

OWNERSHIP STRUCTURE FOR SUSTAINABLE GROWTH

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Abstract:

The article refers to the problem of the association between ownership structure and firm performance. The literature overview allows us to state that there is a connection between ownership concentration and firm performance (positive association), however the cited research studies gave ambiguous findings. The subject of this article is important for the company's owners, managers, investors, financial analysts and policy makers. The main hypothesis is that firms with higher ownership concentration achieved an increase in the level of profit. We conducted the analysis for all the listed companies present on the Polish stock market in the period 2005-2013. Our research findings are contradictory to the subject literature but consistent with some empirical findings described in research studies. The originality of this article lies in the applied method: we carried out our research taking into account pre, crisis and post crisis period; we distinguish two groups of companies: group A that improved the level of profit, and group B that has not improved the level of profit; and then we tested ownership concentration for these two groups. The article is organized as follows: we start with an overview of the literature on ownership structure and firm performance, then we present some empirical findings from different countries; we discuss also the measures of ownership concentration and firm performance; we conduct the analysis and present conclusions.

Keywords: ownership concentration, firm performance, agency theory, ownership structure

1. CORPORATE OWNERSHIP AND FIRM PERFORMANCE – LITERATURE REVIEW

It is generally accepted that ownership structure is an important component of corporate governance (Shleifer & Vishny, 1986). Corporate governance is the system of rules, practices and processes by which a company is directed and controlled. Corporate governance essentially involves balancing the interests of shareholders and the management. Since corporate governance also provides the framework for attaining the company's objectives, it encompasses practically every sphere of management, from action plans and internal controls to performance measurement.

Therefore, it has been largely argued that the ownership structure is related to the firm profitability.

The explanation of this relations lies mostly in the agency theory (Jensen & Meckling, 1976). Separation of ownership and control provides an opportunity to achieve personal benefits by managers instead of accomplishing shareholders' interests. The agency theory assumes that shareholders' wealth might not be maximized because the agent and the principal: 1) have different goals, 2) have different propensity towards risk, and 3) have different access to information (the principal can't monitor what the agent does and he can't know which information the agent has). A lot of studies found that managers assume more personal benefits (financial and reputational) in product or market diversification because of risk aversion, and empire building (Pedersen & Thomsen 2000).

That is why there are various controlling mechanisms applied that induce managers to be aligned with shareholders' interests. One of these controlling mechanisms is ownership concentration (Jensen & Meckling, 1976; Demsetz, 1983; Shleifer & Vishny, 1986). Larger shareholders might have stronger incentives to monitor and, therefore, they should oblige managers to be aligned with their objective to increase the company value. A large number of shareholders cannot exercise enough power to oversee managerial performance. Consequently, managers exercise more freedom in the use of the firm resources, as they would in case of a single shareholder, or if the ownership would be more concentrated (Shleifer & Vishny, 1997). Ownership concentration can counteract corporate diversification and gain more shareholder value.

Supporting this theory is a landmark work by Amihud and Lev (1981), who examine this theory empirically, confirming that managers working in firms with large shareholders were less likely to invest in non-related mergers or acquisitions.

These findings were supported by Hill and Snell (1989), who conclude that diversification, investment in R&D, capital intensity, and ownership structure all determine the company productivity. They argue that large shareholders control is negatively related to product diversification.

The results of the theoretical analysis confirm the positive relationship between ownership concentration and company value, confirming the agency perspective that higher concentration increases shareholder power and control aligning managers and shareholders interests, and consequently increasing firm value. Higher concentration of ownership gives large shareholders stronger incentives and greater power at a lower cost to monitor management. Grossman and Hart (1986) argue that shareholders with a large stake in the company show more willingness to play an active role in corporate decisions because they partially internalize the benefits from their monitoring effort. The methods used by large shareholders to monitor and intervene are ranging from informal conversations with the management to formal proxy contests (Shleifer and Vishny, 1986, 1997).

Since Jensen and Meckling (1976), ownership has been supposed to be a determinant of corporate performance, i.e. the causality runs from ownership to performance. Our reading of the extant literature on the relationship between ownership structure and corporate performance suggests the following conclusion: Concentrated ownership is associated with the benefits of better monitoring and the costs of the expropriation by large shareholders (irrespective of the system of corporate governance: a market-oriented (Anglo-American) system or an insider/control-oriented (European-Japanese) system) (Hu, Izumida, 2008).

The ownership structure-corporate performance relationship has been receiving significant attention in financial literature (Jiang, 2004; Karaca & Ekşi, 2012). Consistent to the context is the fact that ownership structure is a way to minimize the asymmetric information disclosure within capital markets

among insiders and outsiders (Wahla et al., 2012). In the same context, Fama and Jensen (1983) and Jensen and Meckling (1976) revealed that the ownership diffusion has a significant effect on the validity of the profit-maximizing aim of firms as the separation control enables corporate managers to exert effort to serve their own interests. Moreover, Demsetz (1983) claimed that ownership structure is an endogenous aspect that maximizes the profit and the value of a firm.

Regarding the above extensive debate among the agency theory, the resource dependence theory and empirical evidence, the relationship between ownership concentration and firm performance is still inconclusive. Indeed, there are many authors around the world who revealed the relationship between concentration ownership and firm performance as positive in developed countries. On the other hand, empirically, there are many studies that found a negative relationship between ownership concentration and company performance.

2. CORPORATE OWNERSHIP AND COMPANY PERFORMANCE – RESEARCH REVIEW

With inconclusive findings found by previous discussions, this part of paper offers review and finds both positive and negative association between ownership concentration and firm performance. There are also some researchers who found no relationship. The summaries of these findings are presented in the tables below.

Table 1: Positive association between ownership concentration and firm performance

Authors and year	Country	Sample	Performance measure
Singh & Gaur (2009)	China & Indian	813 firms, 400 of which were India, while 413 Chinese in 2007.	ROA, ROE & ROS
Wang & Oliver (2009)	Australia	384 firms of the top 500 companies	firm risk
Siala et al. (2009)	Canada	467 firms non-financial listed companies during the period from 2002 to 2004.	Tobin-Q
Jandik & Rennie (2008)	The Czech Republic	All firms were listed on the Czech stock exchange during 1993 to 2003.	Accounting performance
Kapopoulos & Lazaretou (2007)	Greek	175 listed firms through 2000	Tobin-Q & profit ratio
Lin et al. (2002)	China	461 publicly listed manufacturing firms in China between 1999 and 2002.	firm efficiency

Source: E. M. Al-Matari, A. K. Al-Swidi, F. H. Bt Fadzil, Ownership Structure Characteristics and Firm Performance: A Conceptual Study, Journal of Sociological Research ISSN 1948-5468 2013, Vol. 4, No.2

Table 2: Negative association between ownership concentration and firm performance

Authors and year	Country	Sample	Performance measure
García-Meca & Sa´nchez-Ballesta (2011)	Spanish	Non-financial firms listed on the Madrid Stock Exchange that it was 254 firms -year observation for the period from 1999 to 2002.	Tobin's-Q
Millet-Reyes & Zhao (2010)	France	665 non-financial firm-year observations covering 174 French companies from 28 industries over the period 2000–2004.	OCF, ROA & Tobin's Q
Hu et al. (2010)	China	304 from 1271 firms listed on the Shanghai and Shenzhen Stock Exchange that it was selected during 2003.	Tobin-Q
Filatotchev et al. (2007)	Poland & Hungary	157 largest non-financial firms in Poland and Hungary.	ROS & ROA
Belkhir (2005)	US	260 banks that were through 2002.	Tobin-Q

Source: Al-Matari, Al-Swidi, & Bt Fadzil, 2013.

Table 3: No association between ownership concentration and firm performance

Authors and year	Country	Sample	Performance measure
Shan & McIver (2011)	China	540 firm from non-financial sectors which listed in Hong Kong Stock Exchange over 2001-2005.	Tobin-Q
Sánchez-Ballesta & García-Meca (2007)	European	33 studies around the world from 1988 to 2006.	RAO, ROE, ROS & Tobin-Q
Earle et al. (2005)	Hungary	All firms that were listed on the Budapest Stock Exchange over 1996 to 2001.	ROE & operation efficiency

Source: Al-Matari, Al-Swidi, & Bt Fadzil, 2013.

The possible reason of differentiation of conclusions lies in different measures of ownership concentration and firm performance applied in each research.

3. MEASURES OF OWNERSHIP CONCETRANTION AND FIRM PERFORMANCE

The existing research employs three alternative criteria for performance in corporations.

First is a market based measure — Tobin's Q, the market value of the firm over its replacement cost. Since it can provide a viewing window into the firm through the market's valuation of the securities and capture the long-term impacts of corporate actions, Tobin's Q is a well-accepted proxy for firm valuation and widely used in the literature of corporate governance. However, the way in which Tobin's Q is computed is not free from some problems. Demsetz and Villalonga (2001) argue that Q distorts performance comparisons of firms with different intangible capital, because the numerator of Q (market value) partly reflects a firm's intangible assets; but the denominator (replacement cost) includes the firm's tangible assets only. Furthermore, it incorporates Q into accounting artifacts that many studies substitute the depreciated book value of total assets for replacement cost as the denominator of Q.

Secondly, accounting performance measures, such as return on asset (ROA) and return on equity (ROE), are solely employed in many empirical studies or as a complement of Tobin's Q. While primarily accounting information reflects the short-term profitability of the firm's operations, it also induces many problems, including not reflecting all agency costs and long-term returns, easily manipulated by insiders, and affected by accounting practices. Accounting data is not thought as

eligible variables in measuring firm performance in countries where the accounting standards are imperfect, especially in developing countries.

Finally, productivity analysis is also used to explore the effects of ownership structure on performance. Total factor productivity (TFP), usually based on Cobb-Douglas production function, addresses any effects in total output not caused by capital and labor inputs, and is a general accepted measure of technical efficiency, which is seen as the real driver of long-term growth and forward-looking performance in corporations. It is only natural that the studies using different performance measures often present different results.

At the core of the study of corporate ownership is the question what it takes for an owner to exercise an effective control over business activities. Berle and Means (1932) define a controlling owner as an owner that holds at least 20 percent of the company. Below this threshold firms were regarded to be under management control.

The simplest possible measure of ownership concentration is the largest owner's voting share (e.g. Pedersen and Thomsen, 2000).

A number of studies that came after Demsetz and Lehn (1985) measure concentration of ownership with respect to a group of blockholders, frequently as the fraction owned by five, ten or twenty largest shareholders.

Another way to take into account the interplay between shareholders is to make use of existent concentration measures in economic literature. Perhaps the most known measures is the Herfindahl index, which is also known as Herfindahl–Hirschman Index (Herfindahl, 1950, Hirschman, 1970) and Gini coefficient.

In an attempt to deduce logically interpretable measures of influence Shapley and Shubik (1954) and Banzhaf (1965) have developed independently of each other, power indices for weighted voting games. What is central in these measures is that there is no linear relationship between the shareholder's ownership and his power. Instead, what is central is the ability to form winning coalitions. There is no empirical study of corporate ownership that measures ownership concentration by using the direct enumeration of the Shapley-Shubik index or the Banzhaf index of all shareholders. Though both indices conceptually may take all shareholders into consideration, in general this is not possible in practice due to limitations in computational capacity (Overlanda, Mavruka, Sjögrena, 2012).

4. METHODOLOGY, DATA AND RESEARCH FINDINGS

Despite this long debate, there is little empirical evidence on the effects of ownership structure in Europe as prior empirical literature has mainly provided documentation for U.S. and U.K. firms (De Miguel, Pindado, & De La Torre, 2004, Stanwick, Stanwick, 2010). Furthermore, at the best of our knowledge, there is scarcity of studies on the effects of the recent financial crises over the relation between ownership concentration and firm performance, either (Leung, Horwitz, 2010).

Our analysis fits in this research stream which aims at controlling the relation between ownership concentration and firm performance by giving empirical evidences on the influence of ownership structure over firm performance for all the listed Polish firms over 2005-2013.

The sample data are collected from Warsaw Stock Exchange for three periods: pre-crisis, during the crisis and post- crisis (2005-2007, also 2008-2010 and 2011-2013).

The measure of firm performance was profit, while the measure of ownership concentration was applied with respect to a group of blockholders as the fraction owned by the first largest, and three largest shareholders.

We conduct an analysis of all the listed companies on WSE, and we found 191 companies present all the time for the whole period 2005-2013. Among 191 companies we found 112 that observed decrease in the level of average profit in the crisis period in relations to the average profit in pre-crisis period. The further analysis aims to investigate the effects of ownership concentration over profit in the post crisis period in these 112 companies.

We expect to find that firm performance (profit) has increased in a period post crisis in companies with higher ownership concentration.

Among 112 companies we found 82 companies that have improved the average level of profit in the post-crisis period in relations to the average level of profit during the crisis (group A).

The rest of the companies (30 companies, group B) there were companies that have not improved the average level of profit in the post-crisis period in relations to the average level of profit.

Table 4: Comparison of ownership structure between group A and B

	A	B
one largest shareholder - mean	36.74%	43.09%
one largest shareholder - median	32.99%	46.16%
The number of companies where the largest shareholder is institutional	39 (47.56%)	17 (56.67%)
The number of companies where the largest shareholder is individual	40 (48.78%)	13 (43.33%)
three largest shareholders - mean	52.78%	58.96%
three largest shareholders - median	56.09%	61.64%
The number of companies where among the three largest shareholders institutional has majority	35 (42.68%)	15 (50%)
The number of companies where among the three largest shareholders individual has majority	45 (54.88%)	15 (50%)
Free float - mean	42.88%	37.84%
Free float - median	36.51%	33.36%

Source: first hand collected data

The median of the first largest shareholder for Polish listed companies amounted to 38,43%, and three largest shareholders – 59,24% (Adamska, 2013).

It is evident that the median of the first largest shareholder for the group A (with increased profit) is lower than the average while for the group B (with decreased profit) is higher than the average.

The median of the three largest shareholders for the group A is lower than the average and for the group B is higher than the average. In group A, free float is higher.

The group A (with increased profit) can be described as the group of companies with lower ownership concentration, where an individual is the dominant owner. The group B (with decreased profit) can be described as the group of companies with higher ownership concentration where the dominant owner is institutional.

To verify the initial observations and hypothesis the statistical test was applied. To compare two independent samples (with different size and ordinal scale dependent variable) we applied non-parametric statistical hypothesis test – U Mann-Whitney test. The null hypothesis states that the two groups are the same (distributions have the same shape).

Table 5: U Mann-Whitney test

	GRUPA A			GRUPA B			U Mann-Whitney test	
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	Z (U Mann-Whitney statistics)	p value (UMW significance test)
one largest shareholder (percentage of ownership)	36.74%	21.82%	32.99%	43.09%	18.79%	46.16%	-1.541	0.123
Three largest shareholders (percentage of ownership)	52.78%	22.31%	56.09%	58.96%	17.03%	61.64%	-1.281	0.200
free float (percentage of ownership)	42.88%	22.47%	36.50%	37.84%	17.44%	33.36%	-0.821	0.411

Source: author's own work

Comparing the obtained Z value and the critical Z value (1.96) will help us to determine whether to retain or reject the null hypothesis. For the data, we would decide to retain the null hypothesis (the groups are the same), because the absolute value of the obtained Z (-1.54; -1.281, -0.821) is smaller than the critical value.

Additionally p-value was calculated. Because the p value is large (higher than 0.05) for every data, we were not given any reason to conclude that the groups differ.

5. CONCLUSIONS

Although there are apparent differences between the two groups, the statistical testing leave us with no doubt that the group A and B are the same. We have to conclude that there is not association between ownership concentration and firm performance because there is no statistically significant difference between the two groups (group A and B). Our research findings do not support the hypothesis that higher ownership concentration implies better firm performance.

The previous research study for the Polish listed companies found that the association between ownership concentration and firm performance was negative (Filatotchev, Isachenkova, Mickiewicz, 2007).

The previous research studies for 27 countries (for 20 biggest corporations in every country) showed that average stake of individuals amounted to 30%, institutional 5%, state 18%, widely held 36% (in the US respectively: 20%, 0%, 0%, 80%) (La Porta, Lopez-De-Silanes, Shleifer, 1999, 2000). The median of the largest shareholder differs among countries: Germany – 52.1%, Germany (listed companies) – 11.0%, Austria – 52.0%, Belgium – 50.6%, Belgium (listed companies) – 45.1%, Spain – 34.2%, France (listed companies) – 20.0%, Great Britain – 9.9%, the US (NYSE) – 0.0%, the US (NASDAQ) – 0.0% (Becht, Roell, 1999). Poland was ranked among these countries with 38.4% for the largest shareholder. But the research study conducted in 2006 found that the Polish firms perform significantly worse than the UK and Czech firms (Lskavyan, Spatareanu, 2006).

The results of the analysis indicated some surprising conclusions. Although the literature points to positive association between ownership concentration and firm performance, the majority of the Polish listed companies with a better performance have lower ownership concentration. The study results concurred with earlier studies. However, the findings in this study may also demonstrate that ownership structure and concentration is the result of financial firm performance. Yet, this aspect needs some further and more thorough analysis.

REFERENCE LIST

1. Adamska, A. (2013). Własność i kontrola. Warszawa: SGH, 102.
2. Al-Matari, E. M., Al-Swidi, A. K., & Bt Fadzil, F. H. (2013). *Ownership Structure Characteristics and Firm Performance: A Conceptual Study*, Journal of Sociological Research ISSN 1948-5468, Vol. 4, No.2
3. Amihud, Y., & Lev, B. (1981, Autumn). *Risk Reduction as a Managerial Motive for Conglomerate Mergers*, The Bell Journal of Economics, vol 12, no 2, 605-617.
4. Banzhaf, J.F., (1965). *Weighted voting doesn't work: A mathematical analysis*, Rutgers Law Review, 19, 2, 317-343.
5. Becht, M., & Roell A. (1999). *Blockholdings in Europe: An International Comparison*, European Economic Review, vol. 6, 1049-1056.
6. Berle, A. A., & Means, G. C. (1932). *The Modern Corporation and Private Property*, (Harcourt, Brace and World, New York 1967) ISBN 0-88738-887-6
7. Demsetz, H. (1983). *The structure of ownership and the theory of the firm*. Journal of Law and Economics, 26, 375-390.
8. Demsetz, H. & Lehn, K. (1985). *The structure of corporate ownership: Causes and consequences*. Journal of Political Economy, 93, 6, 1155-1177.
9. Demsetz, H., & Villalonga, B. (2001). *Ownership structure and corporate performance*, Journal of Corporate Finance, 7, 209-33.
10. Fama, E., & Jensen, M. (1983). *Agency problems and residual claims*. The Journal of Law and Economics, 26(2), 327-349.
11. Fama, E. F. & Jensen, M. C. (1983). *Separation of ownership and control*. Journal of Law and Economics, 26, 301-325.
12. Filatotchev, I., Isachenkova, N., & Mickiewicz, T. (2007). *Corporate governance, managers' independence, exporting, and performance of firms in transition economies*. *Emerging Markets Finance and Trade*, 43(5), 62–77.
13. Grossman, S. J., & Hart, O. D. (1986). *The costs and benefits of ownership: A theory of vertical and lateral integration*. Journal of Political Economy, 94, 4, 691-719.
14. Herfindahl, O. C. (1950). *Concentration in the Steel Industry*. Unpublished PhD Dissertation, Columbia University.
15. Hirschman, A.O., (1970). *Exit, voice and loyalty*, Harvard University Press, Cambridge, Massachusetts.
16. Hill, C.W. L., & Snell, S.A. (1989, March). *Effects of Ownership and Control on Corporate Productivity*, The Academy of Management Journal, Vol. 32, no. 1, 25-46.
17. Hu, Y., & Izumida S. (2008, October). *The Relationship between Ownership and Performance: A Review of Theory and Evidence*, International Business Research, vol 1, no 4, 72-81.
18. Jensen, M. & Meckling, W.H. (1976). *Theory of the firm: managerial behavior, agency costs, and ownership structure*. Journal of Financial Economics, 3, 305-360.
19. Jiang, P. (2004). *The relationship between ownership structure and firm performance: an empirical analysis over Heilongjiang listed companies*. Nature and Science, 2 (4), 87-90.
20. Karaca, S. S., & Ekşi, I. H. (2012). *Corporate governance as a driver of organizational efficiency in courier service firms : Empirical findings from Nigeria*. Interdisciplinary Journal of Research In Business, 1(11), 26–38.
21. Karaca, S. S., & Ekşi, İ. H. (2012). *The relationship between ownership structure and firm performance: An empirical analysis over İstanbul Stock Exchange (ISE) listed companies*. International Business Research, 5(1), 172–181.
22. La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (1999). *Corporate ownership around the world*. The Journal of Finance, 54 (2), 471-517.
23. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R.W. (2000). *Investor protection and corporate governance*. Journal of Financial Economics, 58, 3-29.
24. Leung, S., & Horwitz, B. (2010). *Corporate governance and firm value during a financial crisis*. Review of Quantitative Finance and Accounting, (34), 459–481.
25. Lskavyan, V., & Spatareanu, M. (2006). *Ownership Concentration, Market Monitoring And Performance: Evidence From The UK, the Czech Republic And Poland*, Journal Of Applied Economics. Vol Ix, No. 1 (May 2006), 91-104
26. de Miguel, A., Pindado, J. and de la Torre, C. (2004). *Ownership structure and firm value: new evidence from Spain*. Strategic Management Journal, 25: 1199–1207.
27. Overlanda, C., Mavruka, T., & Sjögrena, S. (2012, January). *Keeping it real or keeping it simple? Ownership concentration measures compared*, University of Gothenburg, Department

- of Business Administration. Retrieved from: www.gu.se/.../1382/1382969_overland-mavruk-sjogren--120121-.pdf (15.11.2014r.).
28. Pedersen, T. & Thomsen, S. (2000). *The causal relationship between insider ownership, owner identity and market valuation among the largest European companies*. Copenhagen Business School, Working Paper.
 29. Shapley, L.S., Shubik, M., 1954. A method for evaluating the distribution of power in a committee system, *American Political Science Review*, 48, 3, 787-792.
 30. Shleifer, A., & Vishny, R. W. (1986). *Large shareholders and corporate control*. *Journal of Political Economy*, 94(3), 461-488.
 31. Shleifer, A., & Vishny, R.W. (1997). *A survey of corporate governance*. *Journal of Finance*, 52(2), 737-783.
 32. Sing, T. F., & Sirmans, C. F. (2008). *Does real estate ownership matter in corporate governance ?* *Journal of property research*, 25(1), 23–43.
 33. Stanwick, P. A., & Stanwick, S. (2010). *The relationship between corporate governance and financial performance : An empirical study of Canadian firms*. *The Business Review*, 16(2), 35–42.
 34. Thomsen, S. and Pedersen, T. (2000). *Ownership structure and economic performance in the largest european companies*. *Strategic Management Journal*, 21, 689–705.
 35. Uwuigbe, U., & Olusanmi, O. (2012). *An empirical examination of the relationship between ownership structure and the performance of firms in Nigeria*. *International Business Research*, 5(1), 208–216.
 36. Wahla, K. U. R., Shah, S. Z. A., & Hussain, Z. (2012). *Impact of ownership structure on firm performance evidence from non-financial listed companies at Karachi stock exchange*. *International Research Journal of Finance and Economics*, (84), 6–13.
 37. Weir, C., Laing, D., & McKnight, P. (2002). *Internal and external governance mechanisms: Their impact on the performance of large UK public companies*. *Journal of Business Finance & Accounting*, 29(5&6), 579-611.