective is to fight corruption. The findings of this paper suggest that the removal of entry barriers to the financial sector, easing credit controls, developing securities markets, and an adequate supervision of the banking system may help combat corruption. The study also finds that both a stronger democracy and a stronger law and order are associated with lower corruption.

This paper also finds that while reforms in certain dimensions of the financial sector are significantly associated with corruption only in non-advanced economies (such as entry barriers and security market development) or in advanced economies (such as credit controls), reforms in other dimensions of the financial sector (such as directed credit and banking supervision) are significantly and negatively correlated with corruption in both advanced and non-advanced economies. This finding suggests that non-advanced economies may need to prioritize reforms in different dimensions of the financial sector than advanced economies. Further, the paper finds that that non-advanced economies may experience greater gains

from financial liberalization than advanced economies as far as corruption is concerned. Since non-advanced economies tend to have more repressed financial sector as well as greater corruption, the results of this paper have important policy implications. These results suggest that policymakers, especially in non-advanced economies, should focus on reforming financial sector not only because reforms positively impact investment and economic growth, but also because reforms can lower corruption, which has further positive effects on economic outcomes. The results further suggest that in the presence of the good governance, financial sector reforms have greater impact on corruption.

Interestingly, out of the five dimensions of the financial reforms that are negatively related to corruption, two – namely directed credit and securities market development – have also been found to be significantly associated with income inequality in a recent paper by Agnello et al. (2012). The results of this paper along with the findings of Agnello et al. (2012), therefore, suggest that while liberalizing the financial system, policymakers might want to prioritize some dimensions over others. Future research should be targeted to deepen our understanding of the causal mechanisms and should explore why certain dimensions of financial liberalization are associated with factors like corruption and income inequality while others are not. Towards this end, it may be useful to examine the effects of financial reforms on corruption in the financial and non-financial sectors separately if such data are available. Finally, it is worth mentioning that even though the evidence suggests that the status quo in the financial sector policy is disturbed by influential events ("shocks"), and the liberalization progress depends on factors such as initial reforms, learning, regional diffusion, global interest rate fluctuations, balance-of-payments and banking crises, and trade openness (Abiad and Mody, 2005) rather than corruption, the possibility of simultaneity cannot entirely be ruled out. Hence, the interpretation of these results warrant some caution and further research on the topic that employs better data is required.

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Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	Obs.
ICRG Corruption Index	3.44	1	0	6	1730
Financial Reforms Index	0.48	1	-4	8	1730
Entry Barriers	0.07	0	-2	3	1730
Credit Controls	1.99	1	0	3	1730
Aggregate Credit Ceilings	0.77	0	0	1	1043
Interest Rate Controls	2.25	1	0	3	1730
Directed Credit	1.93	1.06	0	3	1730
Security Markets	1.84	1.07	0	3	1730
Privatization	1.42	1.20	0	3	1730
International Capital Flows	1.92	1.08	0	3	1730
Banking Supervision	1.08	1.01	0	3	1730
GDP Per Capita, PPP	9415.95	9418.57	186.05	47626.28	1730
Size of Government	14.98	5.75	2.98	43.48	1730
Openness	35.46	24.83	4.63	200.27	1730
Polity2 Democracy	4.93	6.10	-9	10	1583
Government Stability	7.70	2.06	1	12	1583
Law and Order	3.90	1.55	0	6	1583
Judiciary Independence	1.34	0.69	0	2	1583

PPP-adjusted GDP per capita measured in international dollars. Government size is measured as the general government final consumption expenditure (% of GDP). The share of imports of goods and service in total GDP is the measure of openness.

Table 2: Financial Reforms and (the Absence of) Corruption. Dependent Variable: ICRG Corruption Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Financial Reforms Index	0.0630*** (0.0185)									
Entry Barriers		0.139^{**} (0.0532)								
Credit Controls			0.0921** (0.0456)							
Credit Ceilings				0.0752 (0.0924)						
Interest Rate Controls					0.0523 (0.0349)					
Directed Credit						0.0948** (0.0436)				
Security Markets							0.172^{***} (0.0487)			
Privatization								-0.0177 (0.0393)		
International Capital Flows								,	0.0585 (0.0373)	
Banking Supervision									,	0.143*** (0.0469)
Time Trend	-0.0379** (0.0183)	-0.0378** (0.0182)	-0.0382** (0.0182)	-0.0208 (0.0181)	-0.0380** (0.0182)	-0.0381** (0.0182)	-0.0386** (0.0183)	-0.0384** (0.0182)	-0.0386** (0.0183)	-0.0390** (0.0182)
Income	1.393 (1.365)	1.471 (1.354)	1.491 (1.363)	-1.196 (0.933)	1.480 (1.359)	1.493 (1.359)	1.447 (1.367)	1.494 (1.356)	1.482 (1.355)	1.399 (1.345)
Income squared	-0.0934 (0.0686)	-0.0993 (0.0680)	-0.0999 (0.0685)	0.0177 (0.0526)	-0.0998 (0.0682)	-0.100 (0.0683)	-0.0968 (0.0687)	-0.101 (0.0682)	-0.0996 (0.0682)	-0.0948 (0.0676)
Government Size	0.0154 (0.0122)	0.0138 (0.0123)	0.0141 (0.0123)	0.0328** (0.0141)	0.0138 (0.0123)	0.0137 (0.0123)	0.0136 (0.0123)	0.0135 (0.0124)	0.0141 (0.0124)	0.0140 (0.0124)
Openness	-0.00132 (0.00508)	-0.00147 (0.00510)	-0.00135 (0.00512)	0.00424 (0.00643)	-0.00125 (0.00518)	-0.00147 (0.00509)	-0.000936 (0.00511)	-0.00113 (0.00515)	-0.00108 (0.00514)	-0.000830 (0.00512)
Observations	1730	1730	1730	1043	1730	1730	1730	1730	1730	1730
Countries	85	85	85	53	85	85	85	85	85	85
Adjusted R^2	0.212	0.207	0.206	0.293	0.205	0.206	0.208	0.204	0.205	0.207

Fixed effects estimator. Standard errors clustered at country level in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01. Constant not reported. A higher value of the ICRG corruption index implies lower corruption. All the independent variables are lagged by one year.

Table 3: Financial Reforms and (the Absence of) Corruption: Robustness. Dependent Variable: ICRG Corruption Index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Financial Reforms Index	0.0477** (0.0184)			()						()
Entry Barriers		0.122^{**} (0.0500)								
Credit Controls			0.0718 (0.0477)							
Credit Ceilings				0.0163 (0.0867)						
Interest Rate Controls					0.0455 (0.0377)					
Directed Credit						0.0755^* (0.0446)				
Security Markets							0.139*** (0.0491)			
Privatization								-0.0215 (0.0367)		
International Capital Flows									0.0254 (0.0404)	
Banking Supervision										0.0996** (0.0447)
Time Trend	-0.0519*** (0.0191)	-0.0519*** (0.0190)	-0.0522*** (0.0190)	-0.0305 (0.0197)	-0.0518*** (0.0190)	-0.0522*** (0.0190)	-0.0526*** (0.0191)	-0.0523*** (0.0190)	-0.0524*** (0.0191)	-0.0529*** (0.0190)
Income	-0.742 (1.246)	-0.678 (1.243)	-0.674 (1.242)	-2.760*** (0.792)	-0.690 (1.244)	-0.677 (1.239)	-0.696 (1.255)	-0.667 (1.244)	-0.672 (1.242)	-0.741 (1.232)
Income squared	0.0220 (0.0673)	0.0172 (0.0673)	0.0172 (0.0672)	0.103** (0.0499)	0.0176 (0.0674)	0.0174 (0.0671)	0.0192 (0.0678)	0.0164 (0.0674)	0.0169 (0.0672)	0.0211 (0.0668)
Government Size	0.0237 (0.0164)	0.0221 (0.0164)	0.0226 (0.0164)	0.0421^{***} (0.0135)	0.0225 (0.0164)	0.0223 (0.0164)	0.0221 (0.0164)	0.0219 (0.0166)	0.0223 (0.0165)	0.0224 (0.0164)
Openness	0.00205 (0.00537)	$0.00192 \\ (0.00540)$	$0.00211 \\ (0.00538)$	0.00629 (0.00552)	$0.00217 \\ (0.00543)$	$0.00197 \\ (0.00535)$	0.00253 (0.00542)	$0.00234 \\ (0.00542)$	$0.00239 \\ (0.00542)$	$0.00248 \\ (0.00541)$
Polity2 Democracy	0.0320^{**} (0.0155)	0.0330** (0.0152)	0.0329** (0.0153)	0.00218 (0.0172)	$0.0325^{**} (0.0153)$	$0.0330^{**} (0.0153)$	0.0324^{**} (0.0154)	0.0328** (0.0153)	0.0325^{**} (0.0152)	0.0327^{**} (0.0152)
Government Stability	-0.00448 (0.0189)	-0.00565 (0.0188)	-0.00632 (0.0187)	-0.0277 (0.0194)	-0.00668 (0.0187)	-0.00625 (0.0186)	-0.00605 (0.0186)	-0.00731 (0.0187)	-0.00716 (0.0187)	-0.00631 (0.0185)
Law and Order	0.262*** (0.0469)	0.262*** (0.0471)	0.263*** (0.0472)	0.298*** (0.0541)	$0.265^{***} (0.0475)$	0.263*** (0.0471)	$0.263^{***} (0.0472)$	0.264^{***} (0.0472)	0.264*** (0.0471)	0.262*** (0.0469)
Judiciary Independence	-0.0296 (0.0865)	-0.0274 (0.0873)	-0.0338 (0.0867)	-0.0468 (0.104)	-0.0361 (0.0863)	-0.0358 (0.0868)	-0.0357 (0.0858)	-0.0367 (0.0865)	-0.0362 (0.0866)	-0.0364 (0.0866)
Observations	1583	1583	1583	969	1583	1583	1583	1583	1583	1583
Countries	82	82	82	52	82	82	82	82	82	82
Adjusted R^2	0.298	0.296	0.294	0.410	0.294	0.295	0.296	0.293	0.293	0.295

Fixed effects estimator. Standard errors clustered at country level in parentheses. * p < 0.10, *** p < 0.05, **** p < 0.01. Constant not reported. A higher value of the ICRG corruption index implies lower corruption. All the independent variables are lagged by one year.

Table 4: Financial Reforms and Corruption for Sub-Samples

	Good governance	Bad governance	Advanced Economies	Non-Advanced Economies
Di i I D C I I				
Financial Reforms Index	0.0243**	0.0135	0.0435#	0.0680***
	(0.0121)	(0.0215)	(0.0288)	(0.0229)
Entry Barriers	0.0186	0.0371	0.0336	0.174***
v	(0.0378)	(0.115)	(0.0847)	(0.0588)
Credit Controls	0.0399	0.0703	0.168**	$0.0768^{\#}$
Cicaro Conorolis	(0.0335)	(0.0729)	(0.0774)	(0.0520)
	()	()	()	()
Credit Ceilings	$0.0991^{\#}$	-0.00154	0.0920	0.0514
	(0.0604)	(0.251)	(0.108)	(0.117)
		0.00001	0.0700	
Interest Rate Controls	0.00903	-0.00261	0.0599	0.0609
	(0.0187)	(0.0694)	(0.0482)	(0.0431)
Directed Credit	0.0269	0.0781	0.169**	0.0853*
	(0.0300)	(0.0624)	(0.0682)	(0.0496)
Security Markets	0.106**	0.147**	0.0630	0.202***
Security Warkers	(0.0434)	(0.0606)	(0.0948)	(0.0559)
	(0.0101)	(0.0000)	(0.0310)	(0.0000)
Privatization	-0.0456	-0.0146	-0.0540	-0.0356
	(0.0384)	(0.0391)	(0.0832)	(0.0455)
I	0.0206	0.0574	0.00007	0.0676#
International Capital Flows	0.0306	-0.0574	-0.00907	0.0676#
	(0.0265)	(0.0481)	(0.0713)	(0.0416)
Banking Supervision	0.132***	0.00974	$0.114^{\#}$	0.144**
Zaming Super vision	(0.0443)	(0.0530)	(0.0729)	(0.0613)
	(0.0443)	(0.0530)	(0.0729)	(0.0613)

Fixed effects estimator. Standard errors clustered at country level in parentheses. ${}^{\#}p < 0.15 * p < 0.10$, *** p < 0.05, **** p < 0.01. A higher value of the ICRG corruption index implies lower corruption. Controls: log(Income), log(Income squared), government size, openness, and time trend. All the independent variables are lagged by a year. Number of observations (countries): Good governance: 1163 (81), except for credit ceilings variable: 718 (52); Bad governance: 567 (61), except for credit ceilings variable: 325 (37). Advanced economies: 477 (22), except for credit ceilings variable: 286 (13); Non-Advanced economies: 1168 (62), except for credit ceilings variable: 704 (40). Constant not reported.