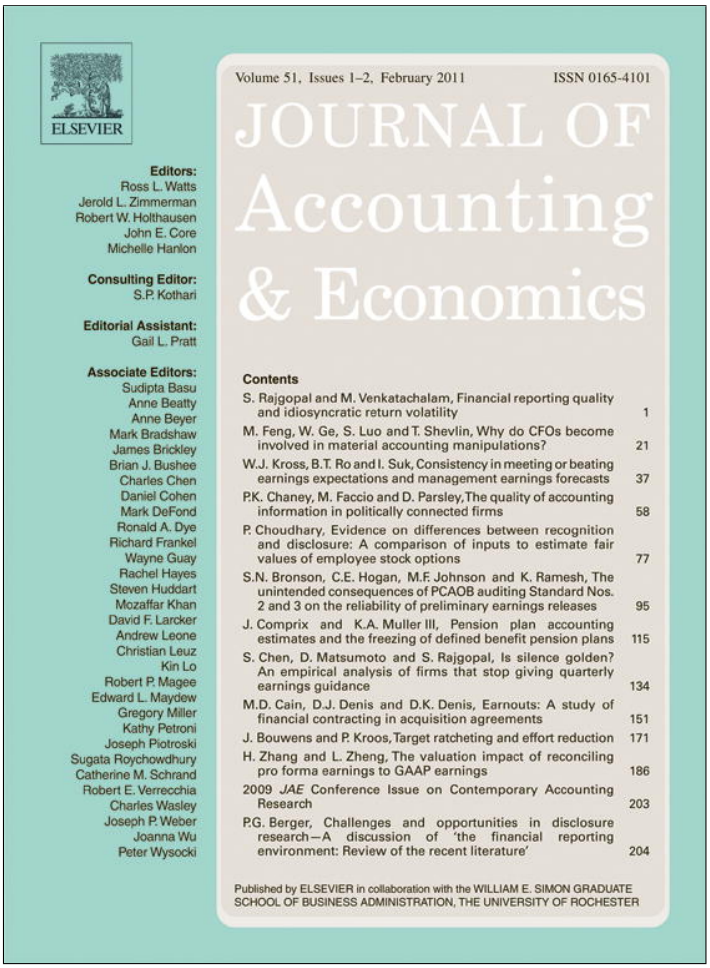

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The quality of accounting information in politically connected firms ☆

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ABSTRACT

We document that the quality of earnings reported by politically connected firms is significantly poorer than that of similar non-connected companies. Our results are not due to firms with ex-ante poor earnings quality establishing connections more often. Instead, our results suggest that, because of a lesser need to respond to market pressures to increase the quality of information, connected companies can afford disclosing lower quality accounting information. In particular, lower quality reported earnings is associated with a higher cost of debt *only* for the non-politically connected firms in the sample.

1. Introduction

In this paper we investigate whether earnings quality varies systematically with political connections in a wide sample of countries and politically connected firms. Overall, our results reveal that the presence of political connections is associated with a lower quality of accounting earnings. We document that political connections have incremental explanatory power beyond country, regulatory, and firm-specific ownership characteristics.

Ex-ante, one could have argued that because connected firms are subject to extensive controls and monitoring (including scrutiny by the media), political connections would, in fact, be associated with better earnings quality. This, however, is not the case. Based on the results in prior research, three explanations are consistent with our finding that the quality of earnings of politically connected firms is poorer than the quality of earnings of similar non-connected peers. First, as politically connected firms typically derive gains from their connections[1] over and above the payments they make,[2] insiders may hide, obscure, or at

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[1] See, for example, Cull and Xu (2005), Johnson and Mitton (2003), and Khwaja and Mian (2005) for evidence of preferential access to credit; Backman (1999) and Dinç (2005) for evidence of preferential treatment by government owned banks; Agrawal and Knoeber (2001) for preferential treatment in the award of government contracts; and Faccio et al. (2006) for bailouts.

[2] See Svensson (2003), Cull and Xu (2005), and Hellman et al. (2003) for a discussion of bribes, and Bertrand et al. (2004), and Fan and Wong (2007) for vote-buying behavior. Bertrand et al. (2004) also discuss the employment consequences of connections and their impact on voting for politicians.

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least attempt to delay reporting the benefits received with the purpose of intentionally misleading investors to gain at their expense (e.g., Schipper, 1989 or Leuz et al., 2003). In a closely related paper, Leuz and Oberholzer-Gee (2006) argue that the higher transparency associated with foreign financing makes it harder for connected companies to extract political favors, especially those of dubious legality. As a consequence, connected firms that enjoy substantial political benefits are likely to choose to remain less transparent by raising capital domestically—a prediction that is strongly supported by Leuz and Oberholzer-Gee (2006) results. According to this first hypothesis, connected firms would be more opaque than similar non-connected firms. We employ accruals quality as one specific measureable proxy of this opacity.

Second, to the extent that politicians provide protection to their related companies so that low quality accounting information is not penalized, connected firms might simply care less about the quality of the information they disclose, and invest less time to accurately portray their accruals. In this case, the quality of information would be low due to inattention on the part of the firm's managers. This represents a more benevolent interpretation of poor accruals quality. Third, it might simply be the case that firms with poor earnings quality are more likely to establish political connections. In all cases, political connections would be associated with poor information quality, as we find.

We run two sets of tests to attempt to distinguish among these possible explanations. First, for a sub-sample of firms for which the date of establishment of a connection could be determined, we investigate whether poor accruals quality has an impact on the likelihood that a company establishes a connection in a given year. We find no significant association between the quality of earnings and the likelihood that a connection is established. This allows us to rule out that, on average, our results are simply due to firms with ex-ante poor earnings quality establishing connections more often.

Second, we assess the need for connected companies to make the investment needed to provide good quality accounting information. This second test exploits earlier evidence in Francis et al. (2005) who find that, for U.S. firms, poor earnings quality is associated with a higher cost of debt (as well as a higher cost of equity). We argue that this result may not hold for politically connected firms. For example political pressure and intervention on behalf of connected companies may substitute for better quality disclosures, and thus mitigate the consequences (i.e., costs) of poor information quality that their non-connected peers face.

To implement this test, we examine two measures of the cost of debt: the average realized cost of (total) debt; and the yield to maturity spread on publically issued debt. This latter measure better captures the cost imposed by market participants on firms with poor quality reported earnings but misses firms not accessing public debt markets. Our regression analyses support the conclusion that the cost of (total) debt is inversely related to the quality of reported earnings *only* for the non-politically connected firms in the sample. That is, companies with political connections are apparently insulated from the negative consequences of their lower quality disclosures. This provides at least partial support to our second hypothesis, i.e., that managers of connected firms pay less attention in developing the quality of their earnings. Unfortunately, we cannot directly test the first hypothesis because it would require being able to identify events around which connected firms would be expected to manage their earnings in a particular direction *and* in excess of the level of earnings management adopted by similar non-connected peers. A prime candidate as an event for such a test would be the provision of government benefits to connected firms—which insiders would then attempt to steal. Such events however, are generally not observable on a wide scale.

This paper relates to a growing literature examining earnings quality internationally. Economic explanations for poor earnings quality typically focus on agency and governance issues. Leuz (2006) documents a positive association between ownership concentration and earnings management, even among the subset of foreign firms that cross-list internationally. Combined with evidence that firms with concentrated ownership structures are more likely to form political ties (Morck et al., 2000; Morck and Yeung, 2004), this suggests that politically connected firms may also have lower quality reported earnings. Fan and Wong (2002) find that the reported earnings of Asian family firms have limited information content. They argue that this result is driven by an entrenchment effect, where family firms have more incentive and capability to manipulate earnings in order to hide expropriation from minority shareholders. Wang (2006) however, finds that founding family ownership is associated with higher earnings quality for a sample of S&P 500 firms. While confirming these earlier results, we show that political connections are important over and beyond ownership characteristics.

At a more institutional level, the international evidence presented in Leuz et al. (2003) demonstrates that country-level factors, such as equity market development, investor rights, and legal enforcement are systematically related to a country's median level of earnings management. They see these country-level institutional factors as limiting the ability of insiders to use earnings management to conceal their private control benefits. Haw et al. (2004) echo these results by arguing that country-level features interact with differences in control, and cash flow rights, to produce lower quality accounting information in countries with weaker statutory protection of minority rights. Additionally, Leuz and Oberholzer-Gee (2006) show that Indonesian firms with political connections to Suharto were less likely to access international capital markets. This latter paper provides some results suggesting that the benefits of political connections outweigh the costs of increased disclosure associated with foreign financing. These papers leave open the question whether political connections improve or lower the quality of reported earnings.

Section 2 briefly describes how the political connections database was compiled. We then describe how we construct our proxy for accounting earnings quality. Sections 3 and 4 present our results and robustness tests. Besides checking whether our results are sensitive to several alternative measures of earnings quality, we check that our results are not driven by a single country by repeating the analysis by successively dropping one country at a time.

In Section 5 we provide some justification for the reporting behavior of connected firms, and we offer our conclusions in Section 6.

2. Political ties

The empirical evidence we provide in this study is derived from two primary data bases. First, we employ a large firm-level dataset on corporate political connections developed by Faccio (2006). Second, using underlying accounting data available in *Worldscope*, we construct several measures of accounting earnings quality based on the variability of discretionary accruals. As discussed above, we also check whether the effects of political connections on accounting information quality depend on characteristics of a firm's ownership structure (e.g., the existence of large shareholders or family control).

A company is classified as politically connected if, at some point between 1997 and 2001, at least one of its large shareholders (anybody directly or indirectly controlling at least 10% of votes) or top directors (CEO, chairman of the board, president, vice-president, or secretary) is a member of parliament, a minister or a head of state, or is tightly related to a politician or party. These close relationships include cases of friendship, past top political (e.g., a head of state or minister) or corporate positions, foreign politicians, and well-known cases of relationships with political parties, as further discussed below.

Connections with government ministers include cases in which the politician himself is a large shareholder or a top director, as well as cases where a politician's close relative (e.g., the son or daughter) holds such positions. For example, Arnoldo Mondadori Editore is included among our connected firms since it is controlled by Silvio Berlusconi, the Italian Prime Minister. Konsortium Logistik Berhad is included in the sample since its chairman, Mirzan bin Mahathir, is the son of the Malaysian Prime Minister Mahathir bin Mohamad.

Connections with a member of parliament, however, are recorded only when members of parliament themselves are shareholders or top directors, but do not include cases when such positions are held by relatives. Examples of connections with members of the parliament include firms such as Fiat (Italy), Taittinger (France), Rolls-Royce (U.K.), and Enron (U.S.). However, H.J. Heinz Company (U.S.) is not included in our sample of connected firms since it is not owned by Senator John Kerry but, rather, by his wife Teresa.

Close relationships consist of cases of well-known friendship, as identified from *The Economist*, *Forbes*, or *Fortune*; share ownership or directorships held by former heads of state or prime ministers as well as former directorships held by current politicians, foreign politicians, and well documented relationships with political parties (as identified in Gomez and Jomo, 1997; Johnson and Mitton, 2003) and other well-known connections, as indentified in Agrawal and Knoeber (2001) for the U.S.; Backman (1999) for Asia; Fisman (2001) for Indonesia; and the Stationery Office (2001) for the United Kingdom.

To establish the presence of connections, for every publicly traded company included in *Wordscope*, the names of top company directors were taken from *Worldscope*, *Extel*, company websites, and *Lexis-Nexis*, and block-holders were identified from Claessens et al. (2000) and Faccio and Lang (2002), the websites of the stock exchanges or their supervisory authorities, *Worldscope*, and *Extel*. The *Chiefs of State* directory (CIA, 2001) and the official website of the country's government and parliament were used to gather the names of members of parliament or government. Countries that did not make such information available online were excluded from the sample, resulting in an initial sample of 47 countries.

Typically, only a director's family name and initials were reported in *Wordscope*. Thus, their names were manually cross checked with those of members of governments and parliaments using *Extel*, company websites, and extensive searches on *Lexis-Nexis*. To minimize data errors, if there was not enough information available to ensure that the person in question was the same, the company was not included in the sample of connections.

It may be worth pointing out that Government controlled firms are not included in the definition of connections, unless a government minister or a member of the parliament sit on their boards or own large stakes in the company.

For this study, we start by focusing on countries with at least 5 politically connected companies in the Faccio (2006) database, which results in an initial sample of 20 countries and 17,435 companies. Matching this sample to those firms with the necessary accounting data ultimately reduces our sample as described below. The final sample of companies, including the number of connected companies, by country, is presented in Table 1, and is discussed in Section 3. We first describe our measure of earnings quality using data on accruals.

3. The quality of accounting earnings data

Users of accounting information are generally interested in assessing current performance as well as estimating future performance, and there is considerable debate concerning how well various accounting measures reflect these goals. Some of a firm's transactions require only a mechanical application of accounting rules while other types rely on the judgment of the firm's managers and accountants. Management judgment with respect to determining earnings is often associated with discretionary accruals. Managers may use these discretionary accrual choices in an opportunistic manner (perhaps to increase their own compensation or conceal poor performance) or they may use this discretion to improve the informational value of earnings (perhaps to communicate to investors the long-term performance of the firm). In any case, discretionary accruals are often used as a measure of earnings quality (e.g., Dechow and Dichev, 2002; Francis et al., 2004).

Reported earnings are considered a primary indicator of information quality (e.g., Dechow, 1994; Dechow et al., 1998).[3] Since a firm's earnings differ from cash provided from operations by the amount of reported accruals, a standard practice is to focus on the absolute magnitude and/or the variability of accruals to assess earnings quality. In particular, since accruals include both discretionary and non-discretionary components, and since discretionary accruals are believed to better reflect managerial judgment, most earnings quality research focuses on discretionary accruals.

Sloan (1996) finds that the accrual portion of earnings is less persistent than cash flows, implying that firms with high levels of accruals have lower quality earnings. Other studies suggest that managers affect the direction and magnitude of accruals, including Healy and Whalen (1999), Dechow et al. (1996), and Richardson et al. (2003). Dechow et al. (1996), for example, find that 38 firms subject to SEC accounting and auditing enforcement release reported higher accruals than a control group, and Richardson et al. (2003) document that firms reported higher accruals in periods preceding earnings restatements.

We follow other researchers (e.g., Ashbaugh et al., 2003; Francis et al., 2002; Liu and Wysocki, 2007; Raman et al., 2008) and estimate discretionary accruals as the unexplained residual error estimated from a benchmark model of accounting accruals. In some studies, the sign of discretionary accruals is important, e.g., Shivakumar (2000), and the residuals themselves are examined. In this study, the variability of discretionary accruals is the primary object of interest.[4] In this formulation a higher variance (or absolute magnitude) of unexplained accruals is, *ceteris paribus*, associated with lower quality earnings data.[5] There are two primary reasons behind our choice. First, we do not focus on a particular event around which one could reasonably hypothesize that connected firms will tend to under-, or over-report, their earnings more than their non-connected peers, as we do not have such an event. Rather, we focus on the cross-section of firms. Thus, we do not have a particular prediction about the direction of the reporting bias. Second, Francis et al. (2005) argue that a firm with consistently large unexplained accruals will have a low standard deviation of unexplained accruals. They argue that such a firm "has relatively good accruals quality because there is little uncertainty about its accruals. For such a firm, the accruals map poorly into cash flows but this is a predictable phenomenon, and should not be a reason for priced uncertainty" (p. 303). In practice, in the cross-sectional tests in Tables 2–5, for each firm, we compute variability as the standard deviation of unexplained accruals computed over (a) 2001–2005 or (b) 1996–2005. The longer window employed reflects our desire to capture systematic aspects of a firm's earnings quality rather than the effects of short term noise in the data.

Our primary measure of discretionary accruals is a performance-adjusted current accruals measure (REDCA) based on the method used in Ashbaugh et al. (2003). *REDCA* is computed as the difference between total current accruals *(TCA)* and expected performance (i.e., ROA) adjusted total current accruals (*EPTCA*) as follows:

$$REDCA_{ijt} = TCA_{ijt} - EPTCA_{ijt}. \tag{1}$$

where *TCA* and *EPTCA* are computed as follows:

$$TCA_{ijt} = \Delta(Current\ \ Assets)_{ijt} - \Delta(Current\ \ Liabilities)_{ijt} - \Delta(Cash)_{ijt} + \Delta(Short\ term\ and\ Current\ long\ term\ Debt)_{ijt}, \text{ all deflated by lagged total assets.}$$

where Δ is the first difference (with respect to time) operator, and

Current Assets (WC02201) is the sum of cash and equivalents, receivables, inventories, prepaid expenses and other current assets.

Current Liabilities (WC03101) represents debt or other obligations that the company expects to satisfy within one year.

Cash (WC02001) represents the sum of cash and short term investments.

Short Term and Current Long Term Debt (WC03051) represents that portion of financial debt payable within one year including current portion of long-term debt and sinking fund requirements of preferred stock or debentures.

Assets (WC02999) are total assets.

To estimate the expected performance-adjusted total current accruals (*EPTCA*), we first estimate the following:

$$TCA_{ijt} = \beta_1 \frac{1}{Assets_{ijt-1}} + \beta_2 \frac{\Delta net\ \ sales_{ijt}}{Assets_{ijt-1}} + \beta_3 ROA_{ijt-1} + \beta_4 Inflation_{it-1} + \beta_5 GDPgrowth_{it-1} + \varepsilon_{ijt} \tag{2}$$

where *Sales* (WC01001) are defined as gross sales and other operating revenue less discounts returns and allowances. Lagged *ROA,* computed as operating income after taxes (WC08326) relative to total assets is included to control for firm performance as suggested by Kothari et al. (2005). We include inflation and the growth in real (purchasing power parity based) per-capita GDP as controls for the business cycle in each country.[6] The model is estimated by Fama-French industry (Fama and French, 1997), pooling the data across countries using all firms with the requisite accounting data in any given

[3] Dechow (1994) reports that if stock returns are used as a measure of performance, earnings are more highly correlated with stock returns than are current period cash flows. In Dechow et al. (1998), earnings are shown to be a better proxy for future cash flows than current cash flows. Hence, earnings are often used in firm valuation models as well as a measure of firm performance.

[4] Our results are not dependent on a particular model of discretionary accruals as shown in robustness results in Table 5.

[5] Hribar and Nichols (2007) caution that higher variance of discretionary accruals may simply reflect higher variance of cash flows. Hence in our regression analysis we follow their suggestion and explicitly control for the variability of cash flows as well as other potentially correlated firm-level characteristics.

[6] The source for the business cycle measures is the International Monetary Fund's World Economic Outlook Database, April 2009, (www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx). Alternately, we used real GDP growth (not PPP adjusted or on a per-capita basis) with similar results.

Table 1
Countries, firms, and, connected firms included in the sample.

The table includes firms for which *REDCA_5yrs* × 100 could be computed (see Table 2). *Corruption* is from Transparency International. *Anti-Director Rights*, are taken from Djankov et al. (2008) (http://post.economics.harvard.edu/faculty/shleifer/dataset). *Per-Capita Income* is defined for 2005, on a purchasing power parity basis, and expressed in U.S. dollars, and is taken from the World Economic Outlook database from the IMF, available at: http://www.imf.org/external/ns/cs.aspx?id=28.

	Countries	Number of companies	Number connected	Corruption	Anti-director rights	Per-capita income	Average (US$) market cap
1	Belgium	16	1	2.5	3	31,244	2,066,107
2	Denmark	43	1	0.5	4	34,740	839,593
3	France	123	8	2.9	3.5	29,187	4,933,508
4	Germany	116	6	1.8	3.5	30,579	3,919,878
5	Hong Kong	173	3	2	5	33,479	1,132,233
6	India	141	5	7.2	5	3,320	387,393
7	Indonesia	66	15	8	4	4,459	117,284
8	Italy	42	8	5.2	2	28,534	3,203,750
9	Japan	1,665	26	3.1	4.5	30,615	1,164,469
10	Malaysia	211	37	5	5	11,201	305,777
11	Mexico	33	4	6.4	3	10,186	2,603,171
12	Philippines	26	2	7.4	4	4,923	319,299
13	Singapore	103	7	0.7	5	28,368	496,132
14	South Korea	60	2	5.5	5	20,590	895,382
15	Switzerland	67	4	0.9	3	32,571	4,750,633
16	Taiwan	79	4	4.4	3	27,721	1,581,786
17	Thailand	117	15	6.4	4	8,368	142,291
18	UK	409	48	1.4	5	30,436	2,531,682
19	US	1,464	13	2.5	3	41,399	4,451,578

year. We exclude financial firms (SIC 6000–6999) throughout the analysis. An alternative strategy would be to estimate the model by country and industry; however, due to the small size of stock markets in several countries, this would result in the loss of observations for industries with only a small number of firms (e.g., monopolistic and oligopolistic industries). As Faccio (2010) has shown however, connections are more prevalent in less competitive industries. To the extent that monopolies reflect one particular benefit of connections, it would be inappropriate to exclude these firms since they are precisely the firms with more to lose from greater transparency (Leuz and Oberholzer-Gee, 2006). Hence, in this setting, pooling across countries yields substantive benefits.

Using the parameters from Eq. (2), expected performance-adjusted total current accruals (*EPTCA*) are computed as follows:

$$EPTCA_{ijt} = \hat{\beta}_1 \frac{1}{Assets_{ijt-1}} + \hat{\beta}_2 \frac{(\Delta net\ \ sales_{ijt} - \Delta AR_{ijt})}{Assets_{ijt}} + \hat{\beta}_3 ROA_{ijt-1} \quad + \hat{\beta}_4 Inflation_{it-1} + \hat{\beta}_5 GDPgrowth_{it-1} \tag{3}$$

Where ΔAR denotes the change in accounts receivables (and is included as suggested by Dechow et al. (1995)) and all other variables are defined earlier.

Our two primary measures of accrual quality are *REDCA_5yrs* and *REDCA_10yrs*, which are computed as the standard deviation *REDCA* during 2001–2005 or 1996–2005 in Eq. (1). Since requiring 10 years of data may introduce survivorship bias in our results, we also measure accrual quality as the standard deviation of *REDCA* using only 5 years of data (*REDCA_5yrs*).[7] A higher residual standard deviation reflects lower quality reported earnings. We also compute several additional measures of accruals quality as discussed in the robustness section and reported in Table 5.

4. Descriptive statistics

Matching the accounting data from *Worldscope* with the data on political connections from Faccio (2006) described in Section 1, and requiring that there be at least one connected firm in each country, our final sample (using the 5-year measure of accruals quality) includes 4954 firms, of which 209 are connected to a politician, from 19 countries. The sample using the 10-year measure of accruals quality includes 4308 firms, of which 168 are politically connected. Table 1 presents snapshots of a number of summary statistics at the country level. The overall impression is that there is wide variation in the sample across all of the country-level measures tabulated.

For example, there is variation in both the number of firms and the number of connected firms per country. The countries range from poor (India, Indonesia, and the Philippines) to rich (e.g., Denmark, and the United States), from high

[7] Francis et al. (2004) and Francis et al. (2005), use 10 years, and 5 years of data, respectively, in estimating the standard deviation of accruals.

Table 2
Accounting information quality and political connections: Univariate Statistics.
The measures of accounting information quality are the standard deviation (computed over 1996–2005, or 2001–2005) of the firm's discretionary accruals REDCA (estimated from Eq. (1)). *Connected* is a dummy variable set equal to 1 if the company is connected to a politician and 0 otherwise. A company is classified as politically connected if at least one of its large shareholders (anybody directly or indirectly controlling at least 10% of votes) or top directors (CEO, chairman of the board, president, vice-president, or secretary) is a member of parliament, a minister or a head of state, or is tightly related to a politician or party. *Family* is a dummy variable set equal to 1 if the largest shareholder is a family or individual who controls at least 20% of the votes and 0 otherwise.

	REDCA_5yrs × 100		*REDCA_10yrs* × 100	
	No. of obs.	Mean	No. of obs.	Mean
Connected=1	209	5.751	168	6.103
Connected=0	4745	5.206	4,140	5.698
Difference (*t*-stat)		(1.91)		(1.32)
Family=1	907	5.888	770	6.749
Family=0	3,380	5.029	3,012	5.363
Difference (*t*-stat)		(5.69)		(8.97)

corruption (the Philippines, India and Indonesia) to low corruption (Denmark, Singapore and Switzerland). Finally, the average firm size (1997 U.S. $ market capitalization) varies widely, with relatively large firms sampled in France, Switzerland, and the United States. We define the additional control variables presented in Table 1 in more detail when describing our regression analysis (in Section 3.2).

Given this cross-country variation, we take several precautions in our regression analysis. First, a natural concern is that this wide cross-country variation might increase the potential for extreme observations. Hence, we repeated our main analysis after first identifying and then eliminating the top/bottom 5% of residuals. Though we do not report these analyses in tables, we find that the political connections indicator has the same sign and remains statistically significant at conventional levels if we exclude outliers. Secondly, we repeated our benchmark analysis after eliminating entire countries, one at a time, from the analysis. Again, as we show in the robustness section, the coefficients on connections are always positive, and significant in 17 out of 19 regressions. We also adjust the estimated standard errors for clustering at either the country/industry level (when our analysis is cross-sectional), or at the firm level (when the analysis involves a panel structure with repeated firm-level observations).

4.1. Comparisons across samples

Table 2 presents the associations of our two primary measures of accounting information quality vis-à-vis the specific connections variables, and firm ownership structures. *Ceteris paribus*, higher values of these variables indicate lower earnings quality. In the first set of two columns we focus on the (5-year) standard deviation of discretionary accruals computed from Eq. (1). In the second set of columns we display the same information for the (10-year) standard deviation of discretionary accruals.

Each set of three rows present statistics by firm characteristic. For example, there are 209 connected firms for which we can compute the 5-year standard deviation, and its mean value for connected firms is 5.751, and is 5.206 for other non-connected firms. The difference between these means is statistically significant. We note an important caveat that works against us in detecting significant differences in the quality of accruals between connected and non-connected firms in these simple sample comparison tests: as research has shown that connected firms tend to be relatively large, and large firms tend to have better accruals quality, without a control for firm size our inferences are likely to be biased. This is possibly behind the insignificant difference using the 10-year measure. Thus, the results in Table 2 need to be interpreted with caution.

Closely held firms (e.g., family firms) may also be more inclined to establish political connections (Morck et al., 2000; Morck and Yeung, 2004). Hence, in an effort to insure that our political connections indicator is not mixing the effects of a firm's ownership structure and the effects of its connections on its reporting incentives, we examine family firms (*Family*) separately. The difference in earnings quality between family (i.e., firms with a large family or individual shareholder controlling at least 20% of the votes) and non-family firms is highly statistically significant (p-values < 0.001), with family firms exhibiting lower quality earnings than non-family firms.

Overall, the analysis suggests that there are differences in discretionary accruals for connected and non-connected firms, and for family versus non-family firms. Of course, these simple comparisons cannot answer the questions of whether connections matter for earnings quality after controlling for country characteristics, such as the overall level of corruption

within a country, or on other firm attributes, e.g., its size, operating volatility, market to book, or leverage. For these questions we turn to a regression analysis.

4.2. Control variables

Prior to reporting our regression results, we describe a number of firm and country characteristics that we use as controls in our regression analysis. Their inclusion is motivated by prior studies that have found them associated with the quality of accounting information at the firm or at the country level (Doidge et al., 2007; Fan and Wong, 2002; Hribar and Nichols, 2007; Leuz et al., 2003; Leuz, 2006).

We introduce controls for the size of the voting stake held by the largest ultimate shareholder (*Control*). The ownership data are taken from Claessens et al. (2000) and Faccio and Lang (2002), the websites of the stock exchanges or their supervisory authorities, *Worldscope*, and *Extel*. The ownership related data are generally recorded as of the end of 1997. *Control* is constructed according to La Porta et al. (1999), who argue that an investor can gain control in a corporation by directly owning a controlling stake, or indirectly through holding shares in another corporation. In the first case, an investor's share of control rights will correspond to the fraction of votes he is entitled to express because of the shares that he owns. In the second case, the investor's share of the control rights is measured by the weakest control link along the pyramid. We also define *Family* as a dummy variable equal to 1 if the largest shareholder is a family or individual controlling at least 20% of the votes, and 0 otherwise.

Additional firm characteristics included in the regressions are computed using accounting data taken from Worldscope, and measured as of 2001.[8] First, a measure of the firm's *Operating Cycle* is included as suggested by Francis et al. (2004), and is defined as the log of the sum of days in receivable and days in inventory. Next, the firm's size, *Ln Mkt Cap*, is measured as the natural log of the company's market capitalization (WC07210) in US dollars.

Hribar and Nichols (2007) and Liu and Wysocki (2007) show that the results of tests using unsigned measures of accruals quality are likely to be biased if no appropriate controls for operating volatility are used. Thus, we control for a number of operating volatility measures (measured over the same time period as the dependent variable). First, we employ the volatility of cash flows over total assets, $\sigma(CFO/TA)$, during 2001–2005. We defined cash flows (CFO) as:

$$CFO_{ijt} = Income\ before\ extra\ items_{ijt} - TCA_{ijt} + Depreciation\ \ and\ \ Amortization_{ijt},$$

where $Depreciation\ and\ Amortization_{ijt}$ (WC01151) is the sum of depreciation, depletion and amortization expenses; $TCA_{ijt} = \{\Delta(Current\ Assets)_{ijt} - \Delta(Current\ Liabilities)_{ijt} - \Delta(Cash)_{ijt} + \Delta(Short\ term\ and\ Current\ long\ term\ Debt)_{ijt}\}$; $Income\ before\ extra\ items_{ijt}$ is defined as income before extraordinary items and preferred and common dividends, but after operating and non-operating income and expense, reserves, income taxes, minority interest and equity in earnings (WC01551); and *Assets* (WC02999) are the sum of total current assets, long-term receivables, investment in unconsolidated subsidiaries, other investments, net property plant and equipment and other assets. Second, we control for the volatility of sales over total assets, $\sigma(Sales/TA)$, during 2001–2005. Further, we control for the annual growth of sales (WC08631) during 2001, *Sales growth*, and the standard deviation of the annual growth of sales, $\sigma(Sales\ growth)$, during 2001–2005.

We also control for *Market-to-book*, defined as the ratio of market capitalization to book value of equity (Market-to-book), and *Leverage*, defined as total debt as percentage of total assets (WC08236).

Finally, we note that countries with weak institutions may also have lower earnings quality, as documented in Leuz et al. (2003). Hence we also include country-level variables (*Anti-Director Rights*, and *Corruption*) as separate controls since a higher proportion of firms are connected in countries with weaker institutions.[9] *Anti-Director Rights* is the updated index of Anti-Director Rights by Djankov et al. (2008). Our measure of *Corruption* within a country is taken from Transparency International (www.transparency.org). The index measures the "degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, drawing on 14 different polls and surveys from seven independent institutions, carried out among business people and country analysts, including surveys of residents, both local and expatriate." Corruption represents "the abuse of public office for private gain." Transparency International's index for 1997 is rescaled from 0 to 10, with higher values indicating higher corruption.[10]

4.3. Regression analysis

Table 3 presents the results from OLS regressions in which the dependent variable is the standard deviation of the variable computed in Eq. (1) computed over a 5-year period (2001–2005). In all the regressions, the dependent variable is

[8] Fixing the independent variables as of 2001 makes the assumption of independence and exogeneity somewhat more plausible given that our dependent variable is measured over a 5-year period ending in 2005. We did however repeat all of the empirical analysis defining the independent variables as of 2005. None of our conclusions are affected by this choice.

[9] Another way to control for country effects such as the incidence of political connections is by explicitly controlling for country fixed effects in the construction the dependent variable. In Table 5, we do this in several of our alternative measures of discretionary accruals, and our results remain virtually identical.

[10] The Transparency International Corruption Perceptions Index is published annually, beginning in 1995 with rankings for 41 countries; by 1997, the number of countries had increased to 52, and included all our firms' home countries.

Table 3
Standard deviation of discretionary accruals: OLS regressions.

The dependent variable (*REDCA_5yrs*) is defined as the standard deviation (over 2001–2005) of the firm's discretionary accruals (estimated from Eq. (1)) × 100. *Connected* is a dummy variable set equal to 1 if the company is connected to a politician and 0 otherwise. A company is classified as politically connected if at least one of its large shareholders (anybody directly or indirectly controlling at least 10% of votes) or top directors (CEO, chairman of the board, president, vice-president, or secretary) is a member of parliament, a minister or a head of state, or is tightly related to a politician or party. *Control* is the voting stake held by the largest ultimate shareholder. *Family* is a dummy variable set equal to 1 if the largest shareholder is a family or individual who controls at least 20% of the votes and 0 otherwise. *Operating cycle* is defined as the log of the sum of days in receivable and days in inventory. *Ln Mkt Cap*, is the natural log of the company's market capitalization in US dollars. $\sigma(CFO/TA) \times 100$ is the 5-year standard deviation of CFO over total assets ($\times 100$), where CFO_{ijt}=*Income before extra items*$_{ijt} - TCA_{ijt}$+*Depreciation Amortization*$_{ijt}$, where TCA=$\{\Delta(Current\ Assets)_{ijt} - \Delta(Current\ Liabilities)_{ijt} - \Delta(Cash)_{ijt} + \Delta(Short\ term\ and\ Current\ long\ term\ Debt)_{ijt}\}$. $\sigma(Sales/TA) \times 100$ is the 5-year standard deviation of cash sales over total assets ($\times 100$). *σ(Sales growth)* is the standard deviation of the annual growth of sales. *Sales growth* is the annual growth of sales. *Market-to-book* is the ratio of market capitalization to book value of equity. *Leverage* is total debt as percentage of total assets. *Anti-Director Rights* developed by La Porta et al. (1998) and updated by Djankov, La Porta et al. (1998). *Corruption* is from Transparency International (www.transparency.org). The TI index measures the "degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, drawing on 14 different polls and surveys from seven independent institutions, carried out among business people and country analysts, including surveys of residents, both local and expatriate." Corruption represents "the abuse of public office for private gain." The original index is rescaled from 0 to 10, higher value for higher corruption. *t*-Statistics based on standard errors corrected for heteroskedasticity and clustering at the country/Fama-French industry level are reported in parentheses below the coefficient estimates.

	(1)	(2)	(3)
Connected	0.647[b] (2.42)	0.505[c] (1.92)	0.538[b] (2.05)
Control		0.022[a] (2.24)	
Control^2		−0.0001 (−0.97)	
Family			0.242[c] (1.75)
Operating cycle	1.025[a] (9.50)	0.968[a] (8.84)	0.953[a] (8.54)
Ln Mkt Cap	−0.324[a] (−6.47)	−0.286[a] (−5.57)	−0.301[a] (−5.69)
$\sigma(CFO/TA) \times 100$	0.107[a] (3.52)	0.160[a] (5.94)	0.160[a] (5.90)
$\sigma(Sales/TA) \times 100$	0.088[a] (4.29)	0.075[a] (3.21)	0.075[a] (3.21)
$\sigma(Sales\ growth) \times 100$	0.0001[a] (3.89)	0.0001[a] (3.93)	0.0001[a] (3.98)
Sales growth × 100	0.002 (1.29)	0.002 (1.24)	0.002 (1.22)
Market-to-book	0.012 (1.28)	0.004 (0.51)	0.005 (0.56)
Leverage	−0.016[a] (−4.16)	−0.014[a] (−4.36)	−0.015[a] (−4.65)
Anti-director rights	−0.282[a] (−2.83)	−0.323[a] (−3.00)	−0.342[a] (−3.24)
Corruption	0.090 (1.56)	0.089 (1.55)	0.086 (1.48)
Intercept	3.339[b] (2.31)	2.811[c] (1.85)	3.489[b] (2.19)
Number of obs.	4,585	4,053	4,053
Adjusted R^2	33.44%	36.34%	36.00%

multiplied by 100. The independent variables are measures of connections, ownership variables, and other company and country-level attributes. In the initial cross-sectional tests, we classify a company as connected if a political connection is recorded at any time between 1997 and 2001. Subsequently (in Section 4.4), we examine the sub-sample of firms for which we could identify the date of establishment of the connection. There we address the question whether connected firms exhibited a different (e.g., poorer) earnings quality (relative to their peers) prior to the establishment of their political connection.

Moulton (1990) strikingly illustrates how clustering within a group biases estimated standard errors downward. The problem affects the standard errors on aggregate effects (e.g., corruption), on individual-specific response variables (e.g., earnings quality). In particular, since intra-group (e.g., a country/industry) observations share common, perhaps unobservable, characteristics, a fundamental assumption (i.e., independence) of most estimation methods is violated. Thus, in the regressions, unless otherwise noted, we report *t*-statistics based on standard errors adjusted for clustering at the country/industry level.

In Regression (1), we find that connections are positively and significantly related to lower accruals quality (*p*-value=0.016). The magnitude of the coefficient is economically large, and indicates that the presence of connections is associated with a 12% increase in the dependent variable (0.647/5.229).[11]

Other firm-specific controls are also statistically significant in regression (1). Consistent with earlier studies, we find that the standard deviation of discretionary accruals is lower for larger companies; and, it increases with the length of the firm's operating cycle, the volatility of sales, sales growth and its volatility, though it is not statistically significant for sales growth (Hribar and Nichols, 2007; Liu and Wysocki, 2007; LaFond et al., 2007). We also find a negative correlation between the standard deviation of discretionary accruals and leverage.

As for the country-level controls, we find that weak institutions are associated with a higher standard deviation of discretionary accruals. In particular, the standard deviation of discretionary accruals is higher in countries that provide

[11] 5.229 is the sample average of (*REDCA_5yrs* × 100) the dependent variable.

Table 4
Standard deviation of discretionary accruals: OLS regressions.

The dependent variable (*REDCA_10yrs*) is defined as the standard deviation (over 1996–2005) of the firm's discretionary accruals REDCA (estimated from Eq. (1)) × 100. Independent variables are defined in Table 3. *t*-Statistics based on standard errors corrected for heteroskedasticity and clustering at the country/Fama-French industry level are reported in parentheses below the coefficient estimates.

	(1)	(2)	(3)
Connected	0.784[a] (2.84)	0.733[a] (2.69)	0.730[a] (2.69)
Control		0.027[a] (2.73)	
Control^2		−0.0002 (−1.21)	
Family			0.649[a] (3.98)
Operating cycle	1.139[a] (8.82)	1.062[a] (8.15)	1.052[a] (8.12)
Ln Mkt Cap	−0.516[a] (−10.88)	−0.482[a] (−9.25)	−0.490[a] (−9.20)
$\sigma(CFO/TA) \times 100$	0.088[a] (2.97)	0.141[a] (4.88)	0.141[a] (4.85)
$\sigma(Sales/TA) \times 100$	0.074[a] (4.37)	0.058[a] (3.28)	0.059[a] (3.27)
$\sigma(Sales\ growth) \times 100$	0.0001[a] (3.70)	0.0001[a] (2.77)	0.0001[a] (3.00)
Sales growth × 100	0.002 (1.14)	0.002 (1.15)	0.002 (1.18)
Market-to-book	0.005[c] (1.68)	0.004 (1.09)	0.004 (1.10)
Leverage	−0.008[b] (−2.30)	−0.005 (−1.69)	−0.006[c] (−1.84)
Anti-director rights	−0.332[a] (−2.73)	−0.230[c] (−1.76)	−0.235[c] (−1.83)
Corruption	0.239[a] (3.91)	0.232[a] (3.89)	0.233[a] (3.91)
Intercept	5.797a (4.57)	4.707a (3.43)	5.181a (3.70)
Number of obs.	3968	3543	3543
Adjusted R^2	32.84%	35.43%	35.30%

poor legal protection of minority shareholders (e.g., low *Anti-Director Rights*), and it is also higher in more corrupt countries. These results corroborate early findings by Leuz et al. (2003).

Fan and Wong (2002) find that closely held companies disclose less meaningful accounting information; hence in regressions (2) and (3) we add controls for ownership structure. To the extent that our measures of connectedness are correlated with ownership variables, we need to assess their robustness to the inclusion of these additional controls. We begin by controlling for the concentration of control (voting rights) in the hands of the largest shareholder (*Control*). To better separate the alignment and entrenchment effects present at different levels of concentration of control, we also add the squared value of control in the model. We find that the quality of accruals is lower in firms with a more concentrated ownership structure. Importantly, the coefficient on political connections declines slightly, but remains statistically significant.

In regression (3) we isolate family firms. We find evidence that companies with a large family-block-holder use more discretion in reporting their accounting numbers, consistent with results in Fan and Wong (2002). Thus, these results suggest that concentration of voting rights, ownership, and political connections affect the quality of accounting information that firms provide.

As noted above, using 5 years of data to compute our dependent variable (as in Table 3) potentially introduces a lot of noise. To address this issue, we repeat the analysis using the standard deviation of residuals during 1996–2005. The results are reported in Table 4. We continue to adjust standard errors for heteroskedasticity and clustering at the country/industry level.

All the results on political connections are supported when we use the longer period (ten years) to measure earnings quality. Regression (1) shows that being connected results in a 12% (0.784/5.714) increase in the dependent variable (e.g., thus results in lower earnings quality). This result is significant at the 1% level. Higher concentration of ownership is associated with lower accruals quality, as found previously, and the impact of connections remains economically and statistically significant. When we isolate family firms in regression (3) we find evidence that companies with a large family-block-holder use more discretion in reporting their accounting numbers as before.

5. Robustness tests

5.1. Exclusion of individual countries and differences across countries

To provide assurances that our results are not driven by any specific country, we recursively repeat our estimation of regression (1) in Tables 3 and 4, omitting a different country each iteration. These results are not reported in tables for space considerations, but can be summarized as follows. When the 5-year standard deviation of the discretionary accruals measure is used as the dependent variable, the coefficients on connections are always positive, ranging from 0.407 to 0.792. The coefficient is significant in 17 out of 19 regressions, with a *p*-value of 0.052 or lower; only when we exclude Japan or the United Kingdom, does the coefficient lose statistical significance (*p*-values of 0.146 and 0.171, respectively). When the 10-year measure is employed, the coefficients on connections range from 0.140 to 0.971. The coefficient is significant in 18 out of 19 regressions, with a *p*-value of 0.053 or lower; the coefficient loses statistical significance only when we exclude Japan.

The lack of significance after the exclusion of Japan or the U.K. appears to be due to the lower power of tests that rely on a substantially smaller sample size. Connections, in fact, remain significant if we include all countries in the regressions, and add country dummies to the regression specifications.

A related question is whether the link between connections and transparency differs across countries and economies. To assess this possibility, we added, one at the time (to the model (1) of Table 3) interaction terms between *Connected* and *Corruption*, *Connected* and *Anti-director rights*, and *Connected* and *per-capita GDP*. None of those interaction terms turned out to be significant. For example, the coefficient of the interaction between *Connected* and *Corruption* is 0.034 (t-stat=0.25); the coefficient of the interaction between *Connected* and *Anti-director rights* is 0.417 (t-stat=1.36); the coefficient of the interaction between *Connected* and *ln(per-capita GDP)* is −0.277 (t-stat=−0.73).

5.2. Transformations of the dependent variable and alternative estimation methods

By construction, the dependent variable in our regression models is positive. Because of this truncation, the disturbance terms may not be normally distributed. One possible solution to this problem is to use a logistic transformation, where the new dependent variable is computed as:

$$z_i = \log\left(\frac{\frac{y_i}{\max(y_i)+\theta}}{1-\frac{y_i}{\max(y_i)+\theta}}\right) = \alpha_0 + \alpha_1 Conn_i + \sum_{k=1}^{n} \alpha_k Controls_{k,i} + \varepsilon_i \quad i = 1,2,\ldots,n; \quad \theta > 0. \tag{3}$$

In this case z_i satisfies $-\infty < z_i < \infty$, and thus the truncation problem is avoided. We can therefore employ this specification to assess the robustness of our previous results in Table 3. For space reasons, these robustness results are not tabulated. When allow θ to (alternatively) assume a value of 0.001, 0.01, or 1 and re-run the regressions. We find that the coefficient of *Connected* ranges between 0.109 and 0.112, and is statistically significant at conventional levels, with a p-value of less than 0.10.

We also re-run our specifications alternatively employing a Tobit estimation model, and using the log of our accruals quality measure as the dependent variable, to avoid truncation at zero. Although not reported to conserve space, all our results are unchanged.

5.3. Alternative measures of earnings quality

In Table 5 we present the results of thirteen different estimations. In each of the first six regressions, we consider different measures of earnings quality that have been suggested by other research. In regressions (7)–(12) the dependent variable is the *median* of the *absolute value* of discretionary accruals, rather than the standard deviation, during 2001–2005. In regression (13) the dependent variable is the average ratio of the absolute value of accruals over the absolute value of the cash flow from operations. All models below are estimated by industry including business cycle controls.

The measures are defined as follows:

PADCA is a *portfolio* performance-adjusted measure of discretionary accruals. It is the discretionary accruals (as measured in Eq. (1), though excluding the *ROA* term in equations (2) and (3)) for the firm minus the median industry discretionary accruals based on decile ranks of *ROA* for each industry determined in the prior year.

- *PADCA_5yrs* is the standard deviation of *PADCA* over 2001–2005. The results are presented in Column 1 of Table 5.
- *PADCA_MEDIAN* is the median of the absolute value of *PADCA*, computed over 2001–2005. The results are presented in Column 8 of Table 5.

DCA is a measure of discretionary accruals estimated using the basic Jones (1991) model.

- *DCA_5yrs* is the standard deviation of *DCA* over 2001–2005. The results are presented in Column 2 of Table 5.
- *DCA_MEDIAN* is the median of the absolute value of *DCA*. The results are presented in Column 9 of Table 5.

REDCA2 is the same as the *REDCA* model (Eq. (1)) but estimated with country dummies.

- *REDCA2_5yrs* is the standard deviation of *REDCA2* over 2001–2005. The results are presented in Column 3 of Table 5.
- *REDCA2_MEDIAN* is the median of the absolute value of *REDCA2*, computed over 2001–2005. The results are presented in Column 10 of Table 5.

PADCA2 is the same as *PADCA* (above) but estimated with country dummies.

- *PADCA2_5yrs* is the standard deviation of *PADCA2* over 2001–2005. The results are presented in Column 4 of Table 5.
- *PADCA2_MEDIAN* is the median of the absolute value of *PADCA2*, computed over 2001–2005. The results are presented in Column 11 of Table 5.

Table 5
Robustness tests: Other measures of accruals quality.

The dependent variable is defined using various measures of discretionary accruals (see Section 4.3) × 100. *Connected* is a dummy variable set equal to 1 if the company is connected to a politician and 0 otherwise. A company is classified as politically connected if at least one of its large shareholders (anybody directly or indirectly controlling at least 10% of votes) or top directors (CEO, chairman of the board, president, vice-president, or secretary) is a member of parliament, a minister or a head of state, or is tightly related to a politician or party. *Operating cycle* is defined as the log of the sum of days in receivable and days in inventory. *Ln Mkt Cap*, is the natural log of the company's market capitalization in US dollars. *σ(Sales growth)* is the standard deviation of the annual growth of sales. *Sales growth* is the annual growth of sales. *Market-to-book* is the ratio of market capitalization to book value of equity. *Leverage* is total debt as percentage of total assets. *Anti-Director Rights* developed by La Porta et al. (1998) and updated by Djankov et al. (2008). *Corruption* is from Transparency International (www.transparency.org). The TI index measures the "degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, drawing on 14 different polls and surveys from seven independent institutions, carried out among business people and country analysts, including surveys of residents, both local and expatriate." Corruption represents "the abuse of public office for private gain." The original index is rescaled from 0 to 10, higher value for higher corruption. All models are ordinary least squares estimates. *t*-Statistics based on standard errors corrected for heteroskedasticity and clustering at the country/Fama-French industry level are reported in parentheses below the coefficient estimates.

	(1) *PADCA_5yrs*	(2) *DCA_5yrs*	(3) *REDCA2_5yrs*	(4) *PADCA2_5yrs*	(5) *DCA2_5yrs*	(6) *DISCRET. ACCRUALS*
Connected	0.687[a] (2.62)	0.631[b] (2.35)	0.607[b] (2.45)	0.604[b] (2.54)	0.576[b] (2.32)	0.697[a] (2.92)
Operating cycle	0.964[a] (9.10)	1.028[a] (9.44)	0.900[a] (8.63)	0.875[a] (8.33)	0.907[a] (8.67)	0.796[a] (8.01)
Ln Mkt Cap	−0.322[a] (−6.70)	−0.324[a] (−6.47)	−0.300[a] (−6.39)	−0.302[a] (−6.63)	−0.299[a] (−6.37)	−0.307[a] (−8.10)
σ(CFO/TA) × 100	0.103[a] (3.41)	0.107[a] (3.54)	0.107[a] (3.69)	0.100[a] (3.38)	0.107[a] (3.71)	0.094[a] (4.24)
σ(Sales/TA) × 100	0.086[a] (4.39)	0.088[a] (4.31)	0.079[a] (4.08)	0.079[a] (4.27)	0.079[a] (4.09)	0.058[a] (4.19)
σ(Sales growth) × 100	0.0001[a] (3.82)	0.0001[a] (4.04)	0.0001[a] (3.72)	0.0001[a] (3.78)	0.0001[a] (3.76)	0.0001[b] (2.11)
Sales growth × 100	0.001 (1.00)	0.002 (1.30)	0.002 (1.29)	0.001 (1.07)	0.002 (1.31)	0.002 (1.55)
Market-to-book	0.012 (1.22)	0.012 (1.31)	0.011 (1.22)	0.010 (1.08)	0.011 (1.25)	0.018[b] (2.29)
Leverage	−0.016[a] (−4.28)	−0.016[a] (−4.26)	−0.015[a] (−4.07)	−0.015[a] (−4.11)	−0.015[a] (−4.16)	−0.014[a] (−4.06)
Anti-director rights	−0.287[a] (−2.91)	−0.282[a] (−2.83)	−0.252[a] (−2.61)	−0.290[a] (−3.05)	−0.250[b] (−2.58)	−0.372[a] (−4.37)
Corruption	0.080 (1.43)	0.093 (1.62)	0.094[c] (1.72)	0.077 (1.42)	0.095 (1.73)	0.088[c] (1.73)
Intercept	3.643[a] (2.61)	3.309[b] (2.29)	3.480[b] (2.52)	3.780a (2.86)	3.424b (2.49)	4.839a (4.53)
Number of obs.	4,583	4,585	4,613	4,611	4,612	4,517
Adjusted R^2	32.62%	33.39%	32.16%	31.11%	32.10%	30.11%

	(7) *REDCA_MEDIAN*	(8) *PADCA_MEDIAN*	(9) *DCA_MEDIAN*	(10) *REDCA2_MEDIAN*	(11) *PADCA2_MEDIAN*	(12) *DCA2_MEDIAN*	(13) *|Acc|/|CFO|*
Connected	0.166 (0.95)	0.374[b] (2.15)	0.198 (1.12)	0.363[b] (2.18)	0.550[a] (3.20)	0.293[c] (1.73)	0.298 (1.80)
Operating cycle	0.773[a] (10.84)	0.673[a] (10.23)	0.747[a] (10.46)	0.600[a] (8.37)	0.517[a] (7.44)	0.585[a] (7.79)	0.179 (4.18)
Ln Mkt Cap	−0.180[a] (−6.32)	−0.190[a] (−6.94)	−0.190[a] (−6.61)	−0.184[a] (−6.79)	−0.189[a] (−7.57)	−0.184[a] (−6.62)	−0.134 (−8.98)
σ(CFO/TA) × 100	0.038[a] (3.35)	0.038[a] (3.29)	0.038[a] (3.54)	0.040[a] (3.39)	0.041[a] (3.49)	0.040[a] (3.41)	0.011 (2.05)
σ(Sales/TA) × 100	0.055[a] (5.16)	0.051[a] (4.94)	0.055[a] (5.20)	0.048[a] (5.38)	0.044[a] (5.10)	0.048[a] (5.41)	0.007 (2.39)
σ(Sales growth) × 100	0.0001[a] (4.78)	0.0001[a] (5.99)	0.0001[a] (4.39)	0.0001[a] (4.30)	0.0001[a] (5.64)	0.0001[a] (3.45)	0.0000 (0.07)
Sales growth × 100	0.002[b] (2.28)	0.001 (1.40)	0.002[b] (2.36)	0.002[b] (2.31)	0.002 (1.58)	0.002[b] (2.28)	−0.001 (−1.77)
Market-to-book	0.007 (1.48)	0.008 (1.62)	0.007 (1.62)	0.010c (1.87)	0.004 (1.12)	0.009c (1.82)	0.006 (0.68)
Leverage	−0.008[a] (−3.08)	−0.010[a] (−4.50)	−0.007[a] (−2.98)	−0.008[a] (−3.43)	−0.009[a] (−4.40)	−0.007[a] (−3.11)	−0.002 (−1.38)
Anti-director rights	−0.081 (−0.99)	−0.143[c] (−1.76)	−0.072 (−0.90)	−0.123 (−1.60)	−0.148[c] (−1.88)	−0.131[c] (−1.71)	0.049 (1.29)
Corruption	0.065 (1.60)	0.052 (1.38)	0.068[c] (1.69)	0.094[b] (2.49)	0.062 (1.65)	0.095[b] (2.49)	−0.020 (−1.00)
Intercept	1.154 (1.38)	1.950[b] (2.43)	1.318 (1.58)	2.155[a] (2.82)	2.730[a] (3.69)	2.225[a] (2.87)	1.511 (4.27)
Number of obs.	4,584	4,584	4,583	4,611	4,605	4,610	4,554
Adjusted R^2	23.30%	23.37%	23.93%	22.73%	21.68%	22.54%	7.09%

DCA2 is the same as *DCA* (above) but estimated with country dummies.

- *DCA2_5yrs* is the 5-year standard deviation of the residuals resulting from the Jones (1991) model estimation. The results are presented in Column 5 of Table 5.
- *DCA2_MEDIAN* is the median of the absolute value of *DCA2*. The results are presented in Column 12 of Table 5.

We also include three additional measures for completeness.

- *DISCRETIONARY ACCRUALS* is the standard deviation of accruals over 2001–2005. The model is estimated by industry using the Dechow and Dichev (2002) model which includes lagged, concurrent, and future period's cash from operations in the estimated model for accruals. We adjust the Dechow and Dichev model following McNichols (2002), who includes the variables from the basic Jones (1991) model in the Dechow and Dichev (2002) model. Cash from operations is computed using the balance sheet approach (as described in Section 3.2.). The results are presented in Column 6 of Table 5.
- *REDCA_MEDIAN* is the median of the absolute value of *REDCA* as described in Eq. (1), computed over 2001–2005. The results are presented in Column 7 of Table 5.
- $|Acc|/|CFO|$ is the average, computed over 2001–2005, of the ratio of the absolute value of accruals over the absolute value of the cash flow from operations. In this model, accruals and cash flows from operations are computed as in Leuz et al. (2003).

The correlations between the various accrual proxies range from 0.17 and 0.99, with a median correlation coefficient of 0.70. In Table 5, our results show that connected firms have more variable discretionary accruals, i.e., poorer earnings quality. The coefficient of *Connected* is significant at standard levels in all regression employing volatility measures; and it is significant in 4 out of the 6 regressions in which we employ the median absolute value of accruals. As shown in the table, this result is robust to controlling for country-specific aspects such as *Anti-director rights* and the country's overall level of *Corruption*, as well as firm-specific attributes such as the firm's operating cycle (*Operating cycle*), its size (*Ln Mkt Cap*), the volatility of the firm's sales and cash flows ($\sigma(CFO/TA)$, and $\sigma(Sales/TA)$), the growth and variability of its sales (*Sales growth*, $\sigma(Sales\ growth)$), its market-to-book (*Market-to-book*) ratio and its *Leverage*.

5.4. Are companies with poor accruals quality more likely to establish political connections?

As pointed out in the introduction, several possible hypotheses are consistent with our general finding that connected companies have poorer accruals quality. In particular, it might simply be the case that firms with poor earnings quality are more likely to establish political connections. If that is the case, we should find that poor (ex-ante) accruals quality is associated with a higher likelihood that a connection is established in a given year. To investigate this possibility, we estimate the following model of the probability of establishing a political connection:

$$\begin{aligned}\Pr(Connected_{i,t}=1) = F(&\alpha_1 * REDCA_{i,(t-5,\ t-1)} + \alpha_2 * Ln\ Mkt\ Cap_{i,\ t-1} + \alpha_3 * \sigma(CFO/TA)_{i,\ (t-5,t-1)} \\ &+ \alpha_4 * \sigma(Sales/TA)_{i,(t-5,\ t-1)} + \alpha_5 * \sigma(Sales\ growth)_{i,(t-5,\ t-1)} + \alpha_6 * Salesgrowth_{i,t-1} \\ &+ \alpha_7 * Anti-director\ rights_i + \alpha_8 * Corruption_{i,t-1} + \alpha_9 * Operating\ cycle_{i,t-1} \\ &+ \alpha_{10} * Market-to-book_{i,t-1} + \alpha_{11} * Leverage_{i,t-1} + \alpha_{12} * Capital_{i,t-1})\end{aligned}$$

where $Connected_{i,t}$ is a variable that equals 0 if company i does not establish a connection in year t and equals 1 if it establishes a new connection during year t, $F(.)$ is the cumulative distribution function of a standard normal variable. At any time t the sample includes all companies with available data on the dependent and independent variables, with the exception of (1) connected firms for which we could not establish a date in which the connection was created and (2) connected firms that established their political tie(s) prior to 1990. The sample period, t, starts in 1990, as data availability is very scarce in *Datastream* prior to that period,[12] and ends in 2001, as the Faccio (2006) database only identifies connections established up to that year. After a company establishes a political connection, we drop it from the sample.

The regression results in Table 6 show that the quality of accruals has no significant impact on a firm's likelihood of establishing a connection.[13] The coefficients of the accruals quality variables are in fact negative denoting that, if anything, companies with (prior) poorer accruals quality are less likely to establish a new political connection in a given year. The results confirm that firm size is an important determinant of the likelihood of establishing a connection; so are (at least in one of the specifications) anti-director rights, corruption, the operating cycle, market-to-book, leverage, and the location of the corporate headquarters in the capital of the country.

Although this result rejects the hypothesis that firms with poor earnings quality are more likely to establish political connections, we note that the sample of connected firms included in these tests is relatively small (74 firms when we use a 5-year measure of accruals quality, and 29 firms when accruals quality is measured over a 10-year period). A question

[12] This in fact forces us to require that accounting data be available as far back as in 1985, so as to be able to compute the accruals quality and volatility variables over the five years prior to the establishment of the connection.

[13] For all the accrual proxies, we consistently find that the accrual variable is insignificantly related to the propensity to establish a connection.

Table 6
Determinants of the choice to establish a political connection in year *t*. Probit regression, reporting marginal effects (*dF*/*dx* is for discrete change of dummy variable from 0 to 1). In particular, we estimate the following model of the probability of establishing a political connection:

$$\begin{aligned}\Pr(Connected_{i,t}=1) = F(&\alpha_1 \times REDCA_{i,(t-5,\,t-1)} + \alpha_2 \times Ln\ Mkt\ Cap_{i,\,t-1} + \alpha_3 \times \sigma(CFO/TA)_{i,(t-5,\,t-1)} + \alpha_4 \times \sigma(Sales/TA)_{i,(t-5,t-1)}\\ &+ \alpha_5 \times \sigma(Sales\ growth)_{i,(t-5,t-1)} + \alpha_6 \times Sales\ growth_{i,t-1} + \alpha_7 \times Anti{-}director\ rights_i\\ &+ \alpha_8 \times Corruption_{i,t-1} + \alpha_9 \times Operating\ cycle_{i,t-1} + \alpha_{10} \times Market{-}to{-}book_{i,t-1}\\ &+ \alpha_{11} \times Leverage_{i,t-1} + \alpha_{12} \times Capital_{i,t-1})\end{aligned}$$

where $Connected_{i,t}$ is a variable that equals 0 if company *i* does not establish a connection in year *t* and equals 1 if it establishes a new connection during year *t*, *F*(.) is the cumulative distribution function of a standard normal variable. At any time *t* the sample includes all companies with available data on the dependent and independent variables, with the exception of (1) connected firms for which we could not establish a date in which the connection was created and (2) connected firms that established their political tie(s) prior to 1990. *REDCA_5yrs* (*REDCA_10yrs*) is the standard deviation of the firm's discretionary accruals REDCA (estimated from Eq. (1)) × 100 for the 5 (10) years prior to the establishment of a connection. The other independent variables are defined in Table 3. *Z*-statistics, based on standard errors clustered at the firm level, are reported in parentheses below the coefficient estimates.

	(1)	(2)
REDCA_5yrs	−0.0023 (−0.48)	
REDCA_10yrs		−0.0039 (−0.50)
Ln Mkt Cap	0.0004[a] (4.82)	0.0004[a] (4.14)
$\sigma(CFO/TA) \times 100$	0.0006 (0.27)	−0.0006 (−0.15)
$\sigma(Sales/TA) \times 100$	−0.0000 (−0.02)	−0.0005 (−0.22)
$\sigma(Sales\ growth) \times 100$	−0.0002 (−0.32)	0.0008 (1.31)
Sales growth × 100	0.0001 (0.34)	−0.0004 (−0.57)
Anti-director rights	0.0010[a] (4.09)	0.0011[a] (3.20)
Corruption	0.0003[b] (2.03)	−0.0004 (−0.96)
Operating cycle	−0.0004[c] (−1.68)	−0.0001 (−0.21)
Market-to-book	0.0000[c] (1.74)	0.0000 (0.45)
Leverage	0.0013 (1.63)	0.0021[b] (2.06)
Capital	0.0008[c] (1.67)	0.0013[c] (1.82)
Observed *p*	0.0020	0.0026
No. of obs.	36,272	10,948
Connections	74	29
Pseudo R^2	6.98%	14.47%

remains as to the extent to which these results can be generalized to connected firms for which we could not establish a date for which the connection was created, and for connected firms for which data availability limitations prevent us from being able to compute accruals quality prior to the date of establishment of the connection. Thus, the reader should keep these caveats in mind when interpreting these results.[14]

6. Why do not connected firms care about the consequences of poor earnings quality?

We have shown that, on average, the accruals quality of connected companies is poorer than the quality of accruals of non-connected firms. From an empirical standpoint, a number of studies have shown that poor accrual quality results in a number of negative consequences at the firm level, including a higher cost of capital (Francis et al., 2005), or a higher likelihood of a lawsuit. Thus, the question becomes why connected firms appear not to care about the consequences. One possibility is that their political ties allow mitigating or even eliminating such effects. So, for example, it might be possible that lenders of connected firms provide them with relatively cheap capital, regardless to the opacity/quality of their accounting information.

To address this question, we focus on the cost of debt. This choice is driven by the fact that the overwhelming majority of studies on political ties document preferential access to credit for connected firms (Cull and Xu, 2005; Dinç, 2005; Johnson and Mitton, 2003; Khwaja and Mian, 2005). Thus, perhaps due to political pressure on (government owned) banks, connected firms (despite their poor accruals quality) are able to avoid paying higher interest rates. If that were the case,

[14] We also considered addressing the endogeneity in the choice to establish a connection by employing a treatment effects model. Specifically, in the first stage (the participation equation), we estimate connections using the location of the company's headquarters, *Capital,* and country dummies, along with the firm-level independent variables included in previous regressions (i.e., Table 3). In all specifications the presence of a firm's headquarters in the capital city is a (highly) statistically significant predictor of whether the firm establishes a political connection. Moreover, in each of the outcome regressions, *Connected* is statistically significant as well. The estimated coefficient of *Connected* is larger than that reported using OLS (e.g., in Tables 3 and 4), which suggests that connected firms would, in the absence of connections, actually have better than average earnings quality. In general the treatment effects model has the advantage of using the entire sample – not just the firms which established connections during our sample – but, it relies on the assumption that *Capital* is uncorrelated with the error term in the structural equation (e.g., those in Table 3). Since it is extremely difficult to convincingly claim that *Capital* meets the exclusion restriction, we simply summarize these results in this footnote.

Table 7
Discretionary accruals and the cost of debt: Comparison across different samples.

The table reports the average cost of debt for companies falling into different groups. The dependent variable, *Cost of Debt*, is the ratio of a firm's annual interest expense in year t over the average interest bearing obligations outstanding between year-end $t-1$ and year-end t ($\times 100$). The average interest bearing obligations outstanding are computed using interim data, when available. This ratio is converted to U.S. dollar terms using covered interest parity. The ratio is computed for each year between 2001 and 2005, and then averaged over this period for each firm. *Connected* is a dummy variable set equal to 1 if the company is connected to a politician and 0 otherwise. A company is classified as politically connected if at least one of its large shareholders (anybody directly or indirectly controlling at least 10% of votes) or top directors (CEO, chairman of the board, president, vice-president, or secretary) is a member of parliament, a minister or a head of state, or is tightly related to a politician or party. *REDCA_5yrs* is defined as the standard deviation (over 2001–2005) of the firm's discretionary accruals (estimated from Eq. (1)) $\times$ 100. *REDCA_10yrs* is defined as the standard deviation (over 1996–2005) of the firm's discretionary accruals (estimated from Eq. (1)) $\times$ 100.

	Connected	Non-connected
Panel A: Accruals quality proxy: REDCA_5yrs		
REDCA_5yrs $\geq$ sample median	6.66%	6.71%
	N=99	*N*=2,183
REDCA_5yrs $<$ sample median	5.25%	5.36%
	N=105	*N*=2,237
Difference	*1.41%*	*1.35%*
t-Stat for the difference	*(2.85)*	*(10.00)*
	N=204	*N=4,420*
Panel B: Accruals quality proxy: REDCA_10yrs		
REDCA_10yrs $\geq$ sample median	6.36%	6.66%
	N=88	*N*=1,902
REDCA_10yrs $<$ sample median	4.96%	5.07%
	N=76	*N*=1,966
Difference	*1.40%*	*1.58%*
t-Stat for the difference	*(2.92)*	*(11.97)*
	N=164	*N=3,868*

this would provide an explanation as to why connected firms exhibit significantly poorer accruals quality despite the negative consequences generally associated with poor quality.

6.1. Average realized cost of debt

We use two approaches to infer the cost of debt. In this sub-section, we follow Francis et al. (2005) and Liu and Wysocki (2007), and compute the cost of debt as the ratio of a firm's interest expense in year t (in our case 2005) (WC01251) over the average interest bearing obligations outstanding between quarter 4 of year $t-1$ and quarter 4 of year t (WC03255A). The average interest bearing obligations outstanding are computed using interim data, when available.[15] When computing the average interest bearing obligations outstanding, we require a minimum of two observations in each given year. This gives us the realized cost of debt in the company's local currency. To make these rates comparable across countries, we convert them in U.S. dollar terms using the covered interest parity. Thus, given a cost of borrowing in the local currency of i_{LC}, we define the dollar cost (i_{US}) of borrowing local currency

$$i_{US} = i_{LC}\left[1+\frac{e_1-e_0}{e_0}\right]+\frac{e_1-e_0}{e_0}$$

where e_0 and e_1 are the spot and the one year forward rates as of the beginning of year t. The dollar cost (i_{US}) of borrowing is computed, for each firm, in each year between 2001 and 2005, and then averaged over this period.[16] Thus, the regressions in Table 8 employ the geometric average of the cost of debt during 2001–2005 for each firm as dependent variable.

Table 7 first reports some preliminary results. In these simple univariate tests we find that the cost of debt is higher for companies with poorer accruals. This is true both for connected and non-connected firms, and for both measures of discretionary accruals. Once again however, we wish to evaluate whether the results continue to hold after controlling for other determinants of the cost of borrowing.

As is standard in the literature, we control for a number of factors that are known to influence interest rates via regression analysis, including: leverage, size, the standard deviation of sales growth, the rate of growth of sales, market to book, and the interest coverage ratio. *Leverage* is total debt as percentage of total assets (WC08236) of the end of 2001; size,

[15] Interim data are available (for at least three years between 2001 and 2005) with a quarterly frequency for 34% of the companies in the sample, and with a semi-annual frequency for an additional 37% of the firms in the sample.

[16] We do not go back further to compute the average cost of debt over a longer period between the interim data is very limited further back in time.

Table 8
Discretionary accruals and the cost of debt.

The dependent variable, *Cost of Debt*, is the ratio of a firm's annual interest expense in year t over the average interest bearing obligations outstanding between year-end $t-1$ and year-end t ($\times 100$). The average interest bearing obligations outstanding are computed using interim data, when available. This ratio is converted to U.S. dollar terms using covered interest parity. The ratio is computed for each year between 2001 and 2005, and then averaged over this period for each firm. *REDCA_5yrs* is defined as the standard deviation (over 2001–2005) of the firm's discretionary accruals (estimated from Eq. (1)) $\times 100$. *REDCA_10yrs* is defined as the standard deviation (over 1996–2006) of the firm's discretionary accruals (estimated from Eq. (1)) $\times 100$. *Leverage* is total debt as percentage of total assets as of the end of 2001; *Ln Mkt Cap* is measured as the natural log of the company's market capitalization in US dollars, as of the end of 2001; volatility is the standard deviation (σ*(Sales growth))* of Sales growth during 2001–2005. *ROA* is the ratio of operating income (after taxes) to total assets in year 2001; the *Interest Coverage Ratio* is the ratio of operating income to interest expense in year 2001. Because of the presence of outliers, we drop companies with a cost of debt in the top/bottom percentile, as well as companies with an interest coverage ratio in the top/bottom percentile. All models include additional interaction terms between *Connected* and each of the control variables—not reported for space reasons. Both models are estimated by ordinary least squares. *t*-Statistics based on standard errors corrected for heteroskedasticity and clustering at the country/Fama-French industry level are reported in parentheses below the coefficient estimates.

	(1)	(2)
REDCA_5yrs	0.169[a] (4.77)	
		0.210[a] (6.61)
REDCA_5yrs × *Connected*	−0.217[b] (−2.28)	
REDCA_10yrs × *Connected*		−0.066 (−0.53)
Connected	0.067 (0.02)	0.474 (0.15)
Leverage	−0.031[a] (−4.96)	−0.031[a] (−4.78)
Ln Mkt Cap	−0.048 (−1.03)	0.009 (0.19)
σ*(CFO/TA)* × 100	0.034[b] (2.23)	0.047[a] (2.87)
σ*(Sales/TA)* × 100	0.008 (0.85)	0.001 (0.12)
σ*(Sales growth)* × 100	0.000 (0.39)	0.000 (0.74)
Sales growth × 100	0.0001 (0.04)	−0.001 (−1.53)
Operating cycle	−0.406[b] (−2.13)	−0.471[b] (−2.44)
Market-to-book	0.031 (1.35)	0.032 (1.34)
Interest Coverage Ratio	0.001 (0.40)	0.000 (0.08)
Intercept	8.145[a] (6.47)	7.374[a] (5.86)
Number of obs.	4201	3735
Number of connected firms	128	111
Adjusted R^2	7.65%	8.88%

Ln Mkt Cap, is measured as the natural log of the company's market capitalization (WC07210) in US dollars, as of the end of 2001; σ*(Sales growth)* is the standard deviation of Sales growth during 2001–2005. We define *Market-to-book* as the ratio of market capitalization to book value of equity; the *Interest Coverage Ratio* is the ratio of operating income (WC01250) to interest expense (WC01251) during 2001.

To minimize the possibility of finding a spurious correlation between accruals quality and the cost of debt, as suggested by Hribar and Nichols (2007), we additionally control for the volatility of cash flows over total assets, σ*(CFO/TA)*, during 2001–2005, the volatility of sales over total assets, σ(*Sales/TA*), during the same period, and the firm's *Operating cycle* to capture differences in operating volatility across firms. Because of the presence of outliers, we exclude companies with a cost of debt in the top/bottom percentile, as well as companies with an interest coverage ratio in the top/bottom percentile.

In Table 8, we report two regressions: one for each of our main earnings quality measures. We find that for non-connected firms, lower accruals quality (higher standard deviation of accruals) results in a significantly higher cost of debt. The interaction term on our 5-year earnings quality measure with the connected dummy is however negative and statistically significant, indicating that this effect is reversed for connected firms. In fact, if we add up the coefficient on each earnings quality measure with the coefficient on the interaction between earnings quality and connections, we find the sum to be insignificantly different from zero, indicating that, for the sample of connected firms, there is no statistical relation between the quality of earnings and the cost of debt.

This indicates that, despite their poor accruals quality, connected firms are not penalized by their lenders, which in turn, may be due to political pressures faced by lenders, especially in the case of government owned banks. Alternatively, the result may be due to greater private information flows between connected firms and the lenders, or to the implicit promise of a government bailout in the event of default of an opaque connected firm. From our perspective this result provides an explanation as to why connected firms do not appear to care about the quality of their earnings, in that (for some reason) there is no penalty applied to those firms reporting lower quality information.

The results, however, do not extend to the 10-year earnings quality measure. When this alternative measure is used, in fact, the interaction term with *Connected*, although negative, becomes closer to zero in magnitude, and is not statistically significant. Additionally, the joint effect of being connected is actually positive, although it is not significant.

According to Table 8, the cost of debt is positively related to the volatility of cash flows/total assets, and it is negatively related to the length of the operating cycle and leverage. These results are perhaps surprising. Francis et al. (2005) also find

Table 9
Discretionary accruals and the cost of debt for bond issuers.

The sample includes all issuances of non-convertible debt (excluding equity- or inflation-linked bonds, or bonds with attached warrants) by publicly traded firms between 1995 and 2007, as reported in SDC Platinum's *Global New Issues* database. We additionally require availability of all data needed to compute the independent variables in *Datastream*. The dependent variable is the basis point spread over treasury bonds with comparable maturity. *REDCA_5yrs* is defined as the standard deviation (over the 5 years preceding the bond issuance) of the firm's discretionary accruals (estimated from Eq. (1)) × 100. Similarly, $\sigma(CFO/TA)$, $\sigma(Sales/TA)$, and $\sigma(Sales\ growth)$ are measured during the 5 years preceding the bond issuance. All other stock (flow) variables are measured as of the end of the year (during the year) preceding the issuance. Both models are ordinary least squares estimates. *t*-Statistics based on standard errors corrected for heteroskedasticity and clustering at the firm level are reported in parentheses below the coefficient estimates.

	(1)	(2)
REDCA_5yrs	0.012 (0.60)	0.020 (0.93)
REDCA_5yrs × *Connected*	−0.056[b] (−2.48)	−0.075[b] (−2.48)
Connected	−0.005 (−0.04)	0.050 (0.29)
Leverage	−0.009[a] (−4.36)	−0.010[a] (−3.91)
Ln Mkt Cap	−0.120[a] (−5.11)	−0.116[a] (−4.53)
$\sigma(CFO/TA) \times 100$	0.037[b] (2.15)	0.039[b] (2.09)
$\sigma(Sales/TA) \times 100$	0.005 (1.05)	0.008 (1.50)
$\sigma(Sales\ growth) \times 100$	0.011[a] (3.19)	0.016[a] (4.14)
Sales growth × 100	0.008[a] (3.03)	0.009[a] (3.39)
Operating cycle	−0.165[a] (−3.59)	−0.205[a] (−4.11)
Market-to-book	0.037[a] (3.88)	0.033[a] (3.39)
Interest Coverage Ratio	−0.016[a] (−3.73)	−0.021[a] (−4.23)
Intercept	3.513[a] (7.41)	3.597[a] (7.87)
Sample	All bond issuances	Largest issuance in each given year
Number of observations	3,603	1,528
Number of different issuers	643	643
Number of connected firms	23	23
Adjusted R^2	15.60%	17.91%

a negative relation between leverage and the cost of debt. They suggest that this may be driven by companies who chose not to lever because of the particularly high cost of debt they face. In general, however, we do not find a relation between the likelihood of bankruptcy (as proxied by the interest coverage ratio), and the cost of debt.

The cost of borrowing used in this section is inferred from periodically disclosed information, but suffers from some limitations. A first source of potential bias relates to the use of seasonal financing and possible "window-dressing," where perhaps connected firms hide their high leverage at year end; for these companies we would end up inferring high interest rates because of the procedure used to compute the cost of debt (this may also explain the negative relation between leverage and the cost of debt). We partially address this concern by using interim data (where available). A related source of potential bias is that, to a large extent, this measure of the cost of borrowing reflects the cost of private debt. To the extent that there are private information flows between firms and lenders, there may be little reliance on earnings data. Hence private information flows may mitigate the effects of poor quality earnings. We note however that absent a tendency for more private information flows between connected companies and their lenders, we should have found no relation between earnings quality and the cost of debt for either group (connected, or unconnected) of firms; instead we found a relation only for unconnected firms. However, to address these concerns further we turn to a setting where private information flows, and potential window-dressing concerns, are less important.

6.2. Bond issuance

In this section, we focus on public debt issuance and measure the cost of debt in terms of the spread between the yield to maturity for a given issuance and the yield to maturity of treasury bonds with comparable maturity issued by the government of the country in which the firm is headquartered. The focus on the yield to maturity spread has several advantages. First, it is a direct measure of the cost of debt. Second, since we only focus on public debt, it is unlikely that differences in private information flows between lenders and borrowers would result in a different impact of accruals quality on the cost of debt for connected vs. non-connected firms. However, the reliance on public debt also suffers some limitations. First, not all firms issue bonds. Bond issuers in fact tend to be large, mature firms. Additionally, unconnected firms are more likely to have public debt than connected firms, which is consistent with the argument that connected firms shy away from public securities that require more transparency to external investors, as earlier suggested by Leuz and Oberholzer-Gee (2006). Despite these limitations, it is important to provide validation of the previous results employing a different metric.

Hence, we focus on all issuances of non-convertible debt (excluding equity- or inflation-linked bonds, or bonds with attached warrants) issued by publicly traded firms between 1995 and 2007, as reported in SDC Platinum's *Global New*

Issues database. We require the issuer to be publicly traded, and information on the spread over treasury bonds to be available. We further require that the spread be no higher than the yield to maturity (which would imply a negative interest rate on government bond issuances). These requirements yield an initial sample of 11,937 issuances. These data are then matched with company information as reported in *Datastream*. We were able to match the names of the issuers with the names of firms in *Datastream* for 9829 observations. Finally, we require that sufficient data be available to compute the accruals quality measures, as well for the other control variables. This reduces the sample to 3603 observations, which reflect bond issuances by 643 firms, 23 of which have political connections. In the first regression specification of Table 9, we include all bond issuances. In the second specification, we only include the largest bond issued by each firm during a given year. (In both regressions standard errors are adjusted for clustering at the firm-level). One caveat is that the number of connected firms in this sample is much smaller than those in the previous analysis, thus we do not know the extent to which these results generalize.

Despite this concern, we note that we find a relatively high correlation of 0.63 between the yield to maturity spread and the realized cost of debt used in the previous section. More importantly, in Table 9, we run regressions similar to those in Table 8, using our newly defined measure of the cost of debt. We find a positive (although insignificant) relation between the cost of public debt and accruals quality for non-connected firms. However, this relation is reversed for the sub-sample of connected companies. The interaction term between *Connected* and the accruals quality measures is in fact negative and significant. This result indicates that connected firms with poor accruals quality are not penalized even when raising debt in the public markets. Thus whether we measure the cost of debt using the average realized cost of debt (Section 5.1), or using information from the sub-sample of firms issuing public debt (Section 5.2), we reach the same conclusion. Namely, lower quality of reported earnings is not associated with a higher cost of debt for the politically connected firms in the sample. While this result does not allow us to tell whether the poorer accruals quality we observe among connected firms reflects intentional earnings management, at a minimum it is consistent with the hypothesis that managers of connected firms face a lesser need to opportunistically use accruals, as inattention is not penalized in the marketplace.

Some caveats are however appropriate. First, as both accruals quality and connections are choice variables, the debt regression results need to be interpreted with caution, as they are subject to self-selection and endogeneity concerns. Second, for the non-connected firms in the public debt sample, we fail to find any significant association between accruals quality and the cost of debt. To try and better understand this counterintuitive result, we explore two possible explanations. First, we look more closely at differences in the earnings quality of the samples included in Tables 8 and 9. Interestingly, the mean value of the (5-year) standard deviation of discretionary accruals is 5.126 across firms included in regression (1) of Table 8 (“overall” cost of debt), and 3.145 across firms included in regression (1) of Table 9 (bond issuers). This suggests that firms with poorer accruals quality are less likely to issue publicly traded bonds—a result that is consistent with recent evidence in Bharath et al. (2008). Thus, it is perhaps not surprising that we fail to detect a significant relation between accruals quality and the cost of debt once the firms with the poorest earnings quality are excluded from the sample. A second insight into the puzzle is gained by splitting the ‘bond issuers’ in Table 9 into investment and non-investment grade. In results not reported here for space considerations, we found that poor accruals quality is associated with a significantly higher cost of public debt for issuers of ‘investment grade” bonds. (This effect, however, is only present among non-connected firms.) Perhaps, when both investment grade and junk-bond issuers are included in the same regressions, as in Table 9, default risk overwhelms the effect of earnings quality.

7. Conclusions

This study documents that the quality of reported accounting information is systematically poorer for firms with political connections than for firms lacking such connections. This conclusion is based on an analysis of accounting data for over 4500 firms in 19 countries. Political connections appear to be an important predictor of accounting quality even after controlling for several commonly used country-level variables such as the overall level of corruption, or shareholder rights indicators, and for firm-specific factors (ownership structure, size, growth, leverage, market-to-book ratios, or the volatility of cash flows or sales growth). While connections are associated with poorer accruals quality ex-post, the quality of prior accruals does not explain a firm’s propensity to establish a connection in a given period. Thus, we rule out that it is simply the case that firms with poor accruals quality end up establishing political connections.

Two other non-mutually exclusive possible hypotheses are consistent with our results. First, it may be that connected companies intentionally disclose low quality information in an attempt to mislead investors so that insiders can gain at their expense. Second, it may be that, because of the protection they enjoy once connections are established, connected firms face a lesser need to devote time and care to managing discretionary accruals. While we cannot directly test the first hypothesis, we do provide support for the second. Previous research has found that there are costs associated with lower quality accounting information. Our results are consistent with this finding, but with a twist. In particular, we provide evidence that lower quality reported earnings is associated with a higher cost of debt *only* for the non-politically connected firms in the sample. That is, companies that have political connections apparently face little negative consequences from their lower quality disclosures.

To check the robustness of these results we have considered alternative measures of earnings quality, as well as using several different estimation approaches. We have also estimated models using transformed dependent variables, including a logistic transformation, and we have re-run the regressions eliminating countries one at a time. The results are robust to these alternative specifications.

Our result that political connections mitigate the costs of poor accounting quality is closely related to Leuz and Oberholzer-Gee's (2006) finding that political connections reduce the benefits of foreign financing. Additionally, Mitton (2002) finds these benefits may be substantial, particularly during a crisis. Both findings suggest that political connections are a source of domestic benefits that can substitute for other mechanisms or practices that create benefits for firms, such as cross-listing or transparency.

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