OWNERSHIP CONCENTRATION, MARKET MONITORING AND PERFORMANCE: EVIDENCE FROM THE UK, THE CZECH REPUBLIC AND POLAND

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Using data for publicly traded companies from the UK and two transition countries, the Czech Republic and Poland, we analyze the relationship between ownership concentration and performance while also accounting for the effect of hostile takeover threats on this relationship. Some argue that ownership concentration will improve performance by making the owners more willing or able to monitor managers. Others argue that in the presence of efficient markets, market monitoring (via the threat of hostile takeovers) will discipline the managers. Our results show that concentration is insignificant in explaining performance both in the transition countries, where market monitoring is supposedly weak, and in the UK, where market monitoring is supposedly strong.

I. Introduction

As early as the 1930s, Berle and Means (1932) raised the issue of separation of ownership and control in modern corporations. Diffused ownership could leave the managers in control of the firm, allowing them to divert resources to pursue their own interest, resulting in poor performance.

This thesis has generated a large empirical literature investigating the relationship between ownership concentration and firm performance. The results are mixed. However, most of the existing studies do not account for the existence of alternative governance mechanisms. This paper contributes to the existing literature on the importance of ownership concentration for firm performance by taking into account the existence of an alternative governance mechanism – the takeover market. Many believe that takeover threats will subject the managers to market monitoring. Then, it might well be that if concentration is found to be an insignificant factor in performance, this is the result of the existence of alternative monitoring mechanisms, of which takeover threats are one of the most important. We contrast an environment where the takeover market is more developed with an environment were it is less developed. We test whether concentration-performance relationship differs between these two environments. The results using firm level data from the United Kingdom, the Czech Republic and Poland, show that concentration is insignificant in explaining performance both in transition countries, where market monitoring is supposedly weak, and in the UK, where market monitoring is supposedly strong.

The paper is organized as follows. Section II reviews some of the related literature. Section III presents the model. Section IV describes the data. Section V presents the results, and Section VI concludes.

II. Related work

A. Ownership concentration and firm performance

Berle and Means (1932) predict that firm performance should deteriorate (improve) as ownership becomes more diffused (concentrated). There is a significant empirical literature investigating the relationship between ownership concentration and firm performance.[1] Some find a significant relationship, while others do not. Those who find a positive relationship include Gorton and Schmid (2000), Mitton (2002) and Claessens and Djankov (1999). In contrast, Demsetz and Lehn (1985), Demsetz and Villalonga (2000) and Kocenda (2003) do not find any significant relationship between concentration and performance. Demsetz and Lehn (1985) argue that if dispersed ownership were bad, it wouldn't exist in a rational world. They acknowledge the role of ownership concentration as a monitoring mechanism, but argue that it will vary across firms in a way consistent with value maximization.

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[1] For a review of the literature on governance, see, for example, Denis and McConnell (2003).

For example, in a more volatile environment the managers will have more room for shirking. As a result, ownership concentration will be higher for a firm operating in a more volatile environment.

Finally, there are others who argue that higher ownership concentration might have also costs. For example, Burkart et al. (1997) argue that even if tight control by shareholders is ex post efficient, ex ante it constitutes an expropriation threat which would reduce managerial initiative and non-contractible investments.

B. Markets for corporate control and firm performance

The advocates of external governance mechanisms argue that the principal-agent problem will be alleviated by the markets for corporate control (Manne 1965, Jensen and Ruback 1983). Hostile takeovers are thought to be the most important external control mechanism. The idea is that the existence of takeover threats will deter managers from deviating from shareholder value maximization.

There is a large discussion in the literature about the efficiency of hostile takeovers as a disciplining mechanism.[2] The evidence, however, is mixed. For example, Schranz (1993) finds a positive relationship between takeover threats and bank performance for a sample of US banks. Ravenscraft and Scherer (1987), on the contrary, find no evidence that, on average, the target's operating profitability increases after takeovers.

Even if one accepts the importance of hostile takeovers as a disciplining mechanism, their importance over time might have changed (Walsh and Seward 1990). Over time the managers can simply learn to entrench themselves further, making takeovers costlier and deterring the raiders. For example, the managers can use "greenmail" or "poison pills".[3] Finally, there also exist explanations other than the elimination of inefficient management as reasons for takeovers (for example, synergies, tax savings, or hubris).[4]

If Berle and Means' thesis is right, firms with more concentrated ownership should perform better than firms with more dispersed ownership. If, however, Manne and others are right and hostile takeovers play a disciplining role, the

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[2] See, for example, the Winter 1988 issue of the *Journal of Economic Perspectives*.

[3] Greenmail is a premium paid to the raider to terminate the takeover attempt. An example of a poison pill is the issuance of preferred stock that gives shareholders the right to redeem their shares at a premium after the takeover.

[4] See, for example, Walsh and Seward (1990) for a discussion and references for these alternative explanations of takeovers.

existence of active takeover markets should diminish the role of ownership concentration as a governance mechanism. In the following sections we investigate the relationship between concentration of ownership and performance by accounting for the existence of active takeover markets.

C. The United Kingdom versus the Czech Republic and Poland

We contrast publicly traded companies from two different stock market environments: transition countries (the Czech Republic, CZ, and Poland, PL) and developed countries (the United Kingdom, UK).[5]

The British governance system is similar to the US system and is more market oriented than the rest of Continental Europe (Mertzanis 2000). Moreover, the UK is the only European country with an active hostile market for corporate control. Hostile offers have been well established in the UK since the 1960s. There is a high degree of disclosure and shareholder protection in the UK (La Porta et al. 1997). According to Rossi and Volpin (1994), hostile bids are likelier in countries with better shareholder protection. As a result, the target company's board has limited abilities to defend a hostile bid that could benefit the shareholders.[6] Franks, Mayer and Renneboog (1998) report that every year, on average, four percent of the listed UK firms are taken over. The empirical evidence about the effects of takeover threats on performance for UK firms is not clear. For example, while Franks and Mayer (1996) report no relationship, Dahya and Powell (1998) argue in favor of the disciplining role of takeovers.

In PL and the CZ, capital markets started forming in the early 1990s, following the privatization processes. As a result, the level of stock market development and the corporate governance regulation differs substantially between these countries and the UK.[7]

As of our sample period, the Polish Securities Law didn't contain any regulations relating to hostile bids. Therefore, in principle, the target could use various means of protection (such as white knights and poison pills). Moreover, the target's management board had the sole discretion to use protective means.

The Czech laws were more restrictive in terms of the target management's abilities to frustrate a hostile bid. For example, in order to change voting power or

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[5] See www.practicallaw.com, for information on takeover rules and activities in the UK, Poland and the Czech Republic.

[6] Takeover defense tactics, such as the US-style "poison pills", seem to be extremely rare in the UK (source: www.practicallaw.com).

[7] See IMF (2001) for Poland, and IMF (2000) for the Czech Republic.

limit the transferability of shares, two thirds majority vote at a general meeting of shareholders was required. However, individual and small shareholders were typically not responsive to public tenders or other calls to shareholder action.[8] This implies that the managers and/or controlling shareholders could have more opportunities to frustrate hostile bids at the expense of smaller shareholders. Moreover, the enforcement of regulation was apparently ineffective. The Czech Securities Commission (SC) was created in 1998. According to the IMF (2000), it lacked effective regulatory powers and enforcement responsibility in some critical areas such as the regulations governing shareholders' rights. Hanousek and Podpiera (2002) provide another evidence of weak enforcement in Czech equity markets by finding that informed trading was significantly higher there than in developed markets. Hence, as of our sample period, managers and/or controlling shareholders in PL and the CZ should have had more abilities to frustrate hostile bids, implying lower takeover threats in these countries than in the UK.

By contrasting UK firms with firms from the CZ and PL, we are able to control for the existence of the market for takeover threats and check the importance of concentration for performance.

III. The Model

We estimate the following model of simultaneous determination of firm performance and ownership concentration:

$$ROA = \alpha_o + \alpha_1 PL + \alpha_2 CZ + \alpha_3 Conc + \alpha_4 Conc_{pl} + \alpha_5 Conc_{cz} + \alpha_6 Size \qquad (1)$$
$$+ \alpha_7 Size_{pl} + \alpha_8 Size_{cz} + \alpha_9 Capex + \alpha_{10} Capex_{pl} + \alpha_{11} Capex_{cz} +$$
$$+ \alpha_{12} Regul + \alpha_{13} Regul_{pl} + \alpha_{14} Regul_{cz} + \alpha_{15} ROA(-1)$$
$$+ \alpha_{16} ROA(-1)_{pl} + \alpha_{17} ROA(-1)_{cz} + \varepsilon$$

$$Conc = \beta_o + \beta_1 PL + \beta_2 CZ + \beta_3 ROA + \beta_4 ROA_{pl} + \beta_5 ROA_{cz} + \beta_6 Size \qquad (2)$$
$$+ \beta_7 Size_{pl} + \beta_8 Size_{cz} + \beta_9 Ratio\_debt + \beta_{10} Ratio\_debt_{pl}$$
$$+ \beta_{11} Ratio\_debt_{cz} + \beta_{12} Ratio\_tfas + \beta_{13} Ratio\_tfas_{pl}$$
$$+ \beta_{14} Ratio\_tfas_{cz} + \beta_{15} SD + \beta_{16} SD_{pl} + \beta_{17} SD_{cz} + \beta_{18} SD^2$$
$$+ \beta_{19} SD^2_{pl} + \beta_{20} SD^2_{cz} + \eta$$

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[8] Source: www.practicallaw.com.

where *ROA* is a firm performance measure -the pre-tax return on assets defined as the ratio of pre-tax profits (losses) over the total assets; *Conc* is a measure of ownership concentration – the Herfindahl index of concentration of ownership (above 5%); *PL* and *CZ* are country dummies for Poland and the Czech Republic; *Size* is the logarithm of the book value of assets (in US Dollars); *Capex* is a proxy for capital expenditures calculated as the difference between the level of tangible fixed assets from 1998 to 1999 divided by the book value of the assets; *Regul* is a dummy variable for regulated industries; *ROA*(-1) stands for the the lagged (one year) *ROA*; *Ratio_debt* is the lagged ratio of debt to total assets; *Ratio_tfas* is the lagged ratio of tangible fixed assets to total assets; *SD* is the standard deviation of pre-tax returns on assets for the previous four years; and ε and η are white noise terms. All variables are also interacted with the country dummies *PL* and *CZ*, and are denoted with the corresponding subscripts.

A. Performance as a function of ownership concentration

Equation (1) models firm performance as a function of ownership concentration and other controls. The country dummies, *PL* and *CZ* are supposed to capture differences in the environments in which UK and transition firms operate. Had we been able to control for everything else, these would be dummies for low takeover threats, and if their coefficients (α_1 and α_2) were negative, takeover threats would improve performance. However, we cannot control for everything else, and *PL* and *CZ* are going to be noisy proxies for low takeover threats. More precisely, *PL* and *CZ* are country dummies capturing systematic differences between the UK and the transition countries. For example, if fewer takeover threats and tax evasion are likelier in transition economies than in the UK, then significantly negative α_1 and α_2 could be a result of fewer takeovers, a result of tax evasion, or a result of both. Moreover, if fewer takeovers and tax evasion were the only differences between the transition countries and the UK, we could refute the takeover hypothesis if α_1 and α_2 were insignificant or significantly positive.

The concentration of ownership, *Conc*, is included in equation (1) to account for the owners' controlling power. If Berle and Means (1932) are right, then higher concentration should be positively related to performance, and thus we expect $\alpha_3 > 0$. However, if Demsetz and Lehn (1985) are correct, then there should not be any systematic relationship between performance and concentration, i.e., $\alpha_3 = 0$. Finally, if concentration also imposes costs (e.g., like the ones described by Burkart et al., 1997), then the relationship can be negative, i.e., $\alpha_3 < 0$.[9]

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[9] We also tried a nonlinear relationship between *ROA* and *Conc*, but that change did not substantially modify our results.

The interaction terms of *Conc* and country dummies, $Conc_{pl}$ and $Conc_{cz}$, are expected to capture the relationship between concentration and the presence of active takeover markets. The takeover markets in transition countries are much less active than those in UK. Then, if both ownership concentration and takeover threats are important monitoring mechanisms and are substitutes, then α_4 and α_5, the coefficients of the interaction terms, would be positive and significant. This implies that the importance of ownership concentration as a monitoring mechanism increases (decreases) as market monitoring becomes weaker (stronger). If, however, concentration is adversely affecting managerial initiative and non-contractible investment because of the enhanced threat of owners' opportunism, it is not clear how the interaction terms should behave. Finally, if concentration is not important, then we shouldn't expect the interaction terms to be statistically significant.

Ideally we should include all other exogenous variables that determine performance – growth opportunities, market power, institutions, etc. Data limitations do not allow us to include all relevant control variables. Growth opportunities are often approximated by capital expenditures. As a proxy for capital expenditures (*Capex*) we use the change in tangible fixed assets from one period to another. We also use the lagged (one year) pre-tax *ROA* (*ROA*(-1)) as another control. We expect firms that had performed well previously to perform well now too. *Size* is to account for economies of scale. *Regul* is a dummy for regulated industries - finance, utilities, telecom, air transport, water transport. Finally, we interact all controls with country dummies to account for the effects of country specific factors on the relationship between a particular control and performance.[10]

B. Ownership concentration as a function of performance

Equation (2) models concentration as a function of *ROA*. For example, higher (expected) return can make investors more willing to bear risk, which, in turn, may result in higher concentration of ownership.

Size is used as another determinant of concentration. As Demsetz and Lehn (1985) argue, concentration is likely to be lower the larger the firm – if owners are risk-averse, then a greater wealth is required to maintain a given percentage in the firm.

We use the standard deviation of the pre-tax *ROA* for the previous 4 years, denoted by *SD*, as a proxy for the noisiness of the firm's environment. Demsetz

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[10] We also tried industry dummies (based on the two digit SIC codes) and the ratio of operating revenue to total revenue as a proxy for market power (as suggested by Himmelberg et. al. 1999). All the coefficients obtained were statistically insignificant.

and Lehn argue that noisiness should increase concentration since it is harder to distinguish managerial effort or ability from randomness in the presence of outside shocks. A larger concentration will allow the owners to have more information about the managers' actions. Thus, *Conc* should increase with *SD*. However, *SD* alone does not prove to be a significant instrument. We then try to use a non-linear relationship between our proxy of noisiness and *Conc* as an instrument – we use both *SD* and SD^2.

The ratio of tangible fixed assets to total assets (*Ratio_tfas*) from the previous year is used as another determinant of concentration. A higher level of tangible fixed assets might make it easier to measure firm value, requiring less monitoring by the owners. However, tangible fixed assets are also similar to collateral, making the investment safer and increasing the incentive of an individual investor to invest more of his wealth in a particular firm. Thus, the impact of *Ratio_tfas* can go either way. However, *Ratio_tfas* can be correlated with *Size*.[11]

We use the ratio of debt to total assets *Ratio_debt* from previous year as another determinant of *Conc*. Creditors can be alternative monitors, which would decrease the need for higher concentration of ownership.

We also interact these controls with country dummies to control for possible transition/country specific effects.

IV. Data

The data come from the Amadeus database. We focus on publicly quoted companies from the United Kingdom, the Czech Republic and Poland for which the information on ownership is available. The ownership information pertains mainly to the end of 1999.

The ownership data is matched with the balance sheet and profit and loss data from the same database, for the same year. We model the noisiness of a firm's environment (*SD*) by calculating the standard deviation of the pre-tax Return on Assets from the preceding years. *SD* is modeled as the standard deviation of returns for 1995-1998. Using data prior to 1995 reduces the number of observations, especially from transition countries. However, using different periods does not significantly affect the results. There are 561 firms in our sample – 67 firms from the CZ, 83 firms from PL and 411 firms from the UK.

V. Results

We estimated the above model using the Generalized Method of Moments

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[11] Omitting *Ratio_tfas* does not significantly affect the results.

(GMM). The results of the estimation are reported in Table 1. The following variables were considered to be exogenous: *PL*, *CZ*, *Size*, *Capex*, *Regul*, *ROA*(-1), *Ratio_debt*, *Ratio_tfas*, and *SD*.[12] On the contrary, *Conc* and *ROA* were considered to be endogenous, and instrumented using the full set of exogenous variables.[13]

Table 1. GMM system estimation results of equations (1) and (2)

Independent variables	Dependent variables			
	ROA		*Conc*	
	Coefficient	t-stat	Coefficient	t-stat
Constant	0.07	(0.99)	0.09**	(3.18)
Conc	-0.14	(-0.24)		
Conc$_{pl}$	0.25	(0.43)		
Conc$_{cz}$	0.31	(0.52)		
ROA			-0.00	(-0.07)
ROA$_{pl}$			-0.10	(-0.61)
ROA$_{cz}$			0.10	(0.57)
PL	-0.35**	(-2.05)	-0.31**	(-2.06)
CZ	-0.30	(-1.06)	1.19***	(2.71)
Size	-0.00	(-0.94)	-0.01**	(-2.30)
Size$_{pl}$	0.02*	(1.77)	0.02	(1.62)
Size$_{cz}$	0.01	(0.79)	-0.06**	(-2.36)
Capex	0.14*	(1.95)		
Capex$_{pl}$	-0.22*	(-1.64)		
Capex$_{cz}$	0.42***	(4.18)		
Regul	0.04***	(3.17)		
Regul$_{pl}$	-0.09	(-1.15)		
Regul$_{cz}$	-0.01	(-0.30)		
ROA(-1)	0.52***	(7.99)		
ROA(-1)$_{pl}$	0.19	(0.73)		
ROA(-1)$_{cz}$	0.00	(0.02)		
Ratio_debt			0.00	(0.01)
Ratio_debt$_{pl}$			0.18	(1.18)

[12] The variables defined as products of two exogenous variables (for example, *Size$_{pl}$*, *Ratio_debt$_{cz}$*, *SD*^{2}, etc.) were considered exogenous, too.

[13] The variables defined as the product of an endogenous variable and an exogenous variable (*Conc$_{pl}$*, *Conc$_{cz}$*, *ROA$_{pl}$* and *ROA$_{cz}$*) were also treated as endogenous and instrumented correspondingly.

Table 1. (Continued) GMM system estimation results of equations (1) and (2)

Independent variables	Dependent variables			
	ROA		*Conc*	
	Coefficient	t-stat	Coefficient	t-stat
$Ratio\_debt_{cz}$			-0.28*	(-1.66)
$Ratio\_tfas$			0.02	(0.94)
$Ratio\_tfas_{pl}$			0.25**	(2.16)
$Ratio\_tfas_{cz}$			0.23	(1.13)
SD			0.24**	(2.25)
SD_{pl}			4.69***	(3.19)
SD_{cz}			-1.53	(-0.99)
SD^2			-0.43***	(-2.75)
SD^2_{pl}			-27.9***	(-3.72)
SD^2_{cz}			6.88	(0.96)
Number of Obs.	561		561	

Note: * denotes 10% level of significance, ** denotes 5%, and *** denotes 1%.

Even though the coefficient on *Conc* is greater for PL and CZ than for UK firms, its impact on performance is statistically insignificant – *Conc*, $Conc_{pl}$ and $Conc_{cz}$ are all insignificant. According to our results, the concentration-performance relationship is as insignificant when takeover threats are supposedly weak as it is when these threats are supposed to be strong.

The country dummies were to serve as imperfect proxies for low takeover threats in transition countries. Our sample PL firms had worse performance than UK firms, while there was no difference in performance between CZ and UK firms. Had *PL* and *CZ* been good proxies for low takeover threats, we could argue that the takeover theory works for Poland but not for the Czech Republic. However, we should recall that these are noisy proxies.

The impact of size on performance is insignificant for UK and CZ firms, while for PL firms there seems to be a positive and significant relationship (at 10% level). Capital expenditures (*Capex*) do have a significant positive impact for UK firms at the 10% level. For CZ firms this positive effect was much stronger, while for PL firms it was insignificant.[14]

Our sample firms from regulated industries seem to outperform non-regulated

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[14] We couldn't reject the hypothesis that the coefficient on *Capex* and $Capex_{pl}$ was significantly different from zero.

firms and this is equally true for all countries. Similarly, lagged *ROA* is equally significant for all firms – past performance is a good predictor of current performance.

Thus according to our results, ownership concentration does not affect performance and this is equally true for our sample firms from the UK, PL and the CZ. In addition, we find that the performance of our sample PL firms was significantly worse than the performance of sample UK and CZ firms.

Table 1 reports also the GMM system estimation results of equation (2). Relative to UK firms, our sample CZ firms seem to have significantly higher concentration, while PL firms seem to have significantly lower concentration. The impact of *ROA* turns out to be insignificant for all firms. The negative impact of size on concentration is significantly stronger for CZ firms, while there is no difference between PL and UK firms. The impact of *Ratio_debt* is also different for CZ firms – it has no impact on *Conc* for UK and PL firms, while for CZ firms it has a negative impact. *Ratio_tfas* turns out to be significantly positive only for PL firms.

The proxy for the noisiness of the environment (*SD*) has a non-linear impact on *Conc*. The relationship between *SD* and *Conc* is significant and the same for UK and CZ firms – for all $SD<SD^*$ the relationship is positive and for all $SD>SD^*$ the relationship is negative. A non-linear relationship between *SD* and *Conc* is found also for PL firms – there is some SD^{PL} such that for $SD<SD^{PL}$ the relationship is positive and for $SD>SD^{PL}$ it is negative. The difference between PL and UK firms is that $SD^{PL} < SD^*$.

The nonlinear relationship between *SD* and *Conc* implies that in addition to the potential benefits from increased concentration in a noisier environment, there can also be costs. For example, high variance might discourage risk-averse investors to commit more of one's wealth to a particular firm, resulting in lower concentration.

Thus, concentration itself seems to be determined by the characteristics of the firm and the environment in which it operates.

VI. Conclusion

The principal-agent problem has become the focus of a large theoretical and empirical literature. Several hypotheses have been proposed about various mechanisms that could alleviate this problem. This paper focuses on two hypotheses related to corporate governance.

As argued by some, concentration of ownership might be a way of alleviating the principal-agent problem as it gives the owners more power or willingness to monitor the managers. Market monitoring via hostile takeovers is thought to be another potential mechanism for alleviating the principal-agent problem (bad managers will be disciplined by corporate raiders who seek profit opportunities).

The empirical evidence with regard to each of these hypotheses is mixed. Using data from Poland, the Czech Republic and the UK, we tested the validity of these hypotheses. One of the differences in the constraints that UK and transition firms face is that the takeover threats faced by the latter are lower than the takeover threats faced by the former. We found that concentration is insignificant in explaining performance in both environments. However, evidence shows that concentration itself is determined by the characteristics of the firm and the environment in which the firm operates.

Finally, we found that, in our sample, the Polish firms perform significantly worse than the UK and Czech firms. If our proxies for takeover threats were good, we could argue that the absence of takeover threats negatively affects the Polish firms, but not the Czech firms. This would imply that there are mechanisms in the Czech Republic that compensate for the lack of takeover threats. However, given the noisiness of our proxies, another possibility could be that takeovers do not matter, but some other characteristics of the environment in which Polish firms operate worsen their performance. In any case, the possible difference in performance between the Czech and Polish firms is itself interesting and requires further research.

Appendix

Table A1. Descriptive statistics

1. British firms

Variable	Obs	Mean	Std. dev.	Min	Max
Conc	411	0.05	0.07	0.25	0.81
ROA	411	0.07	0.14	-1.03	0.57
Size	411	11.8	1.83	7.25	18.3
SD	411	0.05	0.08	0.00	0.68
Regul	411	0.09	0.28	0.00	1.00
Ratio_debt	411	0.18	0.16	0.00	0.86
Ratio_tfas	411	0.46	0.27	0.00	0.99
ROA(-1)	411	0.08	0.17	-1.43	0.46
Capex	411	0.03	0.11	-0.63	0.82

Table A1 (continued). Descriptive statistics

2. Polish Firms

Variable	Obs	Mean	Std. dev.	Min	Max
Conc	87	0.21	0.21	0.25	0.98
ROA	87	0.01	0.19	-1.43	0.25
Size	87	12.1	1.36	10.0	17.0
SD	87	0.05	0.04	0.01	0.18
Regul	87	0.03	0.18	0.00	1.00
Ratio_debt	83	0.23	0.13	0.04	0.65
Ratio_tfas	87	0.53	0.17	0.05	0.94
ROA(-1)	87	0.06	0.10	-0.43	0.30
Capex	87	0.04	0.09	-0.23	0.43

3. Czech firms

Variable	Obs	Mean	Std. dev.	Min	Max
Conc	67	0.41	0.22	0.25	0.92
ROA	67	-0.03	0.20	-1.24	0.35
Size	67	15.12	1.08	12.2	17.5
SD	67	0.04	0.05	0.00	0.23
Regul	67	0.36	0.48	0.00	1.00
Ratio_debt	67	0.15	0.12	0.02	0.53
Ratio_tfas	67	0.62	0.19	0.11	0.94
ROA(-1)	67	0.01	0.10	-0.41	0.39
Capex	67	-0.02	0.22	-1.70	0.24

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