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The Role of a Free Press in Combating Business Corruption *

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Abstract: Using firm-level data, we find that countries with greater press freedom have significantly lower incidences of bribery involving public officials. In particular, we find that a free press is associated with a substantial reduction in the percentage of firms that report corruption during interactions with tax officials and when obtaining construction permits. Furthermore, we find that fewer businesses in these countries report that corruption is the biggest problem that they face. These findings underline the role of an independent media in combating corruption.

Key words: corruption; firm behavior; bribery; press freedom

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1. Introduction

In 2017, Telia Co AB agreed to pay penalties of at least \$965 million to the United States and international authorities after the media uncovered corrupt payments involving telecom contracts in Uzbekistan (Schoenberg and Dolmetsch, 2017). In 2016, VimpelCom Ltd. agreed to pay \$835 million to settle a case following a media investigation of corrupt payments (Scannell, 2016). Cases of this kind illustrate the important role that the media and investigative journalists play in helping societies to detect and punish corruption. Existing studies appear to confirm this role, finding that press freedom is associated with perceived corruption and that media attention can plausibly reduce corruption through several channels, including enhanced corporate governance.

Our study is the first to address this question using data on firms' involvement in corruption. We use data from the World Bank's Enterprise Surveys, a series of global surveys that contain data on firms' direct experience of corruption, including bribery and the degree to which corruption is seen as an obstacle to doing business. Previous work has used broad measures of corruption perceptions such as Transparency International's Corruption Perceptions Index (CPI). As the CPI is based on expert opinions, it may give a misleading impression that press freedom has a greater influence on corruption than in reality. Furthermore, it is subject to perception biases (Svensson, 2003; Reinikka and Svensson, 2006; Fan, Lin and Treisman, 2009) and makes no distinction between grand and petty corruption. The overall level of (perceived) corruption has received much attention, with studies finding that it has many undesirable economic and social effects.¹ Petty corruption warrants further attention, as it is a common feature of day-to-day business across the world. Globally, 18 per cent of firms surveyed by the World Bank between 2004 and 2017 report experiencing at least one bribery request, and 7 per cent of this sample report that corruption is their biggest obstacle to doing

business. Furthermore, we know little about which type of corruption the media is the most effective at constraining. By studying business corruption in different contexts, we are able to observe that press freedom is more effective in collusive interactions than situations involving harassment by public officials.

We find that a free press reduces substantially business corruption across multiple indicators of both press freedom and corruption. Using the percentage of firm-state interactions in which a bribe was expected or requested as a proxy for firms' engagement with corruption, we show that firms in countries with a free press report substantially less corruption. Moreover, we show that a free press is associated with fewer businesses in these countries reporting that corruption is the biggest problem that they face. Additionally, we find that a free press is associated with a substantial reduction in the percentage of firms that say a bribe was expected or requested during interactions with tax officials. This latter finding is in line with the content of the Panama and Paradise papers, which have revealed the use of offshore financial centers for illegal purposes such as tax evasion and fraud.²

Our findings have several implications. First, they suggest that a free press may reduce significantly the cost of doing business, as previous studies find that bribery imposes large costs on business (Kaufman and Wei, 1999).³ Second, our findings add to the substantial literature on the importance of a free press in combating corruption by showing that this association is evident when we measure corruption using firms' experiences. Finally, our results underline the importance of understanding the media environment for firms engaging in cross-border activities.

This article is organized as follows. First, we review the literature on the role of the media as a monitor of corruption. We then proceed to outline our data, method, and results. The results are presented in two parts: the first presents our findings regarding the overall association

between corruption and press freedom and the second describes the findings from models that interact press freedom with the level of democracy. We conclude with a discussion of the implications of our findings for research and policy.

2. The Media as a Monitor of Corruption

2.1 Theory

The notion that an independent media can play an important role in controlling corruption has good theoretical support. The Becker (1968) model of crime suggests that would-be criminals weigh up the expected costs against the expected benefits of crimes. The model finds that would-be criminals are dissuaded from committing a crime if the punishment or likelihood of detection increases. To the extent that an independent media increases the likelihood of being caught (and imposes reputational cost), a free press should act as a deterrent to individuals contemplating committing a crime. In our study, these individuals are either public officials who elicit bribes from businesses through *extortive corruption* or businesses who offer bribes to obtain favourable treatment, whether through collusion with public officials – *collusive corruption* – or in response to extortive corruption. The role of the press in moderating corruption rests critically on the assumption that such individuals are sensitive to relatively small changes in the odds of detection. In an experimental bribery game, Abbink *et al.* (2002) present findings which support this assumption, showing that a very small chance of being caught, combined with a severe punishment, reduces significantly the likelihood of offering or accepting a bribe. Since giving or receiving a bribe is a criminal act in most jurisdictions, the more the media increases the odds of detection, the less firms should engage in corruption.

There are two relevant literatures which support the link between press freedom and corruption in business. The first literature finds a strong relationship between press freedom and the perception of corruption.⁴ Brunetti and Weder (2003), for example, argue that press freedom can be used as an external control on corruption, and test this argument using cross-country

data on 125 countries over the period 1994-1998. They find that an improvement in press freedom of one standard deviation reduces corruption by 0.4-0.9 points (on a scale from 0 to 6). Adsera *et al.* (2003) find that a well-informed electorate, as captured by the interaction of newspaper circulation and democracy, explains between one-half and two-thirds of the variance in the levels of governmental performance and corruption, using panel data on 100 countries in the period 1980-95, and a cross-national analysis of indicators of corruption and governance effectiveness for 1997-1998. Recent work has extended the literature to incorporate alternative estimation strategies (Freille *et al.* 2007), the role of socio-political integration (Charron, 2009), and the joint impact of democracy and press freedom on corruption (Chowdhury 2004; Kalenborn and Lessmann, 2013). We consider the democracy strand of the literature in further detail in Section 5.

The second relevant literature highlights the relationship between the media and firm behaviour. This literature suggests that media attention may reduce business corruption through several channels. First, it may put pressure on directors and managers to act in line with acceptable social norms such as honesty and integrity. Dyck *et al.* (2008), for example, find that coverage in the Anglo-American press increases the probability that a Russian firms' corporate governance violation is reversed. Jaakson *et al.* (2018) find that business managers' opinions regarding corruption are influenced by normative concerns. While these studies link media attention to corruption, there are many further studies which highlight its link to other relevant dimensions of firm behaviour that often feature in corruption-related scandals. Bednar (2012), for example, shows that media attention is an important determinant of CEO job security, executive compensation, and board membership.

Second, media attention has been shown to have a remarkable impact on firms' practices and corporate policies. El Ghouli *et al.* (2016) show that firms engage in more Corporate Social Responsibility (CSR) activities if located in countries where the media has more freedom.

Krishnamurti *et al.* (2018) find that firms that are more engaged in CSR activities are less exposed to corruption risk. Furthermore, they find that in emerging countries, CSR engagement reduces corruption risk only when press freedom is in place. Kanagaretnam *et al.* (2018), demonstrate that a privately owned and competitive media sector is associated with a lower probability of aggressive tax behaviour. Collins *et al.* (2009) find that some executives rationalize acts of corruption; thus, to the extent that a free press exposes the damage done by corruption, it could make such rationalising more difficult.

Finally, media attention and its attendant impact on public pressure is often critical in catalyzing support for anti-corruption initiatives. For example, following a number of financial scandals in the United Kingdom in the 1980s, such as the collapse of Maxwell Group and the Bank of Credit and Commerce International, the Financial Aspects of Corporate Governance Committee was created in response to media and public opinion.⁵

2.2 The Problem with Corruption Perceptions

All of the studies which explore the relationship between press freedom and corruption use indices based on expert opinions of country-level corruption such as the International Country Risk Guide (ICRG) or Transparency International's Corruption Perceptions Index (CPI). While the CPI and other indicators have been useful resources, many researchers argue that they are potentially misleading in some contexts. Svensson (2003), Reinikka and Svensson (2006), Treisman (2007), and Fan *et al.* (2009) argue that they suffer from perception biases. Knack (2007) and Kenny (2009) argue that they lag reality. Finally, Razafindrakoto and Roubaud (2010) find ideological and cultural biases in experts' evaluations of corruption in sub-Saharan Africa.

As well as these known biases, expert indices are particularly problematic in the context of our study; that is, the expert opinions that feed into the CPI may respond to press freedom independently of actual corruption levels, predisposing the index to be correlated with press

freedom. This is because experts rely on information to form opinions and may perceive the absence of a free press, along with other restrictions on information, as evidence of malfeasance, regardless of actual corruption levels. Without recourse to data on actual corruption levels, we cannot be certain that a free press reduces corruption. A free press may influence corruption perceptions even if the media is ineffective at curbing real corruption. Indeed, there is no shortage of studies which question whether the media is doing a good job, particularly in societies where it is highly polarised and tends to value hypercritical infotainment over critical impartiality and investigative journalism (Hallin and Mancini, 2004). Finally, even if one considers the CPI to be a valid indicator of actual corruption, it is not ideal for studying corruption in business because it does not distinguish between grand and petty corruption. The media may direct its gaze disproportionately on grand corruption or corruption that preys on particular individuals, while neglecting less sensational types of everyday corruption. An association between press freedom and one type of corruption does not imply an association with the other.

2.3 Firms' Corruption Experiences

Increasingly, scholars are turning to survey-based approaches to measure the level of corruption in different contexts. An appropriately-designed survey of households or firms can, according to Knack (2007: 257) 'place a greater emphasis on experience and less on perceptions.' Such survey data has given rise to a plethora of new studies exploring corruption in business, including the determinants of bribery in Asian firms (Wu, 2009), how the gender of owners and managers affects bribery (Breen et al., 2017), and how bribery affects firm growth (Fisman and Svensson, 2007). Furthermore, such data allows us to consider how press freedom affects corruption in the different contexts in which a business may have dealings with the state. In some contexts, acts of corruption are more likely to be extortive than collusive. Brunetti and Weder (2003) argue that the free press is the most effective institution for

combating collusive corruption because internal control agencies such as the police or another branch of the public service, may be vulnerable to capture or to being paid-off. Not only does the press have a particular role to play in principle, competitive forces may drive it to fulfil this role in practice. The incentives of journalists to investigate different types of corruption differ. It may be the case that a story about the solicitation of bribes for electricity connections is less newsworthy and valuable than a story about a conspiracy to reduce tax payments or bypass construction regulation.

By studying corruption across different contexts in business we are able to observe whether press freedom reduces corruption across the board, or if it helps only in the more newsworthy collusive cases. Again, the distinction between these types of corruption is not made in the ICRG or CPI, whereas the data that we employ allows us to look at corruption in different contexts, some of which are more likely to be collusive arrangements than others.

In summary, many studies find a strong link between press freedom and corruption perceptions but no previous work examines this topic from the perspective of firms' experiences. On the one hand, the existing literature provides a clear mechanism through which business corruption should be reduced by a free press, through its disciplining on businesses and public officials. On the other hand, the inherent problems with the CPI and other perception indicators suggest that the role of press freedom may have been overstated. By using arguably more objective measures of corruption, and exploring business corruption across several contexts, we are able to demonstrate that this fear is largely unfounded.

3. Data and Variables

3.1 Measuring Corruption

We measure corruption using the World Bank Enterprise surveys, which are representative surveys of formal firms in the manufacturing and services sectors. From these surveys, we use two measures of firms' involvement in corruption. The first, *Bribe*, is the percentage of public

transactions in which a gift or informal payment was requested or expected by a public official. The survey questions upon which this percentage is based take the following form: ‘In reference to X, was an informal gift or payment expected or requested?’ where X is seeking access to utilities, permits, licenses, and during tax inspections. The question is worded so as not to incriminate the respondent or the firm. As such, it should serve as a better proxy for firms’ engagement in corruption than survey questions which use explicit language related to bribery.

The second measure of corruption is the percentage of firms who identify corruption as the biggest obstacle they face. While our first measure captures more directly firms’ broad experience of corruption, our second measure is useful because it asks firms to situate corruption in a hierarchy of difficulties rather than stating simply that corruption is a problem. The validity of *Obstacle* as a measure of corruption is supported by Maweje and Sebudde (forthcoming) who study Ugandan firms, and find a negative correlation between a firm’s perception that corruption is a constraint and its expectations about future performance.

3.2 Measuring Press Freedom

Our primary measure of press freedom comes from Freedom House, who compiles an index based on expert assessments and an in-house analysis of newspapers and a variety of governmental and non-governmental sources.⁶ The index takes values between 0 (best) and 100 (worst). Furthermore, Freedom House uses a categorical approach based on the value of their index, categorising countries into groups that are considered ‘Free’, ‘Partly Free’, and ‘Not Free’. We employ both the raw index and these categorisations in our analysis. In addition, we use an alternative measure of press freedom produced by Reporters Without Borders, which produces a global ranking of press freedom based on an expert questionnaire and data on abuses and acts of violence against journalists during the period of assessment.

3.3 Summary Statistics

As the Enterprise Surveys are not carried out in every country in every year, we have an unbalanced panel. Our combined dataset consists of 110 countries over the years 2006-2016. Table 1 presents the summary statistics of our main variables of interest. On average 15.28 per cent of public transactions involved a bribe request but the variation is large – from 0 per cent of firms in Estonia to 65.2 per cent in the Republic of Yemen. Interestingly, while Yemen registers as a corrupt country and is generally perceived to be so, some other countries that are often ranked as highly corrupt perform well on this metric. For example, the data for Eritrea suggest that no firms paid bribes. This might indicate that firms in some autocracies may be less willing to answer due to fear of reprisal (Shockley *et al.*, 2017), reinforcing the need to control for democracy and political freedoms, and supporting our decision to use a corruption outcome – *Obstacle* – that does not refer explicitly to firms’ involvement in bribery.⁷ On average, 7.39 per cent of firms view corruption as the biggest obstacle to their operations, varying from zero in some countries to a high of 32.5 per cent in Panama. Thus, there is a large spread of corruption outcomes across the world.

Similarly, there is considerable variation in press freedom. Norway is the country with the best press freedom score from 2005 to 2016, with an average of 10. North Korea is the worst, averaging 97 during this period. Overall, the average value of press freedom in our dataset is 53, varying substantially across groups of countries with an average score of 22 in the OECD, 58 in sub-Saharan Africa, 41 in Latin America and the Caribbean, 67 in the Middle East and North Africa, and 59 in South Asia.

3.4 Empirical Approach

Throughout this study we estimate equations of the following form:

$$Corruption_{it} = \beta_0 + \beta_1 Press_{it} + \beta x_{it} + \varepsilon_{it}$$

Where $Corruption_{it}$ reflects the average corruption experience of firms in country i and time t , $Press_{it}$ is a measure of press freedom, x_{it} is a vector of controls, and ε_{it} is an error of the usual type. In addition, we control for a variety of factors that have been identified in the previous literature on corruption and press freedom namely democracy (using the Polity IV index), GDP per capita, and openness to international trade (defined as exports plus imports as a share of GDP). These latter two variables come from the World Development Indicators.

The correlation of press freedom with its lag is 0.9944; and so, given the time invariance of our main variable of interest we do not estimate fixed effects models, using instead pooled OLS as our main estimation method. Following existing studies (Brunetti and Weder, 2003; Chowdhury, 2004; Kalenborn and Lessmann, 2013) we also estimate random effects models to account for unobserved heterogeneity, though we acknowledge that the random effects assumption may not be valid as the country specific effect is plausibly correlated with the independent variables. Our preferred specification, therefore, is to include dummies for sub-Saharan Africa, Latin America and Caribbean, and OECD countries, and year dummies. These should capture broad cultural, historical, political, and economic traits and trends. Such traits surely matter, as Scholtens and Dam (2007) find that cultural values are associated with business ethics; in particular, that firms in countries with high individualism scores pay more attention to their ethical policies, including governance of corruption and bribery.

Several previous studies have employed instrumental variable strategies to deal with concerns regarding endogeneity. Instruments such as the share of the population that are protestants and the share that speak a major European language have been used (Brunetti and Weder, 2003), as well as ethnic fractionalisation and legal origin (Chowdhury, 2004). The notion that these country traits only influence corruption via an effect on press freedom is highly debateable and in any event these instrument sets fail standard diagnostics in the case of our corruption measures, which are based on experiences of corruption. Indeed, it is very difficult to envision

an instrument that would satisfy the exclusion restriction. Essentially one would need to think of a historical or cultural variable that had no plausible direct effect on corruption. We proceed with a careful analysis of the data and refrain from employing causal language. Documenting robust associations between corruption and press freedom is a valuable exercise which can provide useful insights that can help to inform policymakers and corporate decision-making.

Table 1. Summary Statistics

Variable	N	Mean	Min	Max	SD
<i>Bribe</i>	193	15.28	0.00	65.20	14.39
<i>Obstacle</i>	193	7.39	0.00	32.50	5.98
<i>Press freedom</i>	193	52.90	10.00	95.00	19.63
<i>Tax</i>	193	14.75	0.00	66.70	14.89
<i>Construction</i>	193	24.36	0.00	91.60	19.39
<i>Water</i>	182	15.99	0.00	79.30	18.77
<i>Electricity</i>	191	16.58	0.00	71.10	16.64
<i>Import</i>	191	15.12	0.00	87.70	18.79
<i>Operating</i>	191	16.58	0.00	100.00	18.41
<i>General gift</i>	191	26.05	0.00	90.70	20.44
<i>Government contract</i>	190	31.30	0.00	99.10	21.79
<i>Democracy (Polity IV)</i>	193	4.46	-9.00	10.00	5.44
<i>GDP per capita (log)</i>	193	7.92	5.41	10.89	1.19
<i>Openness</i>	193	0.84	0.20	2.12	0.37

4. Results

4.1 Main Results

Our main findings are presented in Table 2. Columns 1–3 report estimates for our main dependent variable of interest – *Bribe* – the percentage of public transactions in which a gift or informal payment was requested by a public official. The first column is our base specification; the second column presents estimates from a random effects model, and the third column adds dummy variables to our base specification that capture broad global heterogeneities. Columns 4–6 repeat these specifications using *Obstacle* – the percentage of firms who identify corruption as their biggest obstacle.

With regard to our first dependent variable, we find that a free press is associated with a statistically significant reduction in *Bribe*. This relationship holds in our random effects model,

which allows for unobserved heterogeneity, and when global dummy variables are added to our base specification. Moreover, the effect of press freedom is substantial: a one standard deviation improvement in press freedom (19.63) is associated with a reduction in the proportion of public interactions in which a bribe was requested of 4.1 per cent on average, a substantial change when one considers that the mean bribe in our sample is approximately 15 per cent (with a standard deviation of 14 per cent).

For our second dependent variable, we find a strong association between a free press and *Obstacle* – the percentage of firms who identify corruption as their biggest obstacle. We find that fewer firms in countries with press freedom report that corruption is their biggest constraint, and that this association holds across all of our alternative specifications. Our findings therefore support the notion that a free press serves as an effective deterrent to corruption in business. In Table A1 in the Appendix, we present estimates of the association between corruption and the disaggregated components of Freedom House’s index. These components are highly correlated but the tests show the strongest associations for the political and legal components of the index.

Table 2. Corruption and Press Freedom

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	RE	OLS	OLS	RE	OLS
	<i>Bribe</i>	<i>Bribe</i>	<i>Bribe</i>	<i>Obstacle</i>	<i>Obstacle</i>	<i>Obstacle</i>
Press freedom	0.21*** (0.076)	0.18** (0.087)	0.17** (0.077)	0.10*** (0.035)	0.09** (0.037)	0.09** (0.036)
Democracy	-0.00 (0.281)	-0.01 (0.318)	0.07 (0.284)	0.21 (0.132)	0.18 (0.146)	0.18 (0.132)
GDP per capita (log)	-5.14*** (0.907)	-4.72*** (1.082)	-5.81*** (1.134)	0.01 (0.419)	-0.18 (0.436)	0.05 (0.541)
Openness (log)	3.71 (2.262)	3.37 (2.575)	2.48 (2.214)	2.03** (1.021)	1.99* (1.128)	2.12** (1.015)
OECD			-1.69 (2.194)			-2.97* (1.532)
Sub-Saharan Africa			-7.80** (3.181)			-0.90 (1.387)
Latin America, Caribbean			-13.83*** (4.727)			0.40 (2.453)
Constant	43.37*** (9.291)	44.37*** (10.162)	43.40*** (11.574)	1.47 (4.239)	4.34 (4.448)	-2.22 (5.899)
Observations	193	193	193	193	193	193
R-squared	0.364	0.349	0.415	0.100	0.091	0.119
Year dummies	YES	YES	YES	YES	YES	YES

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 3 presents estimates using alternative measures of press freedom and corruption. Columns 1–2 report estimates using *Bribe* and *Obstacle* as dependent variables and Freedom House’s categories of press freedom as explanatory variables. This scale ranks countries as ‘Free’ (0–30), ‘Partly Free’ (31–60), and ‘Not Free’ (61–100). This is a worthwhile exercise as small changes in the score may not be meaningful and there could conceivably be threshold levels of press freedom required for the relationship with corruption to become meaningful. Column 1 demonstrates that relative to ‘Free’ being ‘Not Free’ is associated with an increase in *Bribe*. More specifically, *Bribe* is 10 per cent higher in ‘Not Free’ countries relative to ‘Free’ countries. Interestingly, there is no statistically significant difference between countries with partly free as opposed to full press freedom. Countries that lack a free press or have a partly free press do appreciably worse on *Obstacle*. Columns 3–4 repeat these specifications, substituting Freedom House’s indicator of press freedom with the Reporters Without Borders’

indicator. These tests show that an increase in press freedom is associated with less corruption across both measures of corruption.

Columns 5–7 present estimates using an alternative measure of corruption – the percentage of firms expected to give gifts to public officials ‘to get things done’. The underlying survey question is:

We’ve heard that establishments are sometimes required to make gifts or informal payments to public officials to “get things done” with regard to customs, taxes, licenses, regulations, services etc. On average, what percent of total annual sales, or estimated total annual value, do establishments like this one pay in informal payments or gifts to public officials for this purpose?

The question is worded so that respondents will not incriminate themselves; instead of being asked whether their firm is expected to give gifts, it refers to ‘establishments like this one’. Our central result is robust to several of these alternative indicators of corruption and press freedom. In column 5, our continuous measure of press freedom is not associated with corruption, as measured by informal gifts. However, the association is strong in columns 6 and 7, which use Reporters Without Borders’ and Freedom House’s categorical indicator respectively. Together, these findings suggest that there is a meaningful association between corruption in business and press freedom across multiple indicators.

Table 3. Robustness

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Bribe</i>	<i>Obstacle</i>	<i>Bribe</i>	<i>Obstacle</i>	<i>Gift</i>	<i>Gift</i>	<i>Gift</i>
Freedom House 'Not Free'	10.05***	8.12***					13.85***
	(3.417)	(1.502)					(4.764)
Freedom House 'Partly Free'	0.08	5.65***					6.11**
	(1.823)	(1.213)					(2.931)
RWB Press Rank			0.08***	0.04***		0.10**	
			(0.027)	(0.014)		(0.041)	
Press freedom					0.17		
					(0.120)		
Democracy	0.22	0.18	0.05	0.17	-0.35	-0.31	-0.24
	(0.301)	(0.114)	(0.241)	(0.120)	(0.431)	(0.355)	(0.434)
GDP per capita (log)	-5.88***	0.48	-5.65***	0.19	-6.22***	-5.93***	-5.69***
	(1.105)	(0.534)	(1.158)	(0.540)	(1.566)	(1.572)	(1.489)
Openness (log)	2.03	2.42**	3.78	2.80***	5.16	6.83*	5.30
	(2.141)	(0.964)	(2.347)	(1.053)	(3.273)	(3.513)	(3.240)
OECD	-3.75	-1.68	-2.67	-3.52**	1.55	0.59	1.94
	(2.328)	(1.490)	(2.019)	(1.433)	(2.896)	(2.989)	(3.163)
Sub-Saharan Africa	-7.29**	-0.18	-6.28*	0.09	-5.79	-3.71	-4.64
	(3.068)	(1.385)	(3.324)	(1.467)	(4.368)	(4.726)	(4.281)
Latin America, Caribbean	-	0.38	-12.13**	1.39	-	-13.64**	-
	12.63***				15.46***		14.78***
	(4.737)	(2.361)	(4.679)	(2.426)	(5.766)	(5.837)	(5.669)
Constant	46.06***	-7.22	60.34***	1.52	88.48***	85.16***	62.73***
	(9.935)	(5.226)	(11.770)	(5.384)	(18.506)	(17.362)	(14.455)
Year dummies	YES	YES	YES	YES	YES	YES	YES
Observations	193	193	193	193	191	191	191
R-squared	0.452	0.197	0.418	0.128	0.373	0.387	0.391

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

4.2 Collusive and Extortive Corruption

As noted above, acts of bribery can be categorised as collusive or extortive and the question of what type of corruption the press is most effective at combatting has not been addressed empirically in the existing literature. While the press could, in principle, serve as an effective deterrent to both types, Brunetti and Weder (2003) argue that the press may be the most effective institution at fighting collusive corruption given that official state anti-corruption institutions may themselves be corrupted. Moreover, the competitive forces and nature of

journalism may make collusive conspiracies more attractive targets from the perspective of journalists.

Therefore, we extend our analysis to consider the role of press freedom in several different contexts. We examine each of the disaggregated components of the *Bribe* variable; that is, the percentage of firms who say that a gift was expected or requested during meetings with tax officials; when obtaining construction permits; water connections; electrical connections; import licenses, and operating licenses. In addition, we examine the association between corruption and press freedom in cases where firms say they are expected to give gifts in order to secure government contracts.

Columns 1–7 report estimates using each of these outcomes as a dependent variable, respectively. Panel A presents estimates using Freedom House’s continuous indicator of press freedom and Panel B reports estimates using their categorisation of countries as ‘Free’, ‘Partly Free’, and ‘Not Free’. While these data do not allow us to claim that every act of bribery in a given context is collusive or extortive, certain categories are more likely to feature a dominant type of arrangement. The first two columns consider the contexts of tax and construction. Collusive corruption is likely to be the dominant mode of corruption in these contexts as a firm has no incentive to report corruption and it is difficult for other officials to detect misreporting on the part of the bribed official (Brunetti and Weder, 2003).⁸ In both panels, we find statistically significant relationships between press freedom and the incidence of bribery in these contexts.

Columns 3-6 examine situations that more closely fit the concept of extortive corruption as outlined in Brunetti and Weder (2003). In these types of interaction, the firm faces a bribe demand from an official who controls access to a government service. The official can deny or delay the firm. The Enterprise Surveys contain information on bribery in the pursuit of water

and electrical connections, and import and operating licences. Neither of these situations shows any significant association with press freedom. With respect to the incidence of bribery for firms seeking operating licences, we do find an association in Panel B. Countries with unfree presses are countries in which more firms pay bribes for operating licences.⁹

The final column examines corruption in the context of seeking government contracts. Corruption in public procurement is a perennial and serious issue that can involve substantial sums. We do not find a significant association between press freedom and this type of corruption. Given that such cases are of great interest to the public, this is somewhat surprising and suggests that there are limits to the free press' ability to expose corruption.

Overall, these findings support the notion that the press is an effective external institution when it comes to reducing collusive corruption. Indeed, it is only effective at fighting such corruption and the lack of an association with extortive corruption fits with a rational disinterest on the part of a profit maximising media industry. An alternative explanation is simply that taxes and construction are more salient to media consumers and therefore the press has a stronger incentive to investigate these types of interaction between firm and state, irrespective of their collusive or extortive character. In either case, we can conclude that the press is an effective deterrent against only certain types of corruption.

Table 4. Corruption in All Contexts

	(1) Collusive <i>Tax</i>	(2) Collusive <i>Construction</i>	(3) Extortive <i>Water</i>	(4) Extortive <i>Electric</i>	(5) Extortive <i>Import</i>	(6) Extortive <i>Operating</i>	(7) Procurement <i>Government contract</i>
Panel A: Continuous Press Freedom							
Press freedom	0.19** (0.082)	0.19* (0.108)	0.11 (0.118)	0.05 (0.079)	0.00 (0.123)	0.11 (0.102)	0.15 (0.129)
Constant	59.89** *	76.28***	78.73** *	79.36** *	74.41** *	73.41** *	80.00***
R-squared	(13.219) 0.411	(16.702) 0.352	(18.691) 0.321	(13.109) 0.427	(19.090) 0.250	(15.988) 0.282	(20.030) 0.269
Panel B: Categorical Press Freedom							
FH 'Not Free'	10.78** *	10.09**	6.94	6.06	4.58	11.09**	9.74
FH 'Partly Free'	0.34 (1.820)	-2.02 (3.497)	-1.36 (3.543)	-0.87 (2.157)	-4.45 (2.861)	-0.94 (3.399)	4.90 (4.589)
Constant	46.50** *	66.49***	73.67** *	80.06** *	47.70** *	61.06** *	79.01***
R-squared	(10.444) 0.446	(15.225) 0.383	(14.664) 0.338	(12.496) 0.445	(16.046) 0.279	(12.966) 0.324	(19.796) 0.274
Observations	193	193	182	191	191	191	190
Year dumm.	YES	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES	YES

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

5. Democracy

One may suspect that only democracies have a free press. In this view, our measure of press freedom simply captures the effect of democratic institutions and is too highly correlated with our measure of democracy. Figure 1 illustrates the association between press freedom and democracy. The solid reference lines denote the generally accepted thresholds for full democracy (Polity IV score > 6) and press freedom (Freedom House 'Free' category = [0, 30]) and thus allow us to divide our data into democracies and non-democracies that have or do not have a free press. The dashed reference line indicates the threshold separating Freedom House's 'Free' and 'Partly Free' press freedom categories. The results of this exercise confirm that democracy and press freedom often go together and that the co-occurrence of autocracy

and press freedom is extremely rare. In fact, we find only one case – Suriname – that technically qualifies as a non-democracy with a free press. Interestingly, we do observe full democracies, such as Turkey and Pakistan, which are ranked as ‘Not Free’ according to Freedom House’s categorisation. There are also a substantial number of countries with a democratic government but only a partly free press. In summary, any combination of democracy and press freedom is technically possible.

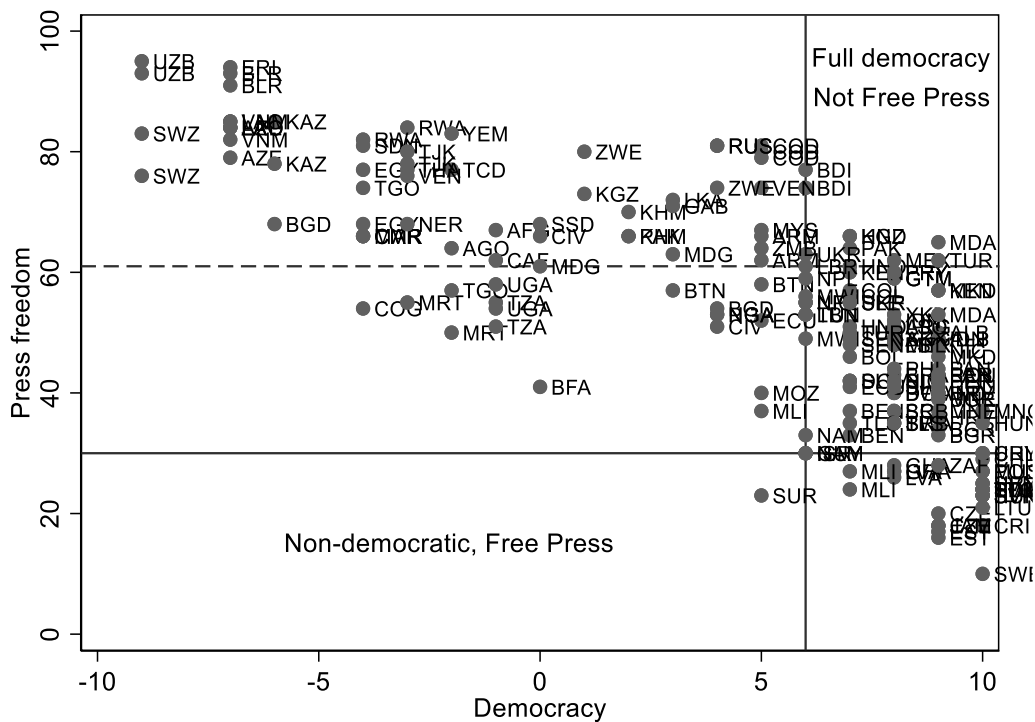


Figure 1. Press Freedom and Democracy

One might ask also if a free press is particularly effective in countries with democratic, that is accountable, institutions. This is important from a policymaking standpoint as efforts to promote a free press may only combat corruption in such environments – perhaps as the press only has the power to expose, not punish. Businesses may also benefit from an appreciation of the interactions between various institutions before undertaking activities in a country. The hypothesis that democracy moderates the effect of press freedom on corruption has considerable support in the literature that measures corruption using the CPI and other

perception based indices. Bhattacharyya and Hodler (2015), for example, develop and test a model of the role of media freedom and democratic institutions, finding that both complement each other in the fight against corruption in a panel of 129 countries from 1980 to 2007. Kalenborn and Lessmann (2013) analyse the joint impact of democracy and press freedom on corruption, finding that both are complementary rather than substitutes, in a cross-section of 170 countries from 2005 to 2010 as well as a panel of 175 countries from 1996 to 2010. A further study finds that the association between a free press and corruption is moderated by the level of political and social openness, often but not exclusively a feature of democracy (Charron 2009).

Table 5 introduces an interaction term between democracy and press freedom to our main specification. When we considered the additive effects of these variables in Table 2, only press freedom is associated with corruption – the level of democracy is statistically insignificant. When interacted, however, the interaction term captures the possibility that different combinations of press freedom and democracy have compound effects that are greater than the sum of their separate effects. Columns 1–3 present estimates for our main dependent variables – *Bribe*, *Obstacle*, and *Tax*. We include the latter variable in our tests because of our previous finding which suggested that press freedom is more likely to play a role in this specific context.¹⁰

Table 5. Democracy, Press Freedom, and Corruption

	(1) <i>Bribe</i>	(2) <i>Obstacle</i>	(3) <i>Tax</i>
Press freedom	0.01 (0.117)	-0.00 (0.049)	0.04 (0.092)
Democracy	-1.92** (0.968)	-0.90** (0.416)	-0.99** (0.412)
Press freedom*Democracy	0.03** (0.013)	0.01*** (0.005)	1.55*** (0.525)
GDP per capita (log)	-5.10*** (1.134)	0.43 (0.569)	-5.16*** (1.087)
Openness (log)	3.16 (2.222)	2.49** (1.011)	2.82 (2.233)
OECD	-1.01 (2.227)	-2.60* (1.461)	-3.73 (2.392)
Sub-Saharan Africa	-8.80*** (3.124)	-1.44 (1.393)	-9.02*** (3.218)
Latin America, Caribbean	-14.11*** (4.690)	0.24 (2.440)	-13.17*** (4.839)
Constant	68.95*** (12.781)	6.86 (5.979)	68.38*** (13.359)
Year dummies	YES	YES	YES
Observations	193	193	193
R-squared	0.436	0.154	0.453

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

We find that the interaction term is statistically significant in all models where it is included, suggesting that the effect of press freedom is moderated by the level of democracy. Figure 2 graphs the marginal effect of press freedom at different levels of democracy across our three corruption indicators, holding our control variables constant at mean values. Recall that higher values of the Freedom House metric indicate worse levels of press freedom. For all of our measures of corruption, close to the commonly accepted threshold of six on the Polity IV scale we find that improvements in press freedom are associated with better corruption outcomes and the effect becomes stronger as we move along the democratic axis. There is no statistically significant marginal effect of press freedom at lower Polity IV scores.

Therefore, press freedom, on average, plays an important role in democratic countries and in those transitioning to democracy or backsliding to non-democratic government. Business

pursuing opportunities in such emerging markets may find it useful to consider the press freedom in such countries. Even if our association of interest is evident only in democracies, it is still the case that it is evident for the majority of our observations. Specifically, freedom of the press is associated with a reduction in corruption in 116 out of 193 of our observations. This exercise confirms that our main results are not only applicable to a few democratic countries that happen to enjoy press freedom.

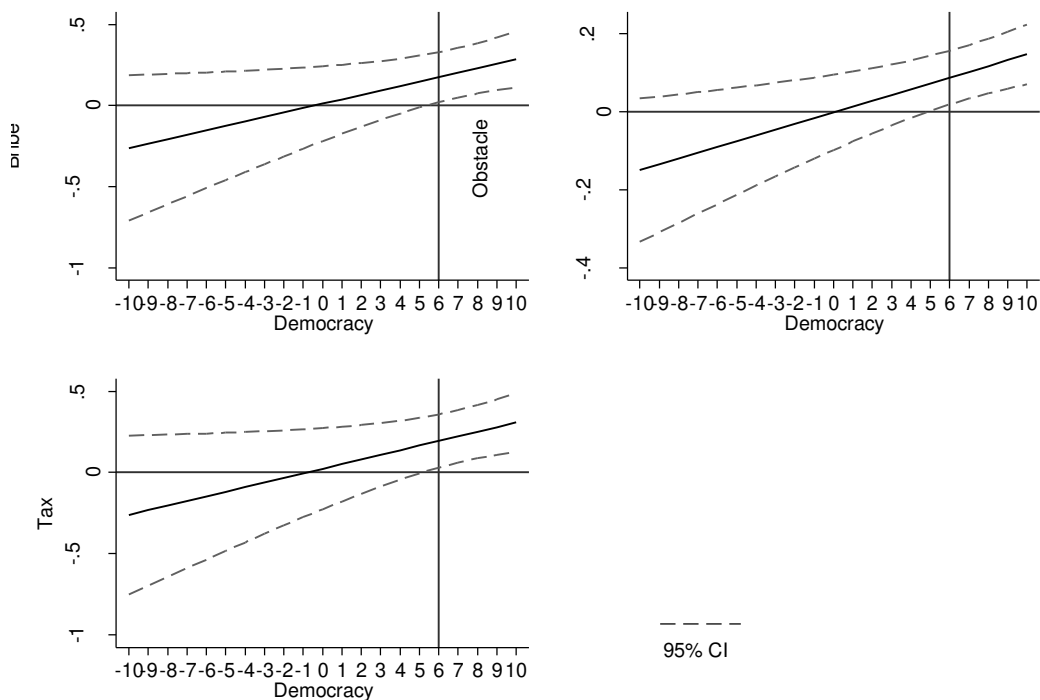


Figure 2. The Marginal Effect of Press Freedom on Corruption at Varying Levels of Democracy

6. Conclusion

The important role of an independent media in combating corruption will come as no surprise to scholars of business ethics. Many studies have demonstrated a strong link between media attention and enhanced corporate governance and decision-making. The role of the media is evident in cases such as the release of the Panama Papers and the Paradise papers, which revealed the widespread use of offshore financial centers for illegal purposes. Such investigative journalism often comes at a high price; according to Transparency International

(2017), 368 journalists were murdered between 2012 and 2017 – at least 70 of who were investigating corruption-related cases.

What has received less attention is the role of an independent media in constraining less sensational types of corruption in business, such as small bribes to obtain licenses and permits. Previous work presents strong evidence that the media shapes perceptions of corruption, but no previous studies consider its role in shaping everyday corruption, as seen through the eyes of ordinary businesses. Furthermore, previous studies do not show which type of corrupt acts – extortive or collusive – that the media is more effective at exposing. Our findings suggest that press freedom helps to combat everyday corruption in business-state interactions. Countries with greater press freedom have significantly lower incidences of bribery involving public officials, and fewer businesses in these countries report that corruption is the biggest problem they face. Moreover, a free press is associated with a substantial reduction in the percentage of firms that say a bribe was expected or requested during interactions with tax officials and in pursuit of construction permits. Finally, it appears that press freedom is most effective in combating collusive corruption, and that its impact is highly concentrated in democracies and near-democratic societies.

Corruption provides some businesses with unfair advantages while raising the cost of doing business for all. It is possible that larger firms are targeted for bribes and are better able to absorb such costs. Therefore, our findings suggest that press freedom may help to ensure a level playing field and reduce significantly the cost of doing business. For businesses, our findings suggest that understanding the media environment should be essential for firms engaging in cross-border activities. For governments and policymakers, our findings suggest that press freedom is an important weapon in the fight against corruption domestically and globally. International efforts to control corruption such as the OECD's Anti-Bribery Convention should

be matched by efforts to promote press freedom; which, although it is considered a fundamental human right in several international treaties, is continuously under threat across the globe.¹¹

Appendix

Table A1. Political, Legal, and Economic Components of Press Freedom

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Bribe	Bribe	Bribe	Bribe	Obstacle	Obstacle	Obstacle	Obstacle
FH Legal	0.45** (0.199)			0.22 (0.309)	0.22** (0.110)			0.09 (0.222)
FH Political		0.39** (0.175)		0.24 (0.254)		0.19** (0.082)		0.10 (0.137)
FH Economic			0.43* (0.256)	0.02 (0.333)			0.23* (0.121)	0.05 (0.213)
Democracy	0.04 (0.281)	0.02 (0.271)	-0.10 (0.253)	0.08 (0.286)	0.16 (0.134)	0.15 (0.132)	0.10 (0.121)	0.18 (0.137)
GDP per capita (log)	-5.98*** (1.134)	-5.79*** (1.150)	-6.15*** (1.169)	-5.77*** (1.144)	-0.04 (0.546)	0.05 (0.544)	-0.10 (0.529)	0.06 (0.545)
Openness (log)	2.20 (2.199)	2.92 (2.266)	1.81 (2.166)	2.70 (2.224)	1.98* (1.009)	2.33** (1.030)	1.79* (0.995)	2.18** (1.044)
OECD	-2.07 (2.243)	-2.29 (2.141)	-1.31 (2.280)	-2.06 (2.303)	-3.17** (1.553)	-3.28** (1.508)	-2.73* (1.645)	-3.06* (1.654)
Sub-Saharan Africa	-8.00** (3.135)	-7.54** (3.244)	-8.71*** (3.215)	-7.57** (3.202)	-1.01 (1.390)	-0.79 (1.418)	-1.33 (1.380)	-0.84 (1.440)
Latin America, Caribbean	-13.64*** (4.715)	-14.48*** (4.856)	-13.32*** (4.727)	-14.11*** (4.828)	0.49 (2.464)	0.08 (2.484)	0.67 (2.420)	0.33 (2.479)
Constant	64.34*** (11.718)	62.44*** (12.169)	66.78*** (12.347)	61.04*** (12.244)	4.33 (5.806)	3.44 (5.569)	5.03 (5.468)	2.55 (5.670)
Observations	193	193	193	193	193	193	193	193
Year dummies	YES	YES	YES	YES	YES	YES	YES	YES
R-squared	0.413	0.414	0.408	0.416	0.115	0.117	0.111	0.119

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.

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¹ See for example the literature on corruption's effect on growth (Mauro, 1995), investment (Wei, 2000), and poverty and inequality (Gupta et al., 2002).

² These papers were released by *Süddeutsche Zeitung* (SZ), a German newspaper with the cooperation of the International Consortium of Investigative Journalists (ICIJ).

³ In addition to these direct costs, recent studies also find that corruption affects the business environment through excessive red tape (Breen and Gillanders, 2012), less efficient public investment (Del Monte and Papagni, 2001), and poor infrastructure (Tanzi and Davoodi, 1997; Kenny, 2009; Gillanders, 2014), not to mention broader negative effects on society.

⁴ The empirical literature is largely uniform on this point. However, Vaidya (2005) presents a theoretical model that allows for collusion between an independent media and government. The model suggests that perverse incentives are possible which favour corruption.

⁵ This argument is in line with the implications from an emerging literature that sees the business press as an information intermediary (Bushee et al, 2010; Cohen et al, 2017). Also, see Dyck *et al.* (2008) for a further analysis of the corporate governance role of the media.

⁶ The full methodology can be found at <https://freedomhouse.org/report/freedom-press-2017-methodology>.

⁷ Our results are robust to dropping the three countries in which no firms report any bribery.

⁸ Brunetti and Weder (2003) consider construction permits as extortive but we think it fits better as collusive. Should the act of corruption be revealed, the firm stands to lose a costly premises or otherwise face serious costs if it should not have gotten the permit in the first place. In other permitting cases, the firm may wish to reveal corruption has taken place as it was entitled to the service and faced predatory behaviour from an official.

⁹ This finding is interesting in light of Djankov *et al.* (2002), who find that countries with heavier regulation of entry have higher corruption.

¹⁰ There was no statistically significant association in the other contexts in business in which we tested the interaction of democracy and press freedom.

¹¹ See Article 19 of the UN Universal Declaration of Human Rights (1948); Article 19 of the International Covenant on Civil and Political Rights (1966), and Article 10 of the European Convention on Human Rights (1950).