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Insider ownership, power, and bank value

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ABSTRACT

This paper examines the influence of insider ownership and power on bank value. We measure insider ownership as the fraction of the bank's common stock owned by its directors and officers as a group, and insider power using the Milnor and Shapley (1978) power index for oceanic voting games. Using a sample of U.S. banks, we find that insider ownership is positively related to bank value, while insider power is negatively related to bank value. These results are consistent with the agency theory literature. To the extent that regulators want to increase bank value, they should encourage equity ownership by bank insiders and outside blockholders.

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1.0 Introduction

Banks play two essential roles in a modern economy. First, banks are liquidity creators (e.g., Diamond and Dybvig, 1983; Berger and Bouwman, 2009). Banks create liquidity by funding illiquid assets with liquid liabilities. They also create liquidity by issuing loan commitments. Second, banks are delegated monitors (e.g., Diamond, 1984). While banks monitor their borrowers, depositors do not need to monitor banks. Such an arrangement reduces the aggregate monitoring costs.

Motivated by the importance of banks, many papers examine the influence of insider ownership and power on bank performance (e.g., Allen and Cebenoyan, 1991; Hadlock, Houston, and Ryngaert, 1999; Griffith, Fogelberg, and Weeks, 2002; Hughes et al., 2003; Gulamhussen, Pinheiro, and Sousa, 2012). Most of these papers assume that insider power is equal to (a function of) insider ownership. In a recent paper, Basu, Paeglis, and Rahanmaei (2016) question the empirical validity of this assumption. They first show that most U.S. firms have multiple blockholders. They then show that the presence of outside blockholders can lead to a significant difference between insider ownership and power. Finally, they show that insider ownership and power have opposite effects on firm value.

Like many other studies, Basu, Paeglis, and Rahanmaei (2016) exclude banks from their sample. A question naturally arises: Do their results hold for banks? The answer to this question is not obvious, as Laeven (2013, p. 64) argues that "governance in banks is different from that of nonfinancial firms" and de Haan and Vlahu (2016, p. 228) conclude that "some of the empirical regularities found in the literature on corporate governance of nonfinancial institutions, such as the positive (negative) association between board independence (size) and performance, do not hold for banks." Thus, in this paper, we examine the influence of insider ownership and power on bank value.

Because our analysis requires high-quality data on blockholders, we use the blockholder dataset of Dlugosz et al. (2006). They show that a widely used source of ownership data—the Compact Disclosure—has many mistakes

and biases such as double counting. They manually collect blockholder data for a large number of firms from corporate filings with the Securities and Exchange Commission (SEC), and make their dataset freely available to all researchers. Their clean dataset covers the period 1996-2001 and is often used by researchers (e.g., Konijn, Kraussl, and Lucas, 2011; Bharath, Jayaraman, and Nagar, 2013). We complement the blockholder data with accounting and stock data.

Our sample consists of 340 observations on large U.S. banks over the period 1996-2001.[1] To ensure the robustness of our results, we use two measures of bank value: Tobin's Q and the ratio of the market value of equity to the book value of equity. We measure insider ownership as the fraction of the bank's common stock owned by its directors and officers as a group. Following Basu, Paeglis, and Rahanmaei (2016), we measure insider power using the Milnor and Shapley (1978) power index for oceanic voting games.

We find that insider ownership is positively related to bank value, while insider power is negatively related to bank value. These results are robust to controlling for bank characteristics and year fixed effects. When we divide banks in our sample into two groups based on insider ownership, we find that the results hold whether banks have high or low insider ownership. We conclude that the results of Basu, Paeglis, and Rahanmaei (2016) hold for banks as well.

The rest of this paper is organized as follows. Section 2.0 reviews the related literature. Section 3.0 describes the data. Section 4.0 presents the empirical results. Section 5.0 concludes.

2.0 Literature review

2.1 Insider ownership and firm value

It has long been recognized that there is a separation of ownership and control in the modern corporation (Berle and Means, 1932). If left unconstrained, managers may exert insufficient effort, build empires, or carry out other activities that benefit themselves but hurt shareholders (e.g., Jensen, 1986). An important mechanism to align the interests of managers with those of shareholders is managerial equity ownership, as high ownership makes it costly for managers to deviate from value maximization (Jensen and Meckling, 1976). However, high managerial ownership can reduce the effectiveness of external governance (e.g., Stulz, 1988; Denis, Denis, and Sarin, 1997). It can also lead to overly conservative risk choices (Kim and Lu, 2011). Thus, managerial ownership has conflicting effects on firm value.

In an influential article, Morck, Shleifer, and Vishny (1988) investigate the relation between insider ownership and firm value, as measured by Tobin's Q. They find that the relation is positive when ownership is in the 0% to 5% range, negative when ownership is in the 5% to 25% range, and positive again when ownership is beyond 25%. Several subsequent studies corroborate the findings of Morck, Shleifer, and Vishny (1988). McConnell and Servaes (1990) use a larger sample of firms. Holderness, Kroszner, and Sheehan (1999) examine a sample of firms in 1935. Short and Keasey (1999) use a sample of UK firms. Hu and Zhou (2008) use a sample of non-listed Chinese firms. McConnell, Servaes, and Lins (2008) measure changes in value over the 6-day interval around announcements of insider share purchases. These papers generally find a non-monotonic relation between insider ownership and firm value.

This line of research, however, is challenged by Demsetz (1983), who argues that insider ownership is endogenous and there should be no relation between ownership structure and firm performance. Demsetz and Lehn (1985) present evidence consistent with the argument of Demsetz (1983). Using a sample of U.S. firms, the authors find that accounting profit is not related to measures of ownership concentration.

Some papers explicitly address the endogeneity concern raised by Demsetz (1983). Loderer and Martin (1997) and Cho (1998) use simultaneous equations model. Himmelberg, Hubbard, and Palia (1999) use panel data and firm fixed effects to control for unobserved heterogeneity in the contracting environment across firms. Cheung and Wei (2006) estimate the relation between insider ownership and firm performance in the presence of adjustment costs. Demsetz and Villalonga (2001) treat ownership as an endogenous variable and separately measure the fractions of shares owned by management and by outside shareholders. These papers generally find that insider ownership has no influence on firm value.

More recently, researchers emphasize that managerial ownership is just one of the many mechanisms that shareholders can use to mitigate agency problems, and analyze the interactions of these mechanisms. Kim and Lu

[1] Our sample ends in 2001 because this is when the blockholder dataset of Dlugosz et al. (2006) ends.

(2011) find that the relation between CEO ownership and firm value depends on the strength of external governance. When external governance is weak, the relation is non-monotonic. When external governance is strong, however, the relation becomes insignificant. The authors conclude that strong external governance leaves less room for agency problems. Cheng, Su, and Zhu (2012) find that managerial ownership and board monitoring are substitutes in mitigating the agency problems between shareholders and managers.

In most of the studies summarized above, the power of insiders is assumed to be a function of their ownership. Basu, Paeglis, and Rahanmaei (2016) challenge this assumption. They show that the presence of blockholders can lead to a significant difference between ownership and power. They also show that insider ownership is positively related to firm value, yet insider power is negatively related to firm value. Finally, they show that the power of outside blockholders has a positive influence on firm value.

2.2 Insider ownership and bank performance

While the influence of insider ownership on firm value has been examined extensively in the corporate finance literature, it has received less attention in the banking literature. In an early work, Glassman and Rhoades (1980) find that owner-controlled banks have higher profit rates than manager-controlled banks. Hughes et al. (2003) find that asset acquisitions are associated with worse performance at banks with entrenched management. Hadlock, Houston, and Ryngaert (1999) find that banks with higher levels of managerial ownership are less likely to be acquired. The authors conclude that bank managers use their shareholdings to block acquisitions that may lead to their departure.

Two papers provide evidence on the benefits of insider ownership. Allen and Cebenoyan (1991) examine a sample of banks that engage in acquisitions. They find that bidder returns are positive only for banks with both high insider ownership and high shareholder concentration. Westman (2011) finds that managerial ownership has a positive impact on profitability at non-traditional banks, while board ownership has a positive impact on profitability at traditional banks. She concludes that managerial ownership is especially important at non-traditional banks, because such banks are difficult for outsiders to monitor.

Several papers examine the relation between insider ownership and bank performance. Griffith, Fogelberg, and Weeks (2002) find that the relation between CEO ownership and bank performance is non-monotonic: as CEO ownership rises, bank performance first rises, then declines, and finally rises again. DeYoung, Spong, and Sullivan (2001) study a sample of small banks. The authors find a significant relation between profit efficiency and managerial ownership at banks run by hired managers. In contrast, there is no such relation at banks run by their primary owners. Gulamhussen, Pinheiro, and Sousa (2012) examine a sample of listed banks in 23 countries. The authors find that the market value of a bank is a nonlinear function of managerial ownership.

2.3 Hypotheses

The agency theory literature suggests that insider ownership has conflicting effects on firm value. On the one hand, high insider ownership aligns the interests of insiders with those of outside investors (e.g., Jensen and Meckling, 1976). On the other hand, high insider ownership increases the power of insiders and thus reduces the effectiveness of external governance (e.g., Stulz, 1988; Denis, Denis, and Sarin, 1997). In this paper, we test the following two hypotheses:

H1. Insider ownership is positively related to bank value.
H2. Insider power is negatively related to bank value.

3.0 Sample and variable definitions

Because our analysis requires high-quality data on blockholders, we begin with the blockholder dataset constructed by Dlugosz et al. (2006).[2] Their dataset contains blockholder information on a large number of U.S. firms over the period 1996-2001. We are able to identify 89 bank holding companies (hereafter banks) in the dataset. For these banks, we obtain insider ownership data from the SEC's Edgar database, accounting data from the Federal Reserve's Y-9C reports, and stock data from the Center for Research in Security Prices (CRSP). Our sample consists of 340 observations. Table 1 provides a breakdown of the number of observations by year. There are between 50 and 63 observations per year.

Dlugosz et al. (2006) define a blockholder as any individual or entity owning more than 5% of a company's common stock. They classify blockholders into five categories: (1) officer, (2) director, (3) affiliated entity, (4)

[2] See http://faculty.som.yale.edu/andrewmetrick/data.html

ESOP, and (5) outside blockholder. Table 2 describes our sample in terms of the presence of outside blockholders. As we can see, about 40% of observations have outside blockholders. Because outside blockholders can discipline insiders (e.g., Edmans, 2014), we need to take into account the presence and ownership of outside blockholders when we measure insider power.

Table 1: Number of observations by year

Year	Number of observations
1996	50
1997	51
1998	60
1999	57
2000	63
2001	59
Total	340

We use two measures of bank value: Tobin's Q and the market-to-book ratio (Caprio, Laeven, and Levine, 2007). Tobin's Q is calculated as the ratio of the market value of equity plus the book value of liabilities to the book value of assets. The market-to-book ratio is the ratio of the market value of equity to the book value of equity. Our measure of insider ownership is the fraction of the bank's common stock owned by its directors and officers as a group. This measure is used in McConnell and Servaes (1990), Himmelberg, Hubbard, and Palia (1999), and McConnell, Servaes, and Lins (2008), among others.

Table 2: The presence of outside blockholders

	Number	Percent
Observations with no outside blockholder	205	60.29
Observations with one outside blockholder	84	24.71
Observations with two outside blockholders	31	9.12
Observations with three or more outside blockholders	20	5.88
Total	340	100

Notes: The sample consists of annual observations on large U.S. banks over the period 1996-2001.

Following Basu, Paeglis, and Rahanmaei (2016), we measure insider power using the Milnor and Shapley (1978) power index for oceanic voting games.[3] This index is based on insider ownership (treated as one block) and the ownership of every outside blockholder. The index ranges from zero to one, where higher values indicate greater power.

We choose the control variables based on previous studies on bank value (e.g., Caprio, Laeven, and Levine, 2007; Fang et al., 2014). Specifically, we control for the following variables: the natural logarithm of total assets as a measure of bank size, the ratio of equity to total assets, the ratio of net loans to total assets, the ratio of total deposits to total assets, and the ratio of pre-tax profits to book value of equity. All regressions include year fixed effects to control for aggregate economic environment.

Table 3: Summary statistics

Variable	Mean	Median	Stdev.	Minimum	Maximum	N
Tobin's Q	1.203	1.122	0.587	0.975	8.308	340
Market-to-book	2.795	2.446	1.350	0.772	11.938	340
Insider ownership	0.069	0.038	0.077	0.003	0.458	340
Insider Shapley	0.083	0.040	0.117	0.000	0.830	340
Size	23.824	23.647	1.260	20.069	27.681	340
Capital	0.090	0.082	0.064	0.035	0.674	340
Loans	0.617	0.648	0.146	0.043	0.859	340
Deposits	0.684	0.687	0.126	0.018	0.899	340
Return on equity	0.235	0.233	0.079	-0.057	0.591	340

Notes: Tobin's Q is the ratio of the market value of equity plus the book value of liabilities to the book value of assets. Market-to-book is the ratio of the market value of equity to the book value of equity. Insider ownership is the fraction of the bank's common stock owned by its directors and officers as a group. Insider Shapley is the Milnor and Shapley (1978) power index for oceanic games of the bank's directors and officers treated as a block. Size is the natural logarithm of total assets. Capital is the ratio of equity to total assets. Loans is the ratio of net loans to total assets. Deposits is the ratio of total deposits to total assets. Return on equity is the ratio of pre-tax profits to book value of equity.

[3] In an oceanic voting game, a sizable fraction of the total vote is controlled by a finite number of major players and the rest is distributed among an "ocean" of minor players (Milnor and Shapley, 1978). The power of a major player measures the percentage of times she casts the decisive vote.

Table 3 presents the summary statistics for the variables. Insider ownership has a mean of 0.069 with a standard deviation of 0.077. The large standard deviation indicates that there is substantial variation in insider ownership across banks in our sample. Insider Shapley has a mean of 0.083. Again, the variation is substantial, with some insiders having zero Shapley value. On average, loans account for 61.7% and deposits account for 68.4% of total assets. Return on equity has a mean of 0.235, suggesting that the average bank is quite profitable.

Table 3 also shows that several variables have extreme outliers. To mitigate the effect of outliers, we winsorize all the variables except size at the 2nd and 98th percentile.

4.0 Empirical results

Table 4 presents the regression results. In columns (1) and (2), the dependent variable is Tobin's Q. In columns (3) and (4), the dependent variables is the market-to-book ratio.

In all regressions, the coefficient on insider ownership is positive and significant. Thus, insider ownership is positively related to bank value. In contrast, the coefficient on insider Shapley is negative and significant, indicating that insider power is negatively related to bank value. These results are consistent with the agency theory literature (e.g., Morck, Shleifer, and Vishny, 1988; Basu, Paeglis, and Rahanmaei 2016).

Table 4: Regression results

	(1)	(2)	(3)	(4)
Insider ownership	2.735**	1.870**	26.022**	20.162**
	(1.258)	(0.792)	(11.134)	(7.871)
Insider Shapley	-1.963**	-1.275***	-19.273***	-14.431***
	(0.802)	(0.482)	(7.112)	(4.882)
Size		0.001		-0.015
		(0.008)		(0.083)
Capital		2.605***		7.253
		(0.534)		(5.087)
Loans		-0.155***		-2.061***
		(0.056)		(0.759)
Deposits		-0.094		-0.346
		(0.094)		(1.114)
Return on equity		0.800***		9.106***
		(0.111)		(1.039)
Constant	1.072***	0.823***	1.973***	1.197
	(0.022)	(0.254)	(0.197)	(2.633)
Year fixed effects	Yes	Yes	Yes	Yes
Observations	340	340	340	340
R-squared	0.131	0.554	0.155	0.499

Notes: Standard errors are clustered at the bank level and reported in parentheses. *** and ** indicate significance at the 1% and 5% level, respectively.

Turning briefly to the control variables, we find that capital is positively related to bank value as measured by Tobin's Q. This result is consistent with the model of Mehran and Thakor (2011). Loans are negatively related to bank value. A possible explanation is that most loans have higher default risk and are less liquid than investment securities. Finally, return on equity is positively related to bank value, as in Caprio, Laeven, and Levine (2007).

Table 5 presents additional regression results. In columns (1) and (2), we estimate regressions using banks whose insider ownership is below the sample median. In columns (3) and (4), we estimate regressions using banks whose insider ownership is above the sample median. In columns (1) and (3) the dependent variable is Tobin's Q, while in columns (2) and (4) the dependent variable is the market-to-book ratio.

As we can see, insider ownership is positively related to bank value, while insider Shapley is negatively related to bank value in each regression. Thus, our results hold whether banks have high or low insider ownership.

An important limitation of our study is the issue of endogeneity. Specifically, insider ownership and power could be endogenously determined by the contracting environment (Demsetz, 1983). Unfortunately, the literature has not proposed convincing instruments for insider power (Konijn, Kraussl, and Lucas, 2011; Basu, Paeglis, and Rahanmaei 2016). Thus, our results should be interpreted as correlations rather than causal relations.

Table 5: Sample split by insider ownership

	(1)	(2)	(3)	(4)
Insider ownership	122.730**	1,178.751**	2.571**	29.404**
	(47.853)	(442.948)	(1.026)	(11.069)
Insider Shapley	-117.643**	-1,124.685**	-1.672***	-19.865***
	(45.870)	(424.425)	(0.610)	(6.699)
Size	0.005	0.063	0.007	0.020
	(0.009)	(0.101)	(0.014)	(0.163)
Capital	1.334***	-3.653	2.282***	2.255
	(0.481)	(4.968)	(0.612)	(6.054)
Loans	-0.105**	-1.993**	-0.227*	-2.558*
	(0.050)	(0.892)	(0.122)	(1.398)
Deposits	0.118	2.451*	-0.144	-1.373
	(0.104)	(1.395)	(0.134)	(1.411)
Return on equity	0.665***	8.746***	0.943***	9.663***
	(0.124)	(1.313)	(0.181)	(1.708)
Constant	0.643**	-2.204	0.729*	1.478
	(0.301)	(3.244)	(0.378)	(4.001)
Year fixed effects	Yes	Yes	Yes	Yes
Observations	170	170	170	170
R-squared	0.564	0.545	0.654	0.571

Notes: Standard errors are clustered at the bank level and reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

5.0 Conclusion

We examine the influence of insider ownership and power on bank value. We find that insider ownership is positively related to bank value, while insider power is negatively related to bank value. These results are robust to controlling for time-varying bank characteristics and year fixed effects. The results are consistent with the agency theory literature.

Our results offer useful insights to bank regulators. To the extent that regulators want to increase bank value, they should encourage bank insiders to increase equity ownership. At the same time, regulators should also encourage the ownership of bank equity by outside blockholders, as doing so reduces insider power.

References

Allen, L., Cebenoyan, A.S., (1991). Bank acquisitions and ownership structure: Theory and evidence. Journal of Banking and Finance 15, 425-448. http://dx.doi.org/10.1016/0378-4266(91)90076-X

Basu, N., Paeglis, I., Rahnamaei, M., (2016). Multiple blockholders, power, and firm value. Journal of Banking & Finance 66, 66-78. http://dx.doi.org/10.1016/j.jbankfin.2016.01.001

Berger, A.N., Bouwman, C.H.S., (2009). Bank liquidity creation. Review of Financial Studies 22, 3779-3837. http://dx.doi.org/10.1093/rfs/hhn104

Berle, A., Means, G., (1932). The Modern Corporation and Private Property. New York: MacMillan.

Bharath, S.T., Jayaraman, S., Nagar, V., (2013). Exit as governance: An empirical analysis. Journal of Finance 68, 2515-2547. http://dx.doi.org/10.1111/jofi.12073

Caprio, G., Laeven, L., Levine, R., (2007). Governance and bank valuation. Journal of Financial Intermediation 16, 584-617. http://dx.doi.org/10.1016/j.jfi.2006.10.003

Cheng, P., Su, L., Zhu, X., (2012). Managerial ownership, board monitoring and firm performance in a family-concentrated corporate environment. Accounting and Finance 52, 1061-1081. http://dx.doi.org/10.1111/j.1467-629X.2011.00448.x

Cheung, W.K., Wei, K.C., (2006). Insider ownership and corporate performance: Evidence from the adjustment cost approach. Journal of Corporate Finance 12, 906-925. http://dx.doi.org/10.1016/j.jcorpfin.2006.02.002

Cho, M.H., (1998). Ownership structure, investment, and the corporate value: An empirical analysis. Journal of Financial Economics 47, 103-121. http://dx.doi.org/10.1016/S0304-405X(97)00039-1

de Haan, J., Vlahu, R., (2016). Corporate governance of banks: A survey. Journal of Economic Survey 30, 228-277. http://dx.doi.org/10.1111/joes.12101

Demsetz, H., (1983). The structure of ownership and the theory of the firm. Journal of Law & Economics 26, 375-390. http://dx.doi.org/10.1086/467041

Demsetz, H., Lehn, K., (1985). The structure of corporate ownership: Causes and consequences. Journal of Political Economy 93, 1155-1177. http://dx.doi.org/10.1086/261354
Demsetz, H., Villalonga, B., (2001). Ownership structure and corporate performance. Journal of Corporate Finance 7, 209-233. http://dx.doi.org/10.1016/S0929-1199(01)00020-7
Denis, D.J., Denis, D.K., Sarin, A., (1997). Agency problems, equity ownership, and corporate diversification. Journal of Finance 52, 135-160. http://dx.doi.org/10.1111/j.1540-6261.1997.tb03811.x
DeYoung, R., Spong, K., Sullivan, R.J., (2001). Who's minding the store? Motivating and monitoring hired managers at small, closely held commercial banks. Journal of Banking and Finance 25, 1209-1243. http://dx.doi.org/10.1016/S0378-4266(00)00127-8
Diamond, D.W., (1984). Financial intermediation and delegated monitoring. Review of Economic Studies 51, 393-414. http://dx.doi.org/10.2307/2297430
Diamond, D.W., Dybvig, P.H., (1983). Bank runs, deposit insurance, and liquidity. Journal of Political Economy 91, 401-419. http://dx.doi.org/10.1086/261155
Dlugosz, J., Fahlenbrach, R., Gompers, P., Metrick, A., (2006). Large blocks of stock: Prevalence, size, and measurement. Journal of Corporate Finance 12, 594-618. http://dx.doi.org/10.1016/j.jcorpfin.2005.04.002
Edmans, A., (2014). Blockholders and corporate governance. Annual Review of Financial Economics 6, 23-50. http://dx.doi.org/10.1146/annurev-financial-110613-034455
Fang, Y., Hasan, I., Marton, K., Waisman, M., (2014). Bank valuation in new EU member countries. Economic Systems 38, 55-72. http://dx.doi.org/10.1016/j.ecosys.2013.07.002
Glassman, C.A., Rhoades, S.A., (1980). Owner vs. manager control effects on bank performance. Review of Economics and Statistics 62, 263-270. http://dx.doi.org/10.2307/1924753
Griffith, J.M., Fogelberg, L., Weeks, H.S., (2002). CEO ownership, corporate control, and bank performance. Journal of Economics and Finance 26, 170-183. http://dx.doi.org/10.1007/BF02755984
Gulamhussen, M.A., Pinheiro, C., Sousa, R., (2012). Journal of International Financial Management and Accounting 23, 121-153. http://dx.doi.org/10.1111/j.1467-646X.2012.01056.x
Hadlock, C., Houston, J., Ryngaert, M., (1999). The role of managerial incentives in bank acquisitions. Journal of Banking and Finance 23, 221-249. http://dx.doi.org/10.1016/S0378-4266(98)00092-2
Himmelberg, C.P., Hubbard, R.G., Palia, D., (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. Journal of Financial Economics 53, 353-384. http://dx.doi.org/10.1016/S0304-405X(99)00025-2
Holderness, C.G., Kroszner, R.S., Sheehan, D.P., (1999). Were the good old days that good? Changes in managerial stock ownership since the Great Depression. Journal of Finance 54, 435-469. http://dx.doi.org/10.1111/0022-1082.00114
Hu, Y., Zhou, X., (2008). The performance effect of managerial ownership: Evidence from China. Journal of Banking and Finance 32, 2099-2110. http://dx.doi.org/10.1016/j.jbankfin.2007.12.047
Hughes, J.P., Lang, W.W., Mester, L.J., Moon, C.G., Pagano, M.S., (2003). Do bankers sacrifice value to build empires? Managerial incentives, industry consolidation, and financial performance. Journal of Banking and Finance 27, 417-447. http://dx.doi.org/10.1016/S0378-4266(02)00385-0
Jensen, M.C., (1986). Agency costs of free cash flow, corporate finance, and takeovers. American Economic Review 76, 323-329.
Jensen, M.C., Meckling, W.H., (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3, 305-360. http://dx.doi.org/10.1016/0304-405X(76)90026-X
Kim, E.H., Lu, Y., (2011). CEO ownership, external governance, and risk-taking. Journal of Financial Economics 102, 272-292. http://dx.doi.org/10.1016/j.jfineco.2011.07.002
Konijn, S., Kraussl, R., Lucas, A., (2011). Blockholder dispersion and firm value. Journal of Corporate Finance 17, 1330-1339. http://dx.doi.org/10.1016/j.jcorpfin.2011.06.005
Laeven, L., (2013). Corporate governance: What's special about banks? Annual Review of Financial Economics 5, 63-92. http://dx.doi.org/10.1146/annurev-financial-021113-074421
Loderer, C., Martin, K., (1997). Executive stock ownership and performance tracking faint traces. Journal of Financial Economics 45, 223-255. http://dx.doi.org/10.1016/S0304-405X(97)00017-2
McConnell, J., Servaes, H., (1990). Additional evidence on equity ownership and corporate value. Journal of Financial Economics 27, 595-612. http://dx.doi.org/10.1016/0304-405X(90)90069-C
McConnell, J., Servaes, H., Lins, K., (2008). Changes in insider ownership and changes in the market value of the firm. Journal of Corporate Finance 14, 92-106. http://dx.doi.org/10.1016/j.jcorpfin.2008.02.001
Mehran, H., Thakor, A., (2011). Bank capital and value in the cross-section. Review of Financial studies 24, 1019-1067. http://dx.doi.org/10.1093/rfs/hhq022
Milnor, J.W., Shapley, L.S., (1978). Values of large games II: Oceanic games. Mathematics of Operations Research 3, 290-307. http://dx.doi.org/10.1287/moor.3.4.290
Morck, R., Shleifer, A., Vishny, R.W., (1988). Management ownership and market valuation: An empirical analysis. Journal of Financial Economics 20, 293-315. http://dx.doi.org/10.1016/0304-405X(88)90048-7

Short, H., Keasey, K., (1999). Managerial ownership and the performance of firms: Evidence from the UK. Journal of Corporate Finance 5, 79-101. http://dx.doi.org/10.1016/S0929-1199(98)00016-9

Stulz, R.M., (1988). Managerial control of voting rights: Financing policies and the market for corporate control. Journal of Financial Economics 20, 25-54. http://dx.doi.org/10.1016/0304-405X(88)90039-6

Westman, H., (2011). The impact of management and board ownership on profitability in banks with different strategies. Journal of Banking and Finance 35, 3300-3318. http://dx.doi.org/10.1016/j.jbankfin.2011.05.013