Transparency and Corruption

The Conditional Significance of a Free Press

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Abstract

Is making political institutions more transparent an effective method for combating corruption? Common wisdom in the debate and research on the causes of corruption answers strongly in the affirmative. We argue that this optimistic view is both right and wrong. Transparency may be an important medicine against corruption, but only under certain conditions.

In order to capture this conditionality the concept of transparency must be distinguished from the interrelated but qualitatively different concepts of publicity and accountability. Facing increased risks of having information about ones bad behaviour made publicly available (transparency) is not enough to affect elite actors' behaviour, if the information is not likely to be broadly spread, processed and utilised as a ground for putting sanctions on these actors. The theoretical argument is tested in the paper by analyzing the interaction effects between the degree of freedom of the press (as indicia of transparency), free and fair elections (indicating the presence of an accountability mechanism) and the level of education (a condition for publicity) in a cross-country study of 107 countries. The results demonstrate that the failure of previous research to analyze interaction effects have led scholars to draw inadequate and misleading conclusions about the link between transparency, democracy and corruption. Furthermore, it is argued, these findings will help to solve a puzzle in the previous research on democracy and corruption. Taken one at a time transparency and free and fair elections will not help much to reduce corruption. Taken together, on the other hand, they can be a powerful team.

"Publicity is one of the purifying elements of politics. Nothing checks all the bad practices of politics like public exposure."[1] This firm belief of American president Woodrow Wilson led him to advocate his famous slogan of 'open covenants openly arrived at' in the international negotiations of the early 20th century. Wilson was convinced that open doors would air out any bad smell of factionalism and other forms of immoral behaviour occurring in the closed negotiation rooms.

Jeremy Bentham was another strong advocate of putting the public light on political decision-makers. It motivates public officials to do their duty, he argued:

> The greater the number of temptations to which the exercise of political power is exposed, the more necessary is it to give to those who possess it, the most powerful reasons for resisting them. But there is no reason more constant and more universal than the superintendence of the public.[2]

Later, negotiation theorists and researchers in public administration have pointed to potential adverse effects of 'too much' transparency, in particular with respect to the efficiency of decision-making processes and the capacity to negotiate compromise solutions. "Although it is certainly important that the public have access to relevant information about administration, working in a goldfish bowl can rarely be as efficient as working in private", according to Guy Peters.[3] Fisher, Ury and Patton even claim that "a good case can be made for changing Woodrow Wilson's slogan 'open covenants openly arrived at' to 'open covenants privately arrived at'", arguing that negotiators will produce wise agreements more easily in private than in public.[4]

Still, great hopes are tied to the power of the public light to raise the quality and moral character of public policy.[5] The increase in the usage of the term transparency in the last decade or so is dramatic. And most debaters seem to agree with Vishwanath and Kaufmann when they claim that "arguments against more transparency while merited in a few instances, are often not only limited in application, but fundamentally flawed".[6]

In the research and debate on the causes of and remedies for corruption the purifying power of transparency is a well established assumption. Montinola and Jackman, for instance, argue that "the freedom of information and association characteristic of democracies helps monitoring of public officials, thereby limiting their opportunities for corrupt behaviour".[7] Kaufmann considers transparency as an important development issue due to its powerful effect on

corruption. "Transparency promotes development indirectly, through better control of corruption and capture, which in turn we know are breaks to development and growth."[8]

A particularly attractive feature of transparency as a potential medicine against corruption is that it is a factor which seems to be feasible to implement by institutional reform. In one of the most comprehensive studies of the causes of corruption so far Treisman found that many of the important factors explaining corruption are long-term economic and socio-cultural variables, such as economic development, religion and colonial heritage. Free and fair elections also had a negative effect on corruption in Treisman's study—but only after 40 years! Introducing free elections and party competition today would not help to bring down the level of corruption for a long time.[9] From a central reformers' perspective, thus, a factor which can be used in anti-corruption reforms and have an effect in the present time would be especially welcomed.

But does transparency really make a difference for corruption—what evidence do we have? Gerring and Thacker are not convinced that transparency does decrease the incidence of corruption. "It may have ambivalent or even negative effects", they argue. "The existence of more information about putatively corrupt activities does not necessarily decrease information costs".[10] An overload of information and competing claims about corruption may make it more difficult for the public to know the good ones from the bad ones, according to this argument.

In our view the fear of information overload seems to be somewhat overanxious. Furthermore, as we will demonstrate, three out of four comparative studies of corruption that have included some measure of transparency have indeed found significant negative effects. Probably the most important effort so far is that of Brunetti and Weder, who present very promising effects of press freedom in a cross-country study of 68 countries (in the main regressions). "A complete move to press freedom would lead to a dramatic reduction of corruption in the average country", they argue.[11] Their data suggests that "an improvement of one standard deviation in press freedom could reduce corruption between 0.4 and 0.9 points" on a scale from 0 to 6. By way of illustration, the authors calculate what an increase in the freedom of the press would mean for a couple of countries. Thus, if Nigeria would attain the same level of press freedom as Norway, which has the highest score in the index, "it would mean a reduction in corruption to the level of Belgium"[12]!

Our starting point in this article, however, is the conviction that the research so far has not been able to give the potential effect of transparency on corruption the rigorous test it deserves. One reason, as we will develop in more detail in the next section, is that the present research has not

considered the conditionality of the transparency effect, i.e. the possibility that transparency may be dependent on other factors in order to do the job.

A second and connected reason is the unpersuasive treatment of democracy as a factor potentially affecting corruption. The present research has failed to acknowledge the fact that democracy has two core components—free and fair elections to institutions with supreme power and civil liberties such as freedom of speech, assembly, religion, freedom of the press, right to access public documents and other instruments for obtaining transparency. The indices for democracy used in studies of corruption typically include only the electoral part. That means both that the effect of democracy on corruption may be underestimated and that it is impossible from these studies to distinguish between the effects of the different components of democracy, including transparency. As we will demonstrate considering the circumstances under which free and fair elections and transparency may affect corruption are crucial to understanding their significance.

In this paper we first present a theoretical model arguing that transparency in itself is not enough to affect behaviour. It must be accompanied by a public willing and able to execute sanctions in order to make a difference for elite behaviour. The causal mechanisms behind effects of transparency on behaviour are assumed to be the anticipated probability of publicity and the subsequent increased risk for sanctions of bad behaviour that such publicity incurs on the actors if sufficient accountability mechanisms are in place.

The model is subsequently tested in a cross-national comparison of more than a hundred countries. Subjective indexes of corruption are used as dependent variables. As a proxy for transparency we use two different data collections on freedom of the press. The more freedom of manoeuvre for journalists to report on corrupt acts, we assume, the larger the chances that information on corrupt activities on behalf of both private and public actors will be made available to the public.

The results of the statistical analyses, which are robust to alternative measures of the key variables, suggest that a revision and specification of existing claims about the effects of transparency on corruption is needed. There is indeed a substantial negative effect in accordance with most existing claims, but the effect is dependent on external factors, in particular the degree of free and fair elections (accountability) and the level of education among the population (as a condition for publicity). These findings support the hypothesis that simply making information available is not enough to affect behaviour.

Thus, the optimistic conclusions of Brunetti and Weder with respect to the potential of transparency to reduce corruption are misleading. The effect of press freedom is indeed impressive in countries which have a relatively high level of electoral democracy and education, but minimal and statistically insignificant in less democratized countries with low levels of education. Introducing a Norwegian level of press freedom in Nigeria (which is close to the bottom in the corruption ranking on place 108) would not make them reach the corruption level of Belgium (on 26th place). Taking into account only the fact that Nigeria has a relatively low score on the free and fair elections variable (thus leaving out the additional effect of education, for which we do not have data for Nigeria) it will rather make it to the level of Albania (on 81th place). However, even this more modest improvement is burdened by so much statistical uncertainty, as we will demonstrate, that we cannot say with a reasonable degree of confidence that Nigeria would move at all in the ranking.

One important conclusion with respect to development policy, thus, is that reforms focusing on increasing transparency must be accompanied with measures at strengthening the public's capacity to sanction bad behaviour if we are to see any effects on corruption. Transparency is not the quick fix it may seem to be, but is dependent on other factors which may take a long time to improve.

Another conclusion concerns the research on democracy and corruption. The interaction effect of freedom of the press and free and fair elections may be an important part of the solution to some puzzling findings in earlier studies. The reason why Treisman and others have found weak or lagged effects of democracy on corruption is probably that the correlation is non-linear, as demonstrated by Montinola and Jackman.[13] We suggest that the interaction effect between electoral democracy and civil liberties such as transparency may be one explanation to the threshold effect. Taken one at a time transparency and free and fair elections will not help much to reduce corruption. Taken together they are a powerful team.

Why transparency is not enough

The concept and phenomenon of transparency has for some time been subject to an increasingly broad and lively debate among social scientists, both in political science, law, economics, public administration, psychology and philosophy. This debate concerns normative issues of whether transparency is good thing (instrumentally and/or intrinsically) which should be promoted by institutional reforms (to which the answer usually is yes, but where there are

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also some objections as noted before) and empirical questions on what the effect on transparency will be on different variables and under different circumstances (for example the effectiveness of juridical and political processes and economic markets, the quality of decisions taken, the democratic status of political processes, etc).[14]

It is hardly surprising that the concept of transparency is used in many ways and with different meanings in this discussion. In our view this is not a big problem as long as the state of the field to a large extent still is about brainstorming, trying out different ideas and deriving hypotheses. We believe however that as scholars are moving towards empirical testing some conceptual convergence would be preferable. In particular, as we will argue in this article, transparency should be distinguished from two closely related concepts; publicity and accountability. Today these concepts are often used interchangeably, with the effect that important links between the three different phenomena are being missed. The following simple model explains how this is the case with respect to studies of corruption.

We assume that a rational politician or civil servant will choose to take a bribe or commit some other corrupt act if the perceived benefit of this act is large enough to exceed the uneasiness created by the combination of the potential costs of accountability and the perceived risk of actually having to face these costs. Corruption will occur if

$$BC > PrA*CA$$

where

- BC represents the perceived benefit of the corrupt act,
- PrA refers to the probability that the actor will be held accountable for this act, and
- CA indicates the costs incurred on the actor if he or she is eventually held accountable.

Thus, corruption can be prevented by increasing the risk or the costs of accountability or by decreasing the benefits of corruption. Here we leave aside factors potentially affecting the perceived benefits of corruption (including both economic factors—such as the level of wages of public officials and the size of the public sector, which is sometimes argued to determine the 'supply of rents'—and norms affecting the perception of corruption) and the possible costs of

accountability (including for instance criminal law or loss of status and privileges connected to political power). Transparency enters the equation as a possible determinant of the probability of accountability. The point we want to make here, however, is that the link between transparency and accountability is not as straightforward as is often assumed.

First of all accountability is primarily a function of publicity rather than transparency. Publicity, one can say, is a causal mechanism linking transparency and accountability. These concepts may be distinguished as follows. In our view the concept of transparency should be reserved to capturing the accessibility of information. Transparency literally means that it is possible to look into something, to see what is going on. A transparent organisation, political system, juridical process or market is one where it is easy for anyone, outside or inside, to acquire the information he or she needs to take decisions or to form opinions about issues which he or she is interested in. The information is there for those who are willing and able to seek it.

Publicity on the other hand means that the information is actually spread to and taken in by a broader audience. Thus, while transparency implies that there is documentation available on the proceedings of a particular institution, publicity means that the content of this information has also become known among a broader public. Clearly transparency promotes publicity. In most cases information that is easily accessible would stand a greater chance of also being spread (although one can imagine that secret information that is leaked to the press may sometimes be more interesting to publish than information from official documents—just because it was secret). But there will be no publicity, i.e. no actual exposure of actions to a broad audience, no matter how transparent the process or the institution in question is, if the available information about these actions is left unattended.

There may be several reasons why transparent information is not spread to a broader public. Information overload is one, as argued by Gerring and Thacker. Too much information on a certain issue may have the effect that important and publicly accessible facts are being drowned by other less important facts. Lack of mediators, such as a well functioning mass media is another. Furthermore, a lot of information which is accessible, such as public documents which are subject to freedom of information laws, will never be spread to a broader public simply because they concern issues which are immediately interesting only to a small group of especially interested actors.[15]

Another reason why transparent information may not become publicly spread, one which we specifically addresses in this article, concerns the capacity of the public to access and process

the information. We hypothesise that especially the level of education is an important link between transparency and publicity. The higher the level of education the stronger the capacity of people to access and process information from the media and public records, and subsequently the higher the risk—from the policy-makers' perspective—of publicity. The probability of publicity thus is a function of the level of transparency and the level of education among the public. Ceteris paribus, higher levels of transparency and education should increase the probability of publicity.

However, and this is our second point in this context, while higher risks of publicity usually would imply higher risks of accountability, and therefore less corruption and other forms of 'bad behaviour', this link is also not an automatic one. Again we need to look more closely at the concepts being used. Accountability is a concept which has flooded the political science and public administration literature for the last decade or so. We agree with Behn that it is usually hopelessly ill defined: "What do we really mean by this ubiquitous admonition to 'hold people accountable'? The phrase rolls off one individuals tongue and into another's ear without registering in either's mind. Indeed, using the phrase suggests that no real thinking is going on."[16] We have no reason here to debate the real meaning of the concept of accountability, but we do wish to separate it from transparency and publicity. In our view accountability involves something more than just having one's actions publicly exposed. In case of misconduct accountability should imply that some kind of sanction is imposed on the actor. Being held accountable involves 'paying the price' for one's actions. Sometimes the embarrassment and social stigma of having one's bad behaviour exposed to the public may be a sufficient sanction. In other cases an actor may not care about what the public thinks. When it comes to corruption the sanction would usually be determined by the criminal law and the courts, and for politicians in democracies also by the voters at election day.

Thus, while transparency promotes publicity, publicity promotes accountability by making the actions known and therefore possible to sanction. But publicity in itself is not enough to acquire accountability. It must be accompanied by some mechanism for sanctions. Increasing the risk of publicity will not induce any change in behaviour on the part of the policy-makers unless they believe that the public will go from awareness to action and actually impose the costs of accountability on them.[17] And in order to take that step, unless the misconduct of the policy-makers is so great that a proper revolution is provoked, there must be some formal institutions in place for holding the policy-makers accountable. Thus we propose that the probability of accountability is a function of the probability of publicity and the existing formal

accountability institutions. In politics the most important accountability institutions, and the one which we will address specifically, is free and fair elections. A democratic regime will have to be more concerned with not being revealed as corrupt than an authoritarian regime since the former risks being kicked out in the next election.[18]

As we will see later in this paper, the comparative studies made so far on the effect of democracy on corruption indicates that the link is more complicated than being just a matter of free and fair elections giving less corruption. In fact the correlation seems to be non-linear; highly mature democracies have the least corruption, while authoritarian regimes are less corrupt than semi-democracies or newly democratised countries. One reason for this somewhat mysterious relationship between democracy and corruption, we will argue, is that free and fair elections is not enough to increase the risk of accountability. As we have argued here a high risk of publicity is also necessary in order for the elections to be an effective instrument against corruption and other forms of misconduct.

Previous research on transparency, democracy and corruption

Why is corruption much more common in some countries than in others? In order to answer that question, which has important implications for development, growth and welfare[19], we need to compare conditions in different countries. The last decade or so an increasing number of studies have been engaged in doing such comparative work.[20] Important factors considered in these studies are economic variables such as trade and GDP, socio-cultural factors such as degree of integration with the international community, religion and colonial heritage, and institutional factors such as rule of law, democracy and type of electoral system. Probably the clearest and strongest correlation found in the literature is that between corruption and the level of economic development.[21] Less developed countries tend to be more corrupt than more developed countries. The correlation is most likely reciprocal. While corruption is an impediment to growth, "policies that boost growth are likely in the long run to reduce corruption".[22] Our study presented here is intended to be a contribution to this research field, with a particular focus on transparency and democracy. The significance of transparency and democracy for corruption has in our view not been adequately dealt with. In this section we explain why we believe this is the case.

Measuring democracy is a difficult thing. There are a number of cross-country data sets for comparative students to choose from, of which the quality varies both in terms of validity and

reliability.[23] Most studies of corruption and democracy have used some version of Freedom House's index of political rights (which before 1989 was referred to as Gastil's index of political rights, as it was developed by Raymond Gastil), which means that the concept of democracy in these studies refers to free and competitive elections.[24] The political rights index is constructed from a number of questions which have to do with the citizens' rights to elect freely, and under competitive circumstances, their political representatives. These elected representatives must also be in possession of real political power in order to score high as democracies.

One obvious problem with this way of measuring democracy is that it captures only half of what we usually mean by democracy. Civil liberties such as freedom of speech, organisation, religion and freedom of the press are core parts of the theoretical concept of democracy as we use it daily and as developed by democratic theorists such as Dahl and others.[25] A country is fully democratic only when the rulers are elected and when civil liberties apply.

Empirically these two components of democracy are correlated. Countries that score high on one index will often do well also on the other, as can be seen in table 1, which lists levels of electoral democracy and press freedom for 111 countries. But the correlation is far from perfect. It can not be taken for granted that countries which have free elections are careful to acknowledge civil liberties.

The failure of the research on corruption so far to acknowledge civil liberties and distinguish it from the electoral component of democracy may have led scholars to draw inadequate conclusions. Given the common claim that transparency is detrimental to corruption—how do we know that the findings with respect to competitive elections are not in reality to a large extent produced by the partly accompanying transparency and other civil liberties? As long as civil liberties are not separated and controlled for conclusions with respect to the importance for corruption of elections may be subject to omitted variable bias.

Vice versa, the same problem applies to those studies which actually have studied the effect of some component of civil liberties, typically freedom of the press, on corruption, but have failed to control for electoral democracy in an adequate way. To date we know of four studies which in different ways have tested the effect of freedom of the press on corruption. As we will see one of those failed to find a significant effect, while the other three did find significant negative effects of freedom of press on corruption. In our view, however, these studies suffer from (in some cases among other things) insufficient controls for free and fair elections.

Clearly, the most ambitious and rigorous effort so far to capture the significance of a free press for combating corruption is that of Brunetti and Weder, which was mentioned in the introduction.[26] They test two different indices of press freedom and four different measures of corruption.[27] The results demonstrate a sizeable negative effect of press freedom on three of the four corruption indexes. "All in all the results indicate that press freedom might be an important check on corruption".[28]

Our concern with Brunetti and Weder's study relates to the control variables. Their main political institutional control variables are "the quality of the bureaucracy" and "rule of law", indexes taken from the International Country Risk Guide (ICRG). One problem is that both seem to be close to the dependent variable (the rule of law variable includes for instance "sound political institutions"). But most importantly there is no control for electoral democracy. ICRG's rule of law variable is a very broad measure of political institutional reliability and legitimacy, but it is not a measure of democracy.[29] In fact rule of law seems to be partially capturing economic development, as GDP per capita—which usually is strongly correlated with democracy—is insignificant in Brunetti and Weders regressions. Chowdhury, on the other hand, has indeed separated and controlled for electoral democracy and press freedom.[30] His results indicate a significant negative effect of press freedom on corruption, under control for electoral democracy and GDP per capita.[31] Unfortunately, Chowdhury's analysis suffers from two other problems, which in our view calls for a cautious interpretation of the results. First, as a measurement of press freedom he uses Freedom House's index for press freedom from 2002. This index, however, includes corruption as one of its component parts (under the heading "economic pressure and control of the media"). Secondly, he uses Vanhanen's measure of electoral democracy, which suffers from sever validity problems. Vanhanen measures democracy by looking at two criteria: 1) The share of the population which turn out to vote in elections, and 2) the share of parliamentary seats going to the largest party. The second criterion is supposed to measure party competition, but it does, as Hadenius and Teorell note, "in large parts miss the mark".[32] Rather than party competition it captures party fractionalisation. Even worse, however, is the first criterion. A high turnout in the elections is not a democratic value in itself. Elections may be manipulated and elected assemblies may be powerless. In some countries voting is compulsory. Thus, "the most democratic country over the last 30 years, according to this index, was Italy in 1992—on account of the pronounced party divisions and mandatory voting in that country".[33] Furthermore, the fact that Vanhanen uses the share of the population, rather than eligible

voters, has the odd effect that countries with a younger population (a high degree of infants below the voting age) score lower on the democracy index.

Besley and Prat in their study focus primarily on the significance of media ownership structures—to what extent the media is state owned, privately owned or have foreign owners and the degree of ownership concentration.[34] Freedom of the press and corruption are treated as dependent variables to ownership structure.[35] Their main findings indicate that state ownership and concentrated ownership are associated with higher levels of corruption and lower levels of press freedom, while high degrees of foreign ownership works in the opposite direction. However, one regression also treats freedom of the press as an independent variable affecting corruption. The result is a significant negative effect, thus supporting Brunetti and Weders findings. The problem with Besley and Prat's study is, again, the way they control for free and fair elections. The only indicator defining electoral democracy is "whether a country has held a legislative election in the previous five years".[36] But whether a country has held elections at all is a poor indicator of free and fair elections.

Lederman, Loayza and Reis Soares do include both democracy and freedom of press in their study.[37] When GDP was introduced into their regressions, however, the significant effect of press freedom disappeared. They concluded that "freedom of press seems to be partially capturing the effect of economic development on corruption".[38] Unfortunately, Lederman, Loayza and Reis Soares fail to specify the content of their indicia for democracy any further than stating that it is a "dummy for a regime with democratic characteristics, not run by a military officer". The data for the dummy variable is from Beck et. al. 2001. This is not very helpful however since Beck et. al. in their database on political institutions has a long list of indicators, and its unclear how Lederman, Loayza and Reis Soares have compiled their dummy variable. For sure it does not include any subjective assessments of whether elections are in practise free of manipulation, as this is not included in Beck et. al.'s data set.[39]

Our objections towards these studies are certainly not intended to imply that they are without value with respect to the issue of transparency and corruption. The fact that three out of four studies indicate a significant negative effect is strong indicia that transparency, as measured by freedom of the press, can reduce corruption. But we do insist that the issue of transparency and corruption has not yet been given the rigorous test it deserves.

Furthermore, as we argued earlier, transparency alone is unlikely to affect corruption. The causal link goes via increased probabilities of publicity and accountability. These factors in turn depend not only on transparency, we have hypothesised, but also on the level of education

(which increases the capacity of people to access and process available information) and the formal accountability institutions in place (most notably elections). At least partial empirical support for this causal chain is given by Adserà, Boix and Payne in their analysis of the effects of newspaper circulation on corruption. Their data—both time series and cross-national data—indicates a weak effect of electoral democracy on corruption, but a much larger effect of the interaction between newspaper circulation and free elections. In our terminology newspaper circulation would be a proxy for publicity, while electoral democracy represents accountability institutions. Adserà, Boix and Payne demonstrate that both are needed to produce an effect on corruption. Since they do not introduce civil liberties or press freedom in their analysis, however, they are not really testing the effect of transparency.[40]

Thus, in what follows we will include analyses of the interaction effects of transparency and education and electoral democracy, which earlier studies have failed to analyse. As Treisman has noted, one of the reasons why corruption is difficult to study is that "its many likely determinants interrelate in complicated ways".[41] Still, the comparative research so far has not taken interaction effects into account (Adserà, Boix and Payne being an exception). As we will demonstrate, in this case it proves to be crucial for understanding the relationship between transparency and corruption.

The data

It is often said that corruption is hard to study empirically, not least because criminal activities are difficult to observe directly. In order to capture the dependent variable comparative scholars have relied on indexes of perceived corruption constructed from surveys with inhabitants, domestic and foreign business people and country experts. The surveys include questions about perceptions of the degree of corruption in the state apparatus and the likeliness that the respondents would be asked for bribes in different situations. Some of these indexes are used in this study as well. Our main data set is the World Bank Governance Indicators Dataset. We also use the data bases of Transparency International and the International Country Risk Guide to corroborate our results. All three indexes have been frequently utilized in previous research.

One problem with these indexes is that it is difficult to say exactly what they are measuring. The usual definition of corruption in the literature is something a long the line of "the improper use of public office in exchange for private gain".[42] Obviously a very broad variety of actions

will fit this definition. Corruption thus comes in many forms. The literature speaks of bureaucratic and political corruption, grand and petty corruption, collusive and extortive corruption, black, white and grey corruption, etc.[43] However, these distinctions are blurred as they are mashed together in the indexes.

Another problem with subjective indexes is that perceptions are often biased. However, as Treisman has argued, if these indexes merely indicate a shared bias, rather than a common perception of reality, as one could argue, it is a surprisingly widely shared bias as the different indexes are usually highly correlated.[44] Thus, if we are unsure about precisely what these indexes are measuring, at least they are measuring the same ting… And while the value of subjective measures can be discussed, and is being discussed, it is clear that the research field would be very poor without them.

The primary independent variable in this study is transparency. And while there are other possibilities—such as looking at the existence of formal freedom of information laws or the degree of simplicity of regulations facing firms and the public (which is close to the public choice notion of 'big government' creating a 'supply of rents')[45], or using failure to report economic data to the UN or the World Bank as a measure of government opaqueness[46]—we believe that in studies of corruption the level of press freedom is a particularly suitable indicia. While formal access to documents and information may also be problematic for corrupt actors, making their activities more difficult to conceal, very few instances of corruption will turn up in public archives. Fact-digging journalists, however, are a real potential threat to those who wish to keep their back-door manoeuvres secret.

A free media is therefore a measure of transparency which is relevant to studies of corruption. Following our definitions of transparency and publicity the media will usually promote both. In its digging function it creates transparency, by making previously secret information available to the public. In its publishing function it creates publicity to this information, by spreading it to people. The indexes of freedom of the press will probably capture more of the former than of the later, as it directly concerns the ability of individual journalists to reveal instances of corruption. We will thus consider freedom of the press as primarily a proxy for transparency. Our main index for freedom of the press is Freedom House's. Their press freedom index of the year 2000 does not include corruption as one of its components, as later versions do, which makes it possible to use. The index includes indicators of laws and regulations that influence media content, political pressures and controls on media content, economic influences over media content and repressive actions (killing journalists, physical violence, censorship, self-

censorship, arrests, etc). The sources of the raw data, according to Freedom House, are "correspondents overseas, staff travel abroad, international visitors, findings of human rights and press organizations, a regular flow of foreign publications, a 24-hour news service, specialists in geographic and geopolitical areas, and reports of governments themselves".[47] We also test an alternative index of press freedom produced by Reporters Without Borders.[48]

To measure electoral democracy we use Polity's index. Polity's and Freedom Houses' indexes are the two that come out best in Hadenius and Teorell's evaluation of different democracy indices (although they are not precisely over-enthusiastic over these two indices either).[49] According to Hadenius and Teorell Freedom House scores reasonably well in terms of theoretical validity (when including civil liberties), but less well with respect to methodological reliability. In particular it is difficult to follow how the coding is carried out. Polity, on the other hand, has its strength on the methodological side, but is weaker in terms of validity, according to Hadenius and Teorell (mainly because civil liberties are excluded).[50] From our point of view most importantly is to note that Polity includes free and fair elections, while excluding civil liberties, thus making it a suitable measure of electoral democracy. We use Polity because the correlation between this index and the press freedom indexes are somewhat lower than for Freedom House's political rights index, which decreases the risk for multicollinearity.[51]

Education is also introduced in the analysis both as a control variable and as an interaction variable. We thus want to test both if some of the correlation between freedom of the press and corruption can be accounted for by the level of education and if higher levels of education—as we hypothesise in the theoretical model—increase the effect of freedom of the press. We use data from the World Bank on the expected number of years of formal schooling that children are expected to receive, including university education and years spent in repetition. This can be seen, according to the World Bank, as "an indicator of an education system's overall level of development". [52] (For robustness we also test two other measures of education.)

The two most important control variables besides democracy—following the current research on the causes of corruption—are economic development and rule of law. Economic development is measured by GDP per capita. Rule of law is obviously trickier to capture. We use data from UNDP which includes indicators of both 'law' ("the strength and impartiality of the legal system" and 'order' ("popular observance of the law").[53]

Table 1, on the next page, shows the individual scores on corruption, freedom of the press and electoral democracy for the 111 countries included in the data set, ranked by the level of corruption.

[Table 1 here]

Analysis and results

First we test the unconditional average effect of press freedom on corruption, to see if we can replicate the findings of previous studies—indicating a sizeable effect—also while controlling for electoral democracy. The base regression includes press freedom and electoral democracy, along with the two most basic additional control variables—economic development (as measured by GDP per capita) and rule of law. The results of the OLS regression for the base model are shown in the first column (model 1) of table 2. Press freedom has indeed a significant negative effect on corruption, controlling for electoral democracy, economic development and rule of law. The effect is also relatively large—almost the size of rule of law. Both the effects of rule of law and of GDP per capita have the expected negative signs and are statistically significant. There is no significant effect of electoral democracy when freedom of the press is included in the model.[54]

[Table 2 here]

The second model adds two control variables, years of democratic rule and education, which may be correlated both to press freedom and to corruption. As discussed earlier one finding in the previous research is that while the current level of democracy (usually measured as electoral democracy) may show weak or insignificant effects on corruption the number of years of democratic rule could be of importance. We have also argued that the level of education should be of importance for the link between transparency and corruption. Here education is introduced as an external control variable.

The results of model 2 are given in the second column of table 2. The press freedom effect remains negative and sizeable. In fact it even increases, so that it is now larger than rule of law. Just like the current level of electoral democracy, there is no significant effect of having had a longer experience of democratic rule.[55] Education, as measured by the average expected years of schooling has no significant effect at all. However, although not shown in table 2, when we substitute expected years of schooling for the alternative measure of education—primary

completion rates (the percentage of students completing the last year of primary school)—there is a significant positive effect of education. A higher degree of lower-level education would thus be associated with higher levels of corruption. At the moment we have no reasonable explanation for this counter intuitive result. It adds to the equally ambiguous findings of previous research with respect to education and corruption.[56]

In model 3 we have added two additional control variables, which have proven to be important in earlier studies of corruption. Openness for international trade, which increases competition and exposes domestic actors to norms of the international community, is measured by the sum of exports and imports as a share of GDP. We have also included a dummy variable for British colonial heritage (1 for countries which are former British colonies, 0 for others), which have shown important effects in some earlier studies.[57] As can be seen in the third column of table 2 freedom of press is still significant at a reasonable degree of uncertainty. Openness to international trade shows no significant effect, while the effect of being a former British colony is highly significant and remarkably large.[58]

Alternative indicators of the main variables

In order to test the robustness of the findings of the multivariate regressions we have experimented with some alternative indices of the key variables, corruption and press freedom. The first two columns of table 3 demonstrate the results of the base model, using the press freedom index of Freedom House, for the corruption indexes of Transparency International and ICRG. The subsequent three columns substitute the Freedom House index for the press freedom index of Reporters Without Borders.

[Table 3 here]

As table 3 demonstrates the press freedom effect is somewhat smaller in absolute terms and is more uncertain in some of the alternative models. But the effect is still negative in all models and significant at the 5-percent level in four out of six specifications (including the original model). In the models using the ICRG corruption index, for some reason, the degree of explained variation is much lower than in the first models using the World Bank and the Transparency International indexes.

The multivariate analyses so far seem to confirm the main results of the studies cited earlier, indicating a strong negative effect of freedom of the press on corruption under control for other important determinants of corruption. Furthermore, we can now conclude that this effect is not

produced by the correlation between press freedom and electoral democracy, which the previous studies had failed to investigate adequately.

However, this is not the final word on the link between transparency and corruption. Figure 1 illustrates the bivariate correlation between freedom of press and corruption.

[Figure 1 here]

Looking carefully at the picture it actually seems to show a clear negative effect of press freedom on corruption only at press freedom levels of ca 7 and higher, on the scale from 0 to 10. Thus, speaking of an "average effect" may be misleading, as the effect seems to be much stronger in countries which already have a relatively high degree of press freedom. Running the same base model as before, but excluding countries with a high level of press freedom (higher than 6) demonstrates that this is the case (table 4).

[Table 4 here]

Increasing press freedom marginally in countries which have a low level to begin with does not significantly affect corruption. One interpretation here may be that a moderately free press is not enough. In order to be a check on corruption press freedom must reach a certain level. Another possibility, following the theoretical model earlier, is that interaction effects are involved. Next, we demonstrate that this is indeed the case.

Interaction effects
We posited before that corruption will occur if the perceived benefits of the corrupt act supersede the discomfort of worrying about the costs of accountability. Transparency may enhance this discomfort by increasing the risk of publicity, which in turn may increase the probability of accountability. But transparency itself is not enough to produce this effect, we argued. In order to increase the probability of publicity, i.e. the chances that the information made available by transparency institutions (for instance by an actively digging press) is widely spread among the public, the public must be capable of accessing and processing the information. The level of education, we assume, is an important link between transparency and publicity. Thus, we expect that increasing the level of education will enlarge the effect of press freedom on corruption.

But a high probability of publicity is also not enough to affect corruption. In order for increasing risks of publicity to enhance the uneasiness of corrupt policy-makers there must be some mechanisms of accountability—including costly sanctions—in place, which may be activated by such a public exposure. The effect of transparency therefore should be larger in countries which have a higher degree of electoral democracy, i.e. in countries where public exposure of corruption may imply getting kicked out of office.

In the statistical analysis the interaction variables are created by the products of the indexes for freedom of the press and electoral democracy (FoP*Electoral dem.) and education (FoP*Education) respectively. They are introduced into the base regression, including also freedom of the press, electoral democracy, economic development and rule of law. Table 5 presents the results.

[Table 5 here]

Model 1 in the first column of table 5 shows the base regression with the interaction variable for press freedom and electoral democracy included. As hypothesised there is a significant negative interaction effect. Increasing the level of electoral democracy with one unit, on the scale from 0 to 10, adds -0.08 to the press freedom effect. It is also seen that press freedom has no significant effect in authoritarian regimes (when the level of electoral democracy is zero, which is how the value of FoP in model 1 (0.15) should be interpreted). Even more striking perhaps is the strong and significant positive effect of electoral democracy, in countries with no press freedom (which is how the value of electoral democracy (0.39) should be interpreted). In fact, although not shown here, the effect of electoral democracy only switches to negative at levels of press freedom higher than 5 (on the scale from 0 to 10). We will return to this finding later on.

But looking at the regression coefficients only goes some way to understanding the relationship between press freedom, electoral democracy and corruption. We can see that for purely authoritarian systems—i.e. when there are no formal accountability mechanisms in place—increasing press freedom does not reduce corruption. But what about countries which have at least some degree of free and fair elections? Figure 2 plots the marginal effect of press freedom for different levels of electoral democracy.

[Figure 2 here]

The negative interaction effect of freedom of press and electoral democracy is illustrated by the slope of the line, representing the marginal effect of press freedom on corruption at different levels of electoral democracy. The more free and fair elections the larger the (negative) press freedom effect (which for the lowest levels of electoral democracy is even positive). The dotted lines in figure 2 illustrate the confidence interval (95%), i.e. the degree of uncertainty of the estimated marginal effect of press freedom. The key to reading the figure is to see whether the zero-line is encompassed within this interval or not. If it is, we cannot say with certainty that there is a marginal effect of press freedom on corruption at all. As can be seen in figure 2 only at electoral democracy levels higher than 6 can we be reasonably certain that there is a negative effect. The precise magnitude of the effect, however, is subject to a relatively large uncertainty. We conclude from model 1 in accordance with our hypothesis that taken one at a time freedom of the press and electoral democracy will not help to stop corruption (especially not electoral democracy, which may even be contrary). But taken together they can be a powerful team. However, we also posited that publicity is a necessary link between transparency and accountability. Higher levels of education should increase the probability of publicity, thus we expected a negative interaction effect with press freedom, indicating that higher levels of education will amplify the negative effect of press freedom on corruption. Model 2 in table 5 shows that this is also what we have in the data. Increasing the level of education with one unit on the scale from 0 to 10 will at the same time increase the negative effect of press freedom on corruption with 0.15 units. The results of model 2 also demonstrates that there is no significant press freedom effect at all in countries for which education levels approach zero. Our hypothesis about education being an important condition for the transparency effect has been verified. Figure 3 describes the conditional effect in more detail.

[Figure 3 here]

The interpretation of figure 3 is the same as with figure 2 before. Higher levels of education clearly boost the press freedom effect. A definite press freedom effect is not found until a country reaches an educational level of ca 4, but it increases sharply thereafter.
However, one conclusion that can not be drawn here is that higher levels of education are an effective medicine against corruption. The effect of education on corruption is more complicated than that, as noticed before. In fact, when we calculate the net effect on corruption from model 2 in figure 3 of raising the level of education we find that it will actually be an

increase in corruption—despite the fact that it also strengthens the negative effect of press freedom. Thus, education seems to be a double-edged sword. It increases the capacity of people of holding elite actors accountable, but still, for some other reason (which we do not know), corruption increases with higher levels of education.[59] As before we have also run robustness tests for all alternative indices of the key variables.[60]

Finally, model 3 in the third column of table 5 investigates the press freedom effect on corruption, considering the interaction effects with electoral democracy and education at the same time. The interaction with electoral democracy is still negative in this model, but weaker and no longer statistically significant, while the interaction with education is about the same as in model 2.[61] That does not necessarily mean, however, that the level of democracy does not affect the marginal effect of press freedom on corruption. It only means, in line with our hypothesis, that the interaction effect of press freedom and free and fair elections depends on the level of education. Figures 4 and 5 illustrate, plotting as before the marginal effect of press freedom for different levels of democracy, but this time with the level of education specified at a low and a high level respectively.

[Figure 4 here]

Figure 4 shows the marginal effect of press freedom on corruption at a very low level of education (education = 1). The effect is positive for electoral democracy levels lower than 8. However, the zero-line is clearly within the confidence interval for every level of electoral democracy. Consequently, we cannot be confident that there is any effect of press freedom at all in countries with very low levels of education regardless of the level of electoral democracy. (In practise there are few countries which have such a low level of education, which is a contributing factor to the high degree of uncertainty.)

[Figure 5 here]

Figure 5, on the other hand, indicates that for countries with a very high level of education (10) the press freedom effect will be negative even in authoritarian systems. A higher level of electoral democracy still increases the press freedom effect, but free and fair elections are not necessary for having at least some negative marginal effect of press freedom on corruption. Although not shown here plotting the marginal effect of press freedom in this way for the

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intermediate levels of education indicate, for example, that at a medium level of education (education = 5) the press freedom effect starts to become statistically significant in countries with a medium level of electoral democracy (electoral democracy =5).

The findings in model 3 are in line with our hypotheses. Not even the highest levels of transparency and accountability will affect corruption if there is only a slim chance of publicity. And while formal accountability mechanisms do increase the effect of transparency, publicity seems to be the most important condition of the two.

Press freedom and the puzzling relationship between democracy and corruption

So far we have considered electoral democracy as a control variable and an interaction variable in order to better understand the significance of transparency for corruption. But if we also look at the interaction effect of press freedom and electoral democracy from the perspective of democracy, we may have an additional important finding here. Scholars so far have had much difficulties straightening out the implications of democracy for corruption. Press freedom may be one answer to this puzzle. [62]

The comparative research so far has produced contradictory and ambiguous results with respect to the link between democracy and corruption. On the one hand, the major conclusion from Lederman, Loayza and Reis Soares' study is that the current political institutions of a country are "extremely important" in determining the incidence of corruption.[63] They find their results encouraging to political reformers who want to do something about corruption. Especially being currently a democracy gives a significant and large negative effect on corruption in their data.[64]

Ades and Di Tella, on the other hand, failed to find any evidence of democracy leading to less corruption. Their data rather seemed to indicate the opposite. Although with some uncertainty (significant only at the 0.10 level) their results with respect to democracy suggested that countries with low levels of electoral democracy have lower corruption.[65] That democracy sometimes "may actually increment the opportunities and magnitude of corruption" is also supported by qualitative studies.[66]

Conversely, Sandholz and Koetzle found correlations with lower levels of corruption of both the current level of democracy and the number of years of democratic rule, but it was weaker and more uncertain (significant at the 0.10 level) than all the other variables they investigated (GDP/capita, state intervention in the economy, trade, colonial heritage and religion).[67]

Similarly, Gerring and Thacker, while leaving out authoritarian regimes and only looking at current democracies, found a weak but significant negative correlation between corruption and the number of years of democratic rule. One of Treisman's major findings, which he thought was a bit discouraging from the perspective of an anti-corruption reformer, was that corruption to a large extent seemed to be a function of a country's institutional and cultural historical legacy rather than its current policies (with policies for growth as the exception). With respect to democracy he concluded that there appears to be "a threshold effect. … The fact that a country is democratic today makes just about no difference to how corrupt it is perceived to be. What matters is whether or not it has been democratic *for decades*". In Treisman's data there was no significant effect of a country being currently a democracy. For the three different data sets that he used to measure corruption (the Transparency International corruption perception indexes of 1996, 1997 and 1998) the threshold indicating a significant effect of democracy on corruption appeared after 20 years in one and only after 40 years in the other two.[68]

One reason for the ambiguous results with respect to democracy and corruption may be that the relationship is non-linear, which makes it difficult to detect in the linear regressions that scholars usually employ. Montinola and Jackman have demonstrated precisely such a non-linear correlation. Their study indicated that authoritarian regimes were less corrupt than partially democratized countries, while fully democratized countries were the least corrupt. Using a measure of the level of democracy as scaled from zero (least democratic) to ten (most democratic) they found a negative correlation starting at around seven on the scale.[69]

> "Perhaps our most important conclusion is that political competition [i.e. electoral democracy] matters, and there is an interesting threshold in this relationship. Corruption is typically a little higher in countries with intermediate levels of political competition than in their less democratic counterparts, but once past the threshold, higher levels of competition are associated with considerably less corruption."[70]

The non-linear relationship between democracy and corruption has subsequently been confirmed by Sung, who found that a cubic function produced the best fit. Democracy and corruption were negatively correlated at the two ends of the scale, but positive for semi-democracies. Sung found a similar threshold effect at the upper side of the democracy scale as

that indicated by Montinola and Jackman (around 2,7 on the scale from 1 (most democratic) to 7 (least democratic).

Thus, the correlation between democracy and corruption involves threshold effects. This is the case both with respect to the current level of democracy (as demonstrated by Montinola and Jackman and Sung) and to the degree of 'maturation', i.e. the number of years of democratic rule (as shown by Treisman). However, so far scholars have not explained the content of the threshold effect. What is it that makes democracy shift from being a source of corruption to start becoming a remedy?

We believe that at least one part of the explanation may be found in the second, but frequently omitted, component of the concept of democracy—civil liberties. As discussed earlier, previous comparative research has equated democracy with free and fair elections. The previous findings in this paper indicates that free and fair elections without civil liberties (as represented by freedom of the press) is positively correlated to corruption, but that the effect switches to negative at high levels of press freedom (with not too low levels of education as an additional condition).

In order to further examine the argument that press freedom may help countries get beyond the threshold we test a curvilinear model on our data, introducing freedom of press as a control variable in a second step.

[Table 6 here]

Model 1 in table 6 tests the assumption that there is a non-linear relationship between democracy and corruption in our data (with GDP as a basic control). The curvilinear term (Electoral dem^2) indicates the extent to which the effect of electoral democracy on corruption is dependent upon the level of electoral democracy. The fact that it is highly significant in model 1 is in line with the conclusions of previous research that the relationship is indeed non-linear. More important here, however, is the change that occurs when freedom of the press is introduced in the second model. The curvilinear term falls by one third and the uncertainty increases (in fact it is only barely significant at the 0.10 level). Press freedom thus almost erases the curvilinearity of the model.

Although this may not be the whole story of the threshold effect and the puzzling findings in previous research with respect to democracy and corruption it is probably an important part of it. Thus, one reason why partially and newly democratized countries often have a higher degree

of corruption than mature and fully democratized countries, we propose, is that there is a lack of media scrutiny on the political system in these countries. Even in cases where there are accountability institutions in place, in the form of general elections, the risk that corrupt activities will be exposed to the public is not high enough in these countries to prevent such activities.

Conclusions

This paper has delivered three important conclusions with respect to the relationship between transparency and corruption. First, it demonstrates that the negative correlation which previous studies have indicated holds also when controlling for electoral democracy. Before, we could not say for sure that earlier findings were not produced by omitted variable bias, now we are confident that they are not. It really seems as if having nosey journalists around can make political actors more nervous about corrupting themselves.

However, the second major conclusion is that looking only at the average effects gives a misleading picture of the significance of transparency for corruption. Transparency in itself is not enough. Just making information available will not prevent corruption. The causal link involves two additional steps. In order to get to the corrupt activities increasing transparency must affect the probability of publicity, which in turn should raise the risks for policy-makers of being held accountable. The interaction effects of freedom of the press with education and electoral democracy demonstrates the first and the second link respectively. Thus, paraphrasing the title of Brunetti and Weder's article, these findings indicate that a free press may be bad news for corruption.[71] But they also indicate that transparency is no quick fix for anti-corruption reformers. In countries with low levels of education and in semi-democratic political systems transparency must be accompanied with additional reforms strengthening the capacity of people to process the information and execute sanctions if it is to have any effect. Thirdly, we believe that we have an explanation for the puzzling findings of previous research with respect to democracy and corruption. There seems to be a threshold effect of democracy on corruption, but what determines the threshold? What does it take to make democracy start hitting in on corruption? We argue that it is the interacting effect of having free and fair elections <u>and</u> a free press (or civil liberties more broadly) which gives the necessary kick. Corruption researchers must acknowledge that democracy is not just a question of elections. Only when we have in place a lively public sphere of educated people, where the risk for media

scrutiny and bad publicity is always present, free and fair elections will start to reduce corruption.

Appendix

Data definitions and sources

FoP-FH	Press freedom in 2000 (Freedom House) (free: 0-30; partly free: 31-60; not free: 61-100)
FoP-RSF	Press freedom in 2003 (Reporters Without Borders) (0= highest level of press freedom, 100= lowest level of press freedom)
Corr-TI	Aggregate corruption indicator for 2003 (Transparency International) (0= highest level of corruption, 10= lowest level of corruption)
Corr-WB	World Bank Governance Indicators Dataset for 2002 (World Bank) (-2.5 = lowest, 2.5 = highest)
Corr-ICRG	Average corruption 2001-2003 (International Country Risk Guide) (0=lowest, 6=highest)
Rule of Law	Legal impartiality and popular observance of the law, 2003 (UNDP) (0=lowest, 6=highest)
GDP/Capita	GDP index 2003 (UNDP). The index is calculated on the basis of GDP/capita (PPP US$)
Education (WB1)	Expected year of schooling 2003 (World Bank)
Education (WB2)	Primary completion rate 2003 (World Bank) (Percentage of students completing the last year of primary school total number of students in the last grade of primary school, minus the number of repeaters in that grade, divided by the total number of children of official graduation age.
Education (UNDP)	Education 2003 (UNDP) Combined primary, secondary and tertiary gross enrolment ratio and the adult literacy rate.
Electoral dem.	Level of democracy (Marchall and Jaggers, Polity IV, 2003) (0=lowest, 10=highest)
Years of dem.	Democratic consolidation, 1999 (Freedom House)
TRADE	Export+ Import/GDP 2003 (UNCTAD)
Former British Former colony	Whether or not the country is a former British colony, 2000 (Treisman) (1= British colony, 0= Not a British former colony).

Note: All indexes (except from former British colony) are transformed to a scale from 0 to 10. 0 = lowest and 10 = highest.

Table 1. Scores on corruption, freedom of press and electoral democracy

	Country	Corruption	FoP	Electoral dem.		Country	Corruption	FoP	Electoral dem.		Country	Corruption	FoP	Electoral dem.
1.	Finland	0	9.03	10	41.	South Korea	5.54	8.02	8	75.	Thailand	7.99	7.69	9
2.	Sweden	.12	9.32	10	42.	South Africa	5.60	8.15	9	76.	Turkey	8.05	5.32	8
3.	Iceland	.27	9.27	na	43.	Czech Rep.	5.72	8.57	10	77.	Philippines	8.08	2.67	0
4.	Singapore	.35	3.40	2	44.	Slovakia	5.96	7.65	na		Congo	8.08	7.72	8
5.	Denmark	.47	9.50	10	45.	Lithuania	6.05	8.59	10	79.	Bulgaria	8.14	7.71	9
	New Zealand	.47	9.05	10	46.	Malaysia	6.25	4.25	0		Romania	8.14	6.61	8
7.	Netherlands	.47	9.56	10		Gambia	6.25	4.47	4	81.	Venezuela	8.38	7.37	7
8.	Canada	.59	9.09	10	48.	Malawi	6.34	5.81	7	82.	Albania	8.40	5.57	7
9.	Switzerland	1	9.56	10		Mocambique	6.34	6.22	6	83.	Algeria	8.46	.71	1
10.	United Kingdom	1.15	8.56	10	50.	Jordan	6.37	5.37	2	84.	Lebanon	8.49	6.28	7
11.	Norway	1.45	9.79	10	51.	Bahrain	6.52	3.89	0		Honduras	8.49	5.10	na
12.	Australia	1.47	9.43	10	52.	Croatia	6.58	4.90	7	86.	Iran	8.52	5.22	6
13.	Austria	2.03	9.21	10	53.	Sri Lanka	6.64	4.43	7		Bangladesh	8.52	4.53	4
	United States	2.36	8.73	10	54.	Brazil	6.69	7.51	8	88.	Guatemala	8.67	5.76	8
15.	Spain	2.36	9.19	10	55.	Latvia	6.72	8.29	8	89.	Yemen	8.70	4.46	1
16.	Chile	2.51	7.97	9	56.	Peru	6.75	4.57	9	90.	Bolivia	8.76	8.39	8
17.	Germany	2.57	9.13	10	57.	Belarus	6.81	3.52	0	91.	Vietnam	8.88	3.86	0
18.	Namibia	2.95	7.46	6		Jamaica	6.81	9.35	9	92.	Pakistan	8.96	4.95	0
19.	Cyprus	2.98	8.92	10	59.	Cuba	6.99	2.35	0	93.	Armenia	8.99	5.49	5
20.	Portugal	3.07	8.77	10	60.	Egypt	7.11	4.49	0	94.	Syria	9.08	4.52	0
21.	Japan	3.10	8.71	10	61.	Dominican Rep.	7.23	7.78	8		Kasakhstan	9.08	5.28	8
22.	Ireland	3.21	8.49	10	62.	Mexico	7.46	5.12	7		Moldova	9.08	4.02	0
23.	France	3.24	8.31	9		Ghana	7.46	6.13	8	97.	Haiti	9.11	5.40	1
24.	Israel	3.33	7.71	10	64.	China	7.52	3.46	0	98.	Zambia	9.20	5.05	3
25.	Slovenia	3.42	8.02	10	65.	El Salvador	7.61	6.88	7	99.	Ukraine	9.29	2.67	0
26.	Belgium	3.54	9.50	10	66.	Saudi Arabia	7.67	2.67	0		Libya	9.29	5.22	7
27.	Botswana	4.01	7.88	9	67.	Argentina	7.70	6.85	8	101.	Uganda	9.35	6.81	0
28.	Costa Rica	4.07	8.91	10	68.	Colombia	7.79	5.30	7	102.	Madagascar	9.38	7.59	7
29.	Tunisia	4.10	3.94	1		Senegal	7.79	7.42	8	103.	Paraguay	9.50	4.90	7
30.	Estonia	4.48	8.59	7		India	7.79	6.86	9	104.	Ecuador	9.53	6.52	6
31.	Greece	4.48	7.72	10	71.	Ethiopia	7.81	5.04	na		Russia	9.61	6.08	8
32.	Uruguay	4.54	7.77	10	72.	Mali	7.84	7.91	6	106.	Indonesia	9.61	5.31	7
33.	Hungary	4.72	7.79	10	73.	Panama	7.96	7.65	9		Azerbaijan	9.73	4.43	0
34.	Italy	4.78	8.08	10		Sierra Leone	7.96	3.06	5	108.	Nigeria	9.73	5.81	4
35.	Kuwait	4.90	6.18	0						109.	Zimbabwe	9.82	4.60	0
36.	Qatar	4.95	5.11	0						110.	Kenya	9.91	4.37	8
37.	Trinidad Tobago	5.19	7.88	10						111.	Angola	10	3.46	1
	Morocco	5.34	6.04	0										
39.	Oman	5.34	4.18	0										
	Polen	5.37	8.62	10										

Sources: Corruption: World Bank (2002), Freedom of the Press: Freedom House (2000), Electoral democracy: Polity (2003). Note: The ranking list (1-109) follows the corruption index, which has been standardised so as to range from 0 (lowest level of corruption) to 10 (highest), as have the press freedom index (0 = lowest press freedom, 10 = highest) and the index for electoral democracy (0 = lowest level of electoral democracy, 10 = highest).

Table 2. Freedom of the press and corruption. Results of multivariate tests.

Independent variables	Dependent variable: Corruption (World Bank index)		
	Model 1	Model 2	Model 3
Constant	13.293***	14.330***	14.876***
	(24.559)	(23.279)	(23.023)
FoP	-.33**	-.43***	-.40**
	(-2.538)	(-2.751)	(-2.566)
Electoral dem.	-.04	.04	.01
	(-583)	(.436)	(.114)
GDP/capita	-.44***	-.52***	-.59***
	(-5.232)	(-3.669)	(-4.246)
Rule of Law	-.35***	-.32***	-.31***
	(-5.016)	(-4.334)	(-4.316)
Years of dem.		-.09	-.06
		(-1.156)	(-.789)
Education		.01	0
		(.044)	(.022)
Trade			0
			(.036)
Former British colony			-.98***
			(-2.735)
N	107	81	80
Adjusted R	.72	.77	.79

Note: *p < .10, **p < .05, ***p < .01, *t* Statistics in parentheses.

Table 3. Testing the base regression with alternative indices of corruption and press freedom.

Indep. variables	Dependent Variable: Three different corruption indexes				
	TI	ICRG	WB	TI	ICRG
Constant	11.241***	8,837***	13.702***	11.155***	9.925***
	(26.656)	(15.203)	(17.588)	(18.292)	(12.205)
FoP (FH)	-.21**	-.14			
	(-2.070)	(-1.008)			
FoP (RWB)			-.27**	-.10	-.31**
			(-1.993)	(-950)	(-2.135)
Electoral dem.	0	-.06	-.07	-.05	.01
	(-.030)	(-.753)	(-.1.001)	(-.893)	(.930)
GDP/capita	-.45***	-.23**	-.46***	-.46***	-.24***
	(-6.861)	(-2.546)	(-5.389)	(-6.937)	(-2.676)
Rule of Law	-.26***	-.13*	-.39***	-.29***	-.14*
	(-4.786)	(-1.778)	(-5.580)	(-5.315)	(-1.898)
Observations	107	107	107	107	107
Adjusted R²	.74	.34	.71	.73	.36

Note: *p < .10, **p < .05, ***p < .01 *t* Statistics in parentheses.

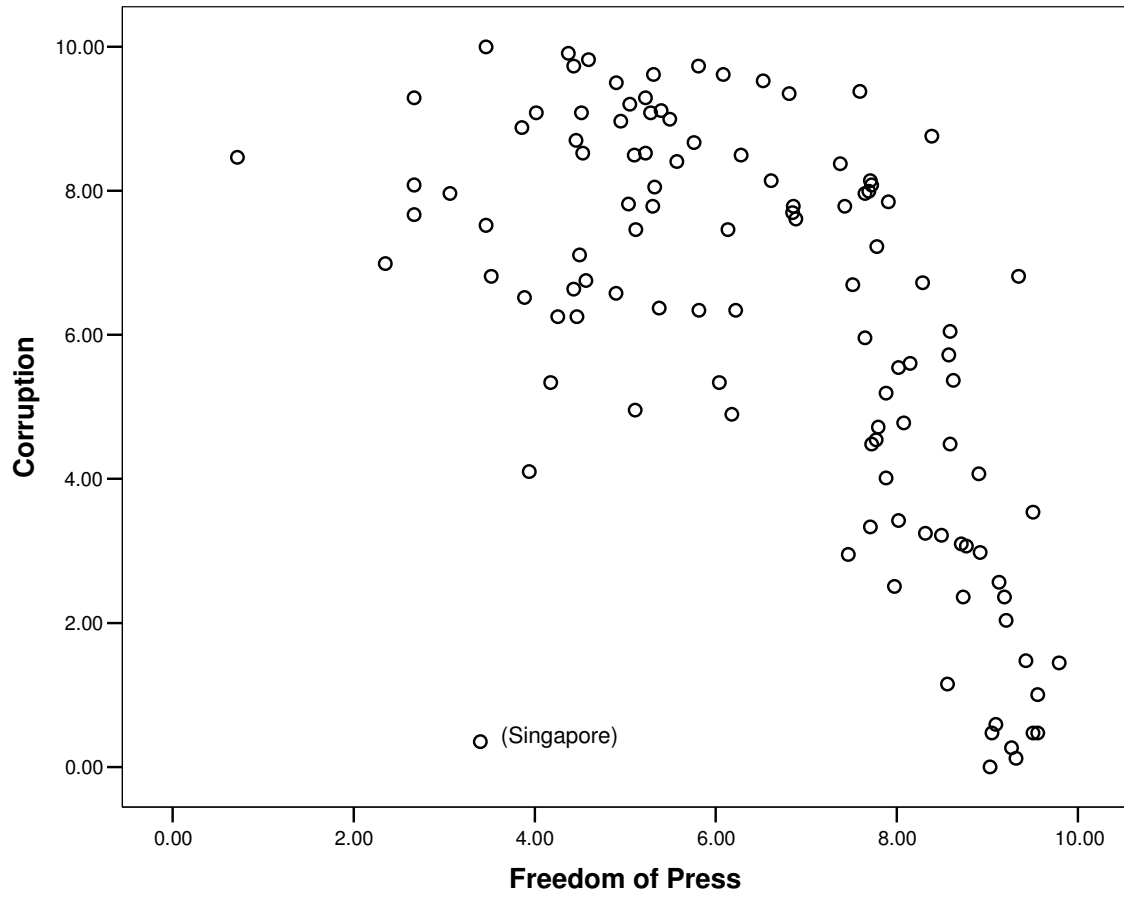**Figure 1. Freedom of press and corruption. Bivariate correlation.**

Table 4. Freedom of the press and corruption in countries with low levels of press freedom.

Independent variables	Dependent variable: Corruption (World Bank index)
Constant	9.802***
	(7.771)
FoP	.149
	(.564)
Electoral dem.	-.044
	(-.499)
GDP/capita	-.236*
	(-1.873)
Rule of Law	-.278**
	(-2.550)
N	45
Adjusted R	.29

Note: *p < .10, **p < .05, ***p < .01, *t* Statistics in parentheses.

Table 5. Freedom of the press and corruption. Interaction effects with electoral democracy and education.

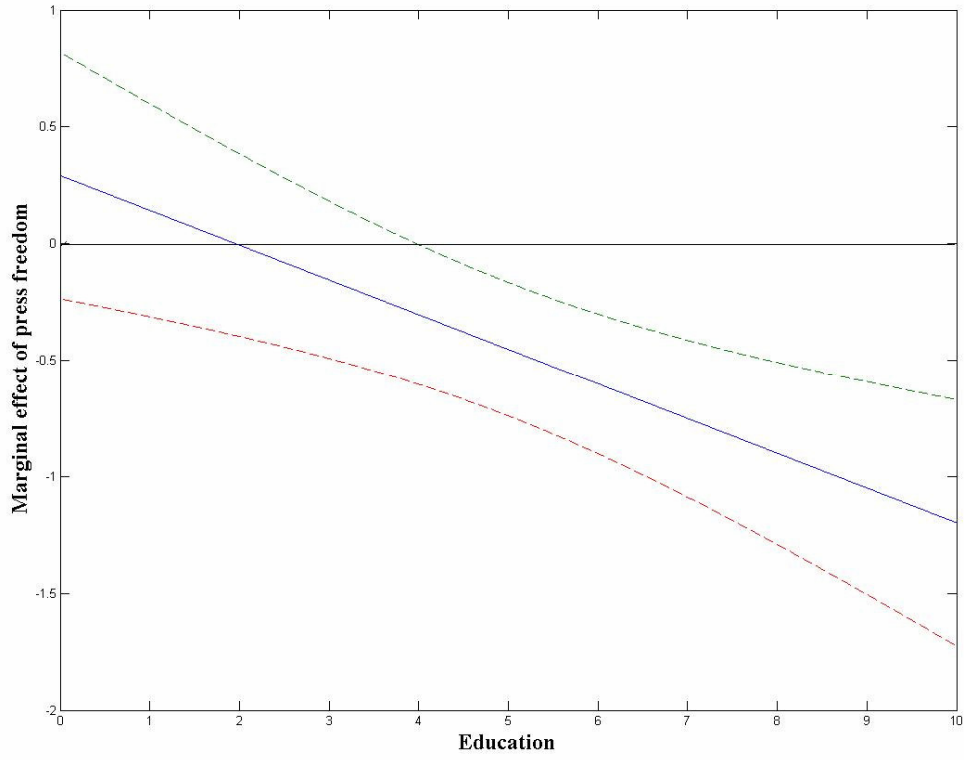| Independent Variables	Model 1	Model 2	Model 3
		Dependent variable: World Bank corruption index	
Constant	10.510***	9.578***	8.262***
	(9.755)	(6.134)	(4.406)
FoP	.15	.29	.51
	(.713)	(1.097)	(1.605)
Electoral dem.	.39**	0	.23
	(2.429)	(.045)	(1.182)
GDP/Capita	-.33***	-.59***	-.51***
	(-3.677)	(-4.401)	(-3.462)
Rule of Law	-.34***	-.25***	-.25***
	(-4.981)	(-3.406)	(-3.377)
FoP*Electoral dem.	-.08***		(-.05)
	(-2.953)		(-1.256)
Education		1.01***	.93***
		(3.054)	(2.770)
FoP*Education		-.15***	-.14***
		(-3.345)	(-2.939)
Observations	107	81	81
Adjusted R²	.75	.80	.80

Note: *p < .10, **p < .05, ***p < .01, *t* Statistics in parentheses.

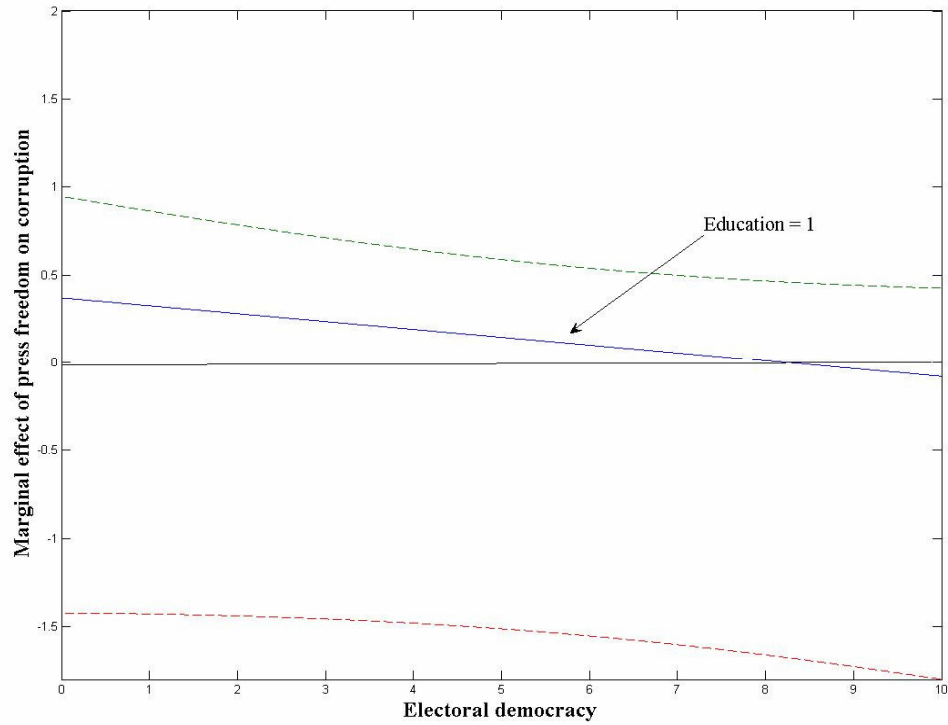**Figure 2. Marginal effect of press freedom at different levels of electoral democracy.**

Note: Dotted line indicates the 95% confidence interval.

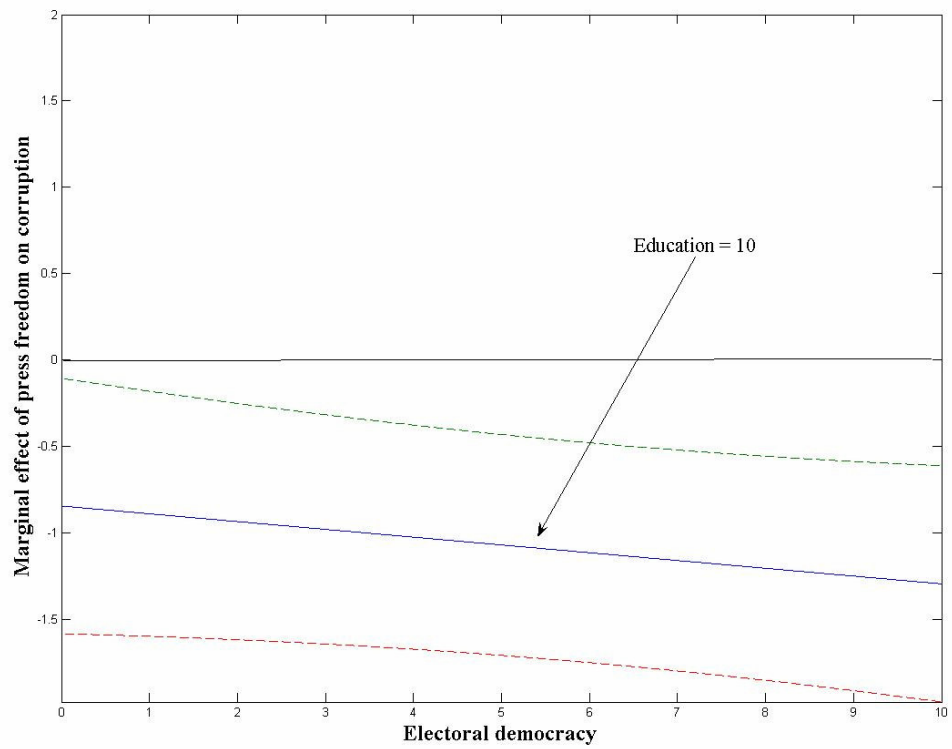**Figure 3. Marginal effect of press freedom for different levels of education.**

Note: Dotted line indicates the 95% confidence interval

Figure 4. Marginal effect of press freedom for different levels of electoral democracy at a very low level of education.

Note: Dotted line indicates the 95% confidence interval

Figure 5. Marginal effect of press freedom for different levels of electoral democracy at a very high level of education.

Note: Dotted line indicates the 95% confidence interval

Table 6. Investigating the non-linear relationship between democracy and corruption.

Independent Variables	Dependent variable: World Bank corruption index	
	Model 1	Model 2
Constant	10.600***	12.293***
	(17.282)	(14.949)
FoP		-.43***
		(-2.961)
Electoral dem.	.41*	.39*
	(1.946)	(1.912)
Electoral dem^2	-.06***	-.04*
	(-2.646)	(-1.669)
GDP/Capita	-.63***	-.61***
	(-6.869)	(-6.873)
Observations	107	107
Adjusted R²	.64	.66

Note: *p < .10, **p < .05, ***p < .01, *t* Statistics in parentheses.

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Notes

[1] Woodrow Wilson, quoted from Goodin 1992, p. 126.

[2] Bentham 1816 [1999] p. 29.

[3] Peters 1995, p. 297.

[4] Fisher, Ury & Patton 1999, p. 36f.

[5] For an analysis of the debate between negotiation theorists and deliberative democratic theorists over the issue of transparency and publicity, see Naurin 2005.

[6] Vishwanath & Kaufmann, 1999, p. 5.

[7] Montinola & Jackman 2002, p. 151. See also, for example, Rose-Ackerman 1999, p. 162 ff., Gerring & Thacker 2004, p. 316, Lederman, Loayza and Reis Soares 2001, p. 8.

[8] Kaufmann 2005.

[9] Treisman 2000, 433ff.

[10] Gerring & Thacker 2004, p. 317.

[11] Brunetti & Weder 2003, p. 1813.

[12] Ibid, p. 1821.

[13] Montinola & Jackman 2002, p. 164. See also Sun 2004.

[14] References

[15] The later fact is an important limitation for the common claim, especially by economists, that transparency is an effective medicine against the power of special interests.

[16] Behn 2001 p.

[17] Thus we are uncomfortable with statements such as the following by Lederman, Loayza and Reis Soares, indicating an automatic link: "By increasing transparency freedom of the press reduces the informational problem in the political system and increases accountability" (Lederman, Loayza & Reis Soares 2001, p. 17). Similarly, Montinola and Jackman claim that "transparency itself should further dampen the incentives for corruption" (Montinola & Jackman 2002, p. 154).

[18] At least this is the case as long as the authoritarian regime does not go so far as to provoke a revolution (in which case the costs of accountability may be very high, as for example the Romanian dictator Ceausescu found out as he was shot against a wall).

[19] Cf. Mauro 1995, Bardhan 1997.

[20] See, for example, Mauro 1995, Ades & Di Tella 1999, Sandholtz & Koetzle 2000, Treisman 2000, Lederman, Loayza & Reis Soares 2001, Montinola & Jackman 2002, Brunetti & Weder

2003, Persson, Tabellini & Trebbi 2003, Sandholz & Gray 2003, Gerring & Thacker 2004, Walker 2004, Gerring & Thacker 2005,

[21] See for example, Mauro 1995, Bardhan 1997, Sandholtz & Koetzle 2000, Treisman 2000, Montinola & Jackman 2002, Gerring & Thacker 2004.

[22] Treisman 2000, p. 440.

[23] A review of five such indices of democracy—Freedom House, Polity, Vanhanen, Alvarez et. al. and Reich—can be found in Hadenius & Teorell.

[24] Of the studies cited here Montinola & Jackman, Ades & Di Tella, Sandholtz & Koetzle and Treisman all use Freedom House or Gastil. (Montinola & Jackman follow Bollen and add subjective measures by Banks on "freedom of group opposition" and "effectiveness of the legislative body" as well as figures on election turnout.) Gerring & Thacker mainly use Polity and partly Freedom House for constructing their measure of democratic consolidation. Treisman uses the index of Alvarez et.el. for democratic consolidation, while Sandholtz & Koetzle uses Banks for democratic consolidation. Lederman, Loayza and Reis Soares employ a dichotomous democracy variable from Beck et.el., whose content they fail to specify. The exception is Sandholtz & Koetzle 2000 who include not only Freedom House's political rights index but also their index of civil liberties, including freedom of the press (which they, however, do not control for separately from the political rights). The problem with using the civil liberties index, and the reason why others have chosen not to (for instance Treisman, p. 434, note 39), is that one of its composite parts is in fact the level of corruption, i.e. the dependent variable.

[25] Dahl 1989.

[26] Brunetti & Weder 2003.

[27] The press freedom indexes are taken from Freedom House and Humana, corruption indexes from ICRG, the World Bank (1997), the Institute for Management Development and Transparency International.

[28] Brunetti & Weder 2003, p. 1821.

[29] Apart from "sound political institutions" 'rule of law' includes "a strong court system and provisions for an orderly succession of power" as well as the degree to which "citizens of a country are willing to accept the established institutions to make and implement laws and adjudicate disputes" (Brunetti & Weder 2003, p. 1808). In one regression Brunetti and Weder excludes authoritarian regimes from the sample, in order to test for endogeneity problems (i.e. the chance that corruption influences freedom of the press rather than vice versa). Here they use

Gastil's political rights index to define the cut off (countries scoring higher than 5 on Gastil's scale form 1 to 7 are defined as authoritarian). The effect of press freedom is the same, with the same control variables (quality of bureaucracy and rule of law), as when authoritarian regimes are included (p. 1816).

[30] Chowdhury 2004.

[31] Chowdhury 2004, p. 96.

[32] Hadenius & Teorell, p. 15.

[33] Ibid.

[34] Besley & Prat 2001.

[35] Besley and Prat use Freedom House's press freedom index of 1999 and three corruption indexes (TI 1999, ICRG (year unclear) and the World Bank 2000). Besley & Prat 2001.

[36] Besley & Prat 2001, p. 8. The data is from Beck et. al. (probably 2000, although not clearly indicated).

[37] Lederman, Loayza & Reis Soares 2001.

[38] Lederman, Loayza & Reis Soares 2001, p. 32.

[39] Beck et. al. 2001.

[40] Adserà, Boix & Payne 2003. For measuring democracy they use Jaggers and Gurr's Polity III database, which only includes the electoral part of democracy. The data on newspaper circulation is taken from the World Bank World Development Indicators (2000), indices of corruption from ICRG.

[41] Treisman 2000, p. 437.

[42] Sandholtz & Koetzle 2000, p. 35. Cf. Gerring & Thacker 2004, p. 300, Nye 1967, p. 419.

[43] References

[44] Treisman 2000, p. 411f.

[45] Kaufmann has looked at both (Kaufmann 2005). IMF, for instance, has an index of fiscal transparency.

[46] Bueno de Mesquita et.al. 2003, p. 180f.

[47] Freedom House, Press Freedom Survey 2000. (http://www.freedomhouse.org/pfs2000/)

[48] The correlation between the two indexes is 0,90. The index of Reporters Without Borders includes "every kind of violation directly affecting journalists (such as murders, imprisonment, physical attacks and threats) and news media (censorship, confiscation of issues, searches and harassment). It registers the degree of impunity enjoyed by those responsible for these press freedom violations. It takes account of the legal and judicial situation affecting the news media

(such as the penalties for press offences, the existence of a state monopoly in certain areas and the existence of a regulatory body) and the behaviour of the authorities towards the state-owned news media and international press. It also takes account of the main obstacles to the free flow of information on the Internet. Reporters Without Borders has taken account not only of abuses attributable to the state, but also those by armed militia, clandestine organisations or pressure groups that can pose a real threat to press freedom." RSF 2003, Second world press freedom ranking, http://www.rsf.org/article.php3?id_article=8248.

[49] Hadenius & Teorell, p. 20.

[50] Ibid, p. 11ff.

[51] The bivariate correlations between Freedom House's press freedom index and the two indexes for electoral democracy are 0,81 for Polity and 0,87 for Freedom House's political rights index. The question of how much multicollinearity is too much has been given many different answers in the literature. When we have tested for multicollinearity in the forthcoming additive models Polity's electoral democracy variable is safe with respect to tree of four different rules of thumb that are indicated in econometrics textbooks (a VIF-factor lower than 10, the square root of the VIF-factor lower than 2, individual R^2-values lower than overall R^2. See, for example, Greene 1997). We are slightly above Lewis-Beck's rule of thumb of a correlation between the independent variables higher than 0.8 (Lewis-Beck, 1980). In the interaction models, however, the VIF-factor increases above 10 for many coefficients. The main problem with multicollinearity, if it exists, is that the results tend to underestimate the strength and significance of the correlated factors.

[52] The World Bank World Development Indicators. www.worldbank.org/data/wdi2005/wditext/Section2.htm

[53] UNDP, in turn, get their data from ICRG. This is not the same variable as Brunetti & Weder's rule of law variable, however. See ICRG, The Political Risk Rating, www.icrgonline.com.

[54] Electoral democracy does have a significant negative effect of -.20 under control for GDP per capita and rule of law, which disappears when freedom of the press is introduced in the model.

[55] The democratic years variable has been computed from data from Freedom House. It covers the period 1950-2000.

[56] Brunetti and Weder, for example, found no significant effect on corruption of two alternative indices for education ("avarage educational attainment" and "secondary school enrolment") (Brunetti & Weder 2003, p. 1809). Ades and Di Tella, on the other hand, did found a negative

effect of education on corruption (although significant only at the 10 percent level) (Ades & Di Tella 1999, p. 987).

[57] In particular Treisman emphasises the importance of a British colonial history, which he attributes to the inheritance of a specific British "legal tradition" (Treisman 2000, p. 418ff.).

[58] This is so also when we exclude the United States, which is defined as a former British colony in this data set.

[59] The same result is found when we use the alternative measure of education, primary completion rates. Since the result puzzles us we have also tested a third indicator of educational level from UNDP— combined primary, secondary and tertiary gross enrolment ratio and the adult literacy rate—which again gives the same result.

[60] All six specifications including the interaction effect of press freedom and electoral democracy (three corruption and two press freedom indices) demonstrate a significant negative interaction effect. Two of the specifications are significant at the 1 % level, three on the 5 % level and one on the 10 % level. Five out of six specifications of the interaction effect between freedom of press and education (using the two freedom of press indexes and the three corruption indexes) demonstrate significant effects. The three specifications using Freedom House's press freedom index are all significant on the 1 percent level. The models including Reporters Without Borders' index are significant on the 5 and the 10 (and the third on the 15) percent levels.

[61] It is a bit difficult to compare model 1 and model 3, however, since the sample is different due to the fact that we only have comparable data on education for 81 countries. Notably, when we use the alternative measure of education (primary completion rates, rather than expected years of schooling) the interaction effect of freedom of press and electoral democracy is significant, while the interaction with education is not. Multicollinearity may be at play here, since we have two interaction terms in the model (see, for instance Brambor, Clark & Golder forthcoming and Cortina 1993). This could mean that the interaction effect of freedom of press and electoral democracy is somewhat underestimated in model 3.

[62] On this point we disagree with Gerring and Thacker who claims that there is a "general finding" that "more democracy – specifically, a longer experience with competitive, multi-party elections – fosters lower levels of corruption" (Gerring & Thacker 2004, p. 298). They base this conclusion on the studies of Sandholz & Koetzle 2000, Treisman 2000 and Montinola & Jackman 2002. As we describe below we do not believe that this is a reasonable conclusion to draw from these studies.

[63] It is not clear how many countries that are actually included in their main regressions. The data is disaggregated into 'observations' which are both cross-sectional and cross-time over the period of 1984-1997.

[64] Lederman, Loayza & Reis Soares 2001, p. 31f. They also found that parliamentary democracies were significantly less corrupt than presidential ones. The later finding has subsequently been confirmed by Gerring and Thacker, 2004, p. 306.

[65] Ades & Di Tella 1999, p. 987.

[66] Sung 2004, p. 181.

[67] Sandholz & Koetzle 2000, p. 45.

[68] Treisman 2000, p. 434 and 438f.

[69] Montinola & Jackman 2002, p. 164.

[70] Ibid, p. 167.

[71] The title is "A free press is bad news for corruption". Brunetti & Weder 2003.