UNIWERSYTET SZCZECIŃSKI
WYDZIAŁ NAUK EKONOMICZNYCH I ZARZĄDZANIA

Studia i Prace WNEIZ US
nr 53/3 2018

DOI: 10.18276/SIP.2018.53/3-12

Edyta Mioduchowska-Jaroszewicz*
Instytut Ekonomii
Uniwersytet Szczeciński
Malwina Szczepkowska**
Instytut Inwestycji i Zarządzania
Uniwersytet Szczeciński

THE EFFECTIVENESS OF THE FAMILY CAPITAL GROUPS LISTED ON THE WARSAW STOCK EXCHANGE

Abstract

The article presents the issues connected with forming and developing of family equity groups. In general, family businesses are identified with the small and medium enterprises. However, there is a group of family businesses that grow larger and form groups of companies. Most family businesses, currently operating as holding companies, started from small businesses. In Poland, we can observe an increasing number of family holding companies playing a significant role in the economy. This article attempts to assess the ownership structure of family capital groups and its impact on the financial situation of the group.

Keywords: family capital group, a family business, the company, holding company, the development strategy of the family business

* Adres e-mail: edyta.mioduchowska-jaroszewicz@usz.edu.pl.
** Adres e-mail: malwina.szczepkowska@usz.edu.pl.

Introduction

The aim of the article is to assess the ownership structure of family capital groups and its impact on the financial situation of the studied group of enterprises. The basis for the analysis of family capital groups is the information collected from enterprises listed on the Warsaw Stock Exchange. Firstly, the family capital group was defined. Secondly, the family ownership and control (using the Substantial Influence Index) and their effectiveness (Return on Equity and Return on Capital) was analyzed.

1. The Essence of Family Businesses – Literature Review

Family businesses have had strong historical presence and extensive prevalence in our society and economy. They are a vital part of the economy and social environment. A family business as a scientific field is still emerging. Scholars often emphasize the dominant role played by these organizational forms in many countries. For example, based on their broadest definition, Astrachan and Shanker (2003) estimate that family firms generate 89% of total tax returns, 64% of GDP and employ 62% of the total workforce in the US. In the European Union, the share of family enterprises varies, depending on the country and scope of the definition, from 45% to 90%, and they generate between 45% and 65% of the national income. Particularly in Germany, family firms have been found to show an unusually strong dominance (Faccio, Lang, 2002). Klein (2000) estimates that approximately 58% of all businesses in Germany with more than €1m turnover/year are family businesses (Siebels, zu Knyphausen-Aufseß, 2012).

A large family, in which the ownership and supervision over its business activity is in the hands of one family, gains in importance as well. A large number of international surveys confirm that a significant number of entities have one or several shareholders who are mostly family members. Research by La Porta (1999) indicated that 30% of global companies are controlled by the family, while in Western Europe the dominant form of ownership is family property (Faccio, Lang, 2002). Even in the USA it was stated (Anderson, Rebb, 2003) that among the 500 largest companies, about 35% are family-owned.

In some countries, such as Asian countries or Italy and Spain, individual people or families simultaneously control a large number of companies in the form of family business groups. A family organizes the ownership of member companies of the group either into horizontal structures or into pyramid structures. A pyramid structure is defined as a network of companies connected to each other on many levels, in a cascade manner (Aluchna, 2014). The actual owner exercises control over the companies indirectly, through other economic entities. The owner owns majority shares in the main company at the top of the pyramid, and in this way is able to control another company, which in turn enables him to control the companies at a lower level (Almeida, 2006; Aluchna, 2017).

The definition of family businesses still remains the biggest difficulty as its formulation raises a lot of controversy among researchers and influences the estimation of the number of these entities in the economy (Casillas 2007, pp. 18–20). Most definitions include notions of family ownership, family control or management, family involvement, and/ or the intention to transfer the family firm (Heck and Trent, 1999). Some definitions are very narrow and limited by their inclusion of the criteria of having two generations involved in the business while others are very inclusive of any business owned by one or more family members (Henry, 2016). In trying to evaluate family entrepreneurship it is important to define their definitions and indicate the research group.

One of the solutions to the lack of a clear definition of a family business is the use of the Substantial Family Influence indicator proposed by S. Klein. It is a measure that determines the level of ownership and the involvement of the family (Klein 2000). Therefore, the synthetic SFI has the following form:

$$SFI \cong \left(\frac{EQ_{Fam}}{EQ_{Total}}\right) + \left(\frac{SB_{Fam}}{SB_{Total}}\right) + \left(\frac{MB_{Fam}}{MB_{Total}}\right) \geq 1$$

Where:
EQ_{Fam} – is a family participation in ownership/*Equity*
EQ_{Total} – is total company equity of a given company
SB_{Fam} – is the number of family members on the supervisory board
MB_{Fam} – is the number of family members on the management board

Based on the existing definitions of family businesses, the Authors used the following definition, formulated for the purpose of this article, in order to examine family entities listed on the Warsaw Stock Exchange: A family enterprise is one in which at least one family member participates in the management and/or supervision over the company and family members own at least 25% of the assets of a company. Such a definition allowed the Authors to identify family capital groups listed on the WSE and then to analyze their financial situation.

2. Methodology

The data published on the website of the Warsaw Stock Exchange were used to analyze the Polish family capital groups. Out of 485 listed companies, 46 family companies operating in the form of a capital group were identified. Table 2 presents basic information about the studied group.

Table 2. Characteristics of the family capital groups listed on the WGPW

Company name	Family	Company's operating sector
AB GK	Przybyło	IT, retail trade, household goods
ABM SOLID SA w upadłości układowej	Pawlik	retail trade, industrial building
ALCHEMIA SA	Karkosik	metallurgical activity
ALMA MARKET SA	Mazgaj	retail trade of food products
ATM GRUPA	Kurzewski	TV and film producer
BORYSZEW SA	Karkosik	industry
COMARCH SA	Filipiak	IT sector
CZERWONA TOREBKA SA	Świtalski	trade network management
DROZAPOL-PROFIL SA	Rybka	metallurgical activity
DROP SA	Chwedoruk	retail trade of food products
ENERGOINSTAL SA	Więcek	industry
FARMACOL SA	Olszewscy	distribution of pharmaceuticals
FEERUM SA	Janusz	producer of agricultural equipment
FAMUR SA	Domogała	producer of agricultural equipment
FOTA SA w upadłości układowej	Fota	distribution of car parts
INTER GROCLIN AUTO SA	Drzymała	manufacturer of car accessories and accessories
INTROL SA	Kapral	electrical and industrial installations
IMPEL SA	Dzik	outsourcing of business and auxiliary processes

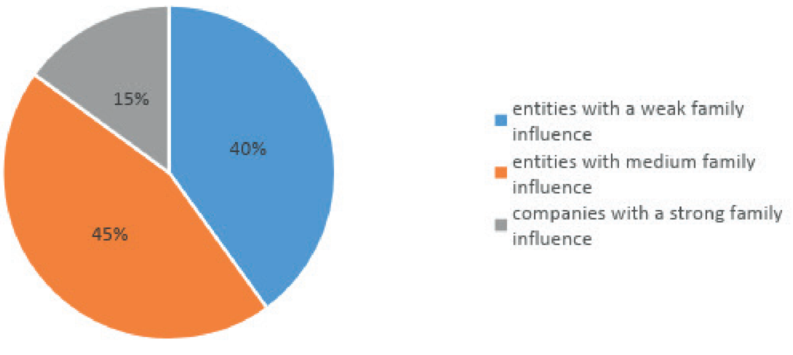
Company name	Family	Company’s operating sector
INTERBUD-LUBLIN SA	Matacz	construction
KOMPUTRONIK SA	Buczkowscy	IT sector
MO-BRUK SA	Mokrzycki	waste management, road construction
MENNICA SA	Jakubas	numismatic production, real estate development, electronic payments
MONNARI TRADE SA	Misztal	clothing production
MIRBUD SA	Mirgos	construction
MARVIPOL SA	Książek	development activity
NETMEDIA SA	Wierzba	IT sector
NEUCA SA	Herba	wholesale trade in pharmaceuticals
NTT SYSTEM SA	Kurek	production of computer memories
PATENTUS SA	Duda	mining machinery manufacturer
PLATFORMA MEDIOWA POINT GROUP SA	Lisiecki	media
POLSKA GRUPA ODLEWNICZA SA	Domagała	industrial production
PAMAPOL SA	Szataniak	meat and vegetable processing
REDAN SA	Wiśniewski	the retail trade
SELENA SA	Domarecki	production of construction chemicals
SKYLINE INVESTMENT SA	Rey	financial consulting
TRITON DEVELOPMENT SA	Szmagalski	construction
TRANS POLONIA SA	Cegielski	transport
TESGAS SA	Kocik	gas sector
UNIMA 2000 SYSTEMY TELEINFORMATYCZNE SA	Kniszner	ICT systems
GIEŁDA PRAW MAJĄTKOWYCH VINDEXUS SA	Kuchno	financial services
WASKO SA	Wajda	IT services
WANDALEX SA	Bąkowski	transport
WOJAS SA	Wojas	production of footwear sales
WISTIL SA	Kwiecień	textile and ceramic industry
ZPUE SA	Wypychewicz	power industry
ZUE SA	Nowak	railway sector

Source: own study based on data from WSE.

The most frequent form of business activity of the surveyed companies was production and trade, which are rather more traditional sectors than that of the modern areas of the economy. As for the familness of the companies, the analyses show that the share of the family in the ownership is dominant: in 40% out of all entities, the share fluctuated between 25–50% and in 60% of the analyzed groups it accounted for over 50% of company ownership. It should be added that in the case of some of the surveyed entities (about 40%) the family's influence on management was even greater as the family had preference voting shares. Therefore, the advantage at general meetings was greater than it resulted from the percentage of shares held.

To determine the family ownership and control over the surveyed entities, the SFI index was calculated, in which the participation of family members in management boards and supervisory boards was additionally taken into account. The results are presented in figure 1.

Figure 1. Characteristics of the studied group using the SFI index



Source: own study based on data from WSE.

In the vast majority of family-owned capital groups (60%) listed on the WSE, the family had a significant influence on the decision-making, both through ownership, as well as supervision and management. In approximately 40% of the surveyed entities, the family control can be assessed as weak. As mentioned above, the share of the family in ownership was significant (in 60% of entities it amounted to over 50% of shares) and meaningfully affected the high level of the SFI index. The assessment of family control in family capital groups may be underestimated due to a certain disadvantage of the applied methodology, i.e., identifying family members by a surname, which eliminates, among others, female successors or relatives.

The next stage of the assessment of family capital groups was the evaluation of their effectiveness. For this purpose, the most popular indicators were used: Return on Equity (ROE) and Return on Capital (ROC).

Return on Equity is a measure of performance evaluation useful to shareholders. The return on equity ratio assesses the effectiveness of the capital employed, not only the principal one, but also the capital that was contributed by the owners. The formula of ROE is as follows (Waśniewski, Skoczylas, 2004, pp. 248–249):

$$ROE = \frac{Zn}{pKWŁ} \times 100$$

Where:
Zn – is net profit,
pKWŁ – is average equity.

The Return on Capital is the most synthetic measure of management effectiveness assessment. The numerator of the formula contains the net profit increased by interest on foreign capital and the tax shield (1-T) and thus it allows one to calculate the full level of profitability from the entire capital invested in the enterprise. It is also suitable for comparing companies with diversified levels of debt, as the numerator includes both the results belonging to the owners (net profit) and the creditors (interest). The formula of the ROC indicator is as follows (Waśniewski, Skoczylas, 2004, pp. 246–247):

$$ROC = \frac{Zn + ods(1 - T)}{pKZ} \times 100$$

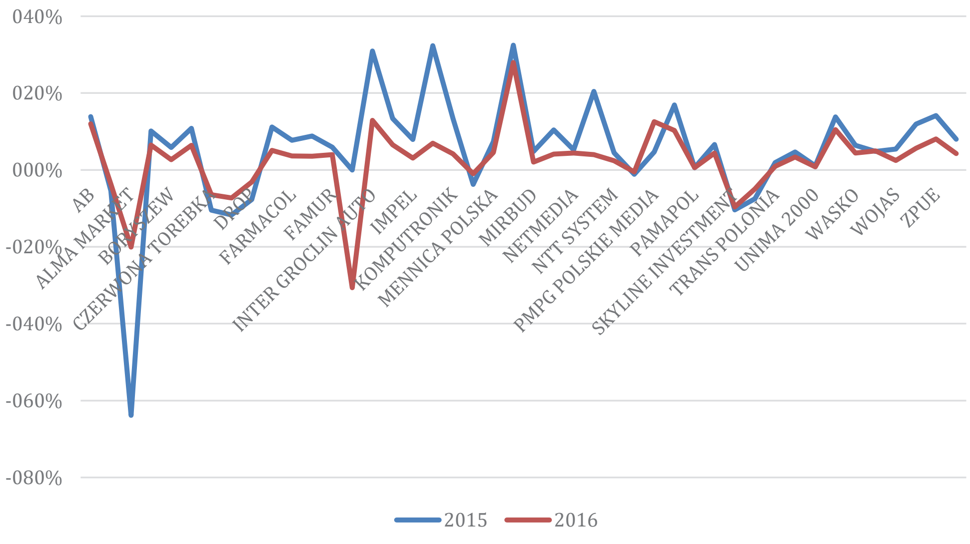
Where:
Zn – is net profit,
Ods – is interest,
T – is income tax rate,
1-T – is tax shield,
pKZ – is average capital invested (assets).

In trying to assess the effectiveness of companies, it is most controversial to measure profitability of those enterprises that do not generate profit but make a loss. It seems that this approach is wrong because the formulas of ROE and ROC contain a profit in the numerator. In addition, in enterprises with a net loss, and at the same time without equity, we get a positive score when calculating the ROE. Such a result, however, does not mean a positive financial situation of the company.

3. The Profitability Analysis of Family Capital Groups

The profitability analysis of family capital groups was carried out on a sample of 46 companies listed on the Warsaw Stock Exchange in the years 2015–2016 with the use of two profitability ratios: Return on Capital and Return on Equity. Figure 2 presents the profitability ratios of equity in family capital groups for the period 2015–2016.

Figure 2. Return on equity in family capital groups in 2015–2016



Source: own study based on data from WSE.

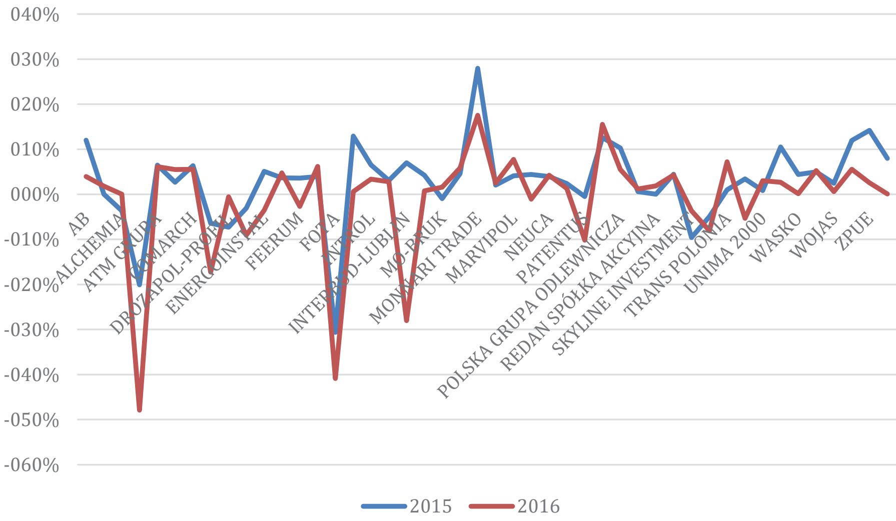
The profitability of equity determines the benefits for owners of equity capital, the return on capital employed by owners, thus it is an important determinant of decisions made by the family companies. The analysis of ROE indicates that in 2015 there were as many as 12 deficit companies in the surveyed group of companies, while in 2016 there were 14 companies.

When assessing the deficit of companies, it is important to consider some important issues in order to measure their profitability. In both of the examined years, there were companies in which, besides having a negative net financial result, the net loss value exceeded the level of share capital and supplementary capital, which in turn resulted in generating negative equity. When calculating the return on equity, it possible to obtain positive ROE from the calculations because the quotient of two negative values gives a positive value. Therefore, the study excluded companies achieving negative financial result and equity, namely: ABM Solid in 2015, Alma Market in 2016, Fota in 2015, Redan in 2015. Therefore, 34 family-owned groups gained profitability in 2015, whilst only 32 companies in 2016. In 2015, only four family-owned capital groups achieved above-average return on equity, or around 30%, such a rate of return means that investing in the shares of the analyzed capital groups is very attractive. This group includes the following companies: Inter Groclin, Introl, Interbud, Monnari and Neuca. In ten family-owned capital groups, such as AB, ATM Grupa, Comarch, Energoinstal, Komputronik, Marvipol, Polska Odlewnicza Group, Vindexus, Wistil and ZPUE, the rate of return on equity exceeded 10%, which provides an average return on equity.

Other companies (20) obtained efficiency from equity at the level below 10%, and that level of return on capital may not always satisfy the owners. It is not sure whether it covered the minimum rate of return or the cost of equity. In 2016, profitability of equity was much lower, and only two companies achieved a profitability above 20%, while only seven companies had a return rate of 10–20%. In the group of companies with the lowest return on equity, there were as many as 23 companies. The highest profitability in the analyzed group in both examined years achieved Monnari Trade at the level of 32.47% in 2015, while in 2016 it was 20.20%.

The profitability assessment of the invested capital informs about the effectiveness of the invested own and foreign capital. Therefore, the formula of the ratio, in addition to the effect of equity or net profit, also takes into account the effect of foreign capital in the form of interest paid on loans, loans and financial leasing. The indicator is very useful for the purpose of comparing companies that use different sources of financing. The profitability of the capital invested can be used to assess the management effectiveness of the invested capital. Figure 3 presents the return on capital ratio in the family in capital groups in the years 2015–2016.

Figure 3. Return on capital in family capital groups in 2015–2016



Source: own study based on data from WSE.

In the years 2015–2016, the analysis of the return on capital obtained by the family capital groups indicates that the efficiency level varied. Out of all the analyzed companies, 25% can be characterized as inefficient. The highest profitability of the capital invested was recorded by the Monnari Trade at the level of 27.96% in 2015, and in 2016 it was 17.53%.

Table 3 presents indicators of descriptive statistics for the return on equity and return on capital ratio.

In 2015, the surveyed group of companies achieved an average efficiency of invested capital at 4.36% (arithmetic average), and 50% of the surveyed companies achieved return on invested capital above 4.39% (median), and 50% below this value. In 2016, the efficiency of invested capital decreased, as the average value decreased from 4.36% to 4.25%. The median this year indicates that 50% of companies achieved a lower value of 3.97% and 50% higher than 3.97%. The deviation from the average also decreased to 3.84%. The rate of return on equity was different due to the fact that the average value of equity in the period grew from 7.8% to 8.79%. The deviation from the average ranged from 7.5% to 6.69%. 50% of the companies achieved profitability of equity over 8.02%, while 50% below this value.

Table 3. Indicators of descriptive statistics for the return on equity and return on capital ratio

Specification	2015		2016	
	ROE	ROC	ROE	ROC
arithmetic average*	7,8%	4,36%	8,79%	4,25%
median*	7,5%	4,39%	8,02%	3,97%
standard deviation*	7,5%	4,98%	6,69%	3,84%

* Calculating the values of the ratios for 2015, 12 companies were eliminated, and for 2016 – 14 companies that had a negative financial result.

Source: own study based on data from WSE.

4. Conclusion – Assessment of the Impact of the Family Groups on their Efficiency

The Pearson's correlation coefficient was used to examine the impact of familness of the family capital group on their effectiveness. The correlation between the SFI coefficient and ROE and ROC profitability ratios was examined and presented in table 4.

Table 4. The results of Pearson's correlation between the SFI and profitability ratios in 2015–2016

Ratio	Year	
	2015	2016
The number of companies in the research sample	32	34
SFI and ROE	–0,04	0,15
SFI and ROC	0,1	0,18

Source: own study based on data from WSE.

In 2015, based on the analysis of the correlation between the SFI ratio and the return on equity and return on capital indicators the following conclusions can be drawn:

– the direction and strength of connections is variable and low,
– the growth familness of companies decreases the return on equity,
– the family involvement in the surveyed listed companies has a positive impact on the profitability of the invested capital,
– the assessment of the strength of dependence between the family influence (SFI ratio) and profitability is very weak,
– the strength between the SFI and ROE is weaker than between the SFI and ROC, i.e. there is a more significant correlation between the familness and the return on capital.

The assessment of the correlation between the family ratio and the return on equity and return on capital in 2016 shows the following conclusions:

– the direction of connections is positive, which means that the increase of family involvement in the studied companies results in an increase of the effectiveness of their operations,
– increased involvement of the family in the ownership structure of the family capital groups results in an increase in the return on equity,
– growing familness leads to the increase in the effectiveness of the total capital,
– the assessment of the strength of dependence between the company's family control (SFI) and profitability is very weak,
– the strength of links between the SFI and ROE indicators is weaker than between that of the SFI and ROC ratios, i.e. there is a higher correlation between the family involvement and the return on capital.

To sum up the assessment of the impact of the family on the effectiveness of the capital groups in 2015–2016 on the basis of the results presented, it should be clearly stated that there are no links between the family involvement and the effectiveness of such companies. The results of the research may be influenced by a small research sample and a short research period. The research sample was determined by the number of family capital groups listed on the WSE in 2015–2016. Therefore, the next direction of the research on this type of dependence is to expand the research period to obtain more reliable results.

References

Almeida, H.V., Wolfenzon, D. (2006). A Theory of Pyramidal Ownership and Family Business Groups. *The Journal of Finance*, *61* (6), 2637–2680, doi.org/10.1111/j.1540-6261.2006.01001.x.

Aluchna, M. (2014). Corporate governance challenges. The case of pyramidal structures. *Przegląd Organizacji*, *2*, 37–41.

Aluchna, M., Kuszewski, T., Zatoń, T. (2017). Struktury piramidowe. Analiza spółek z GWP w Warszawie. *Management Forum*, *5* (1), 1–6.

Anderson, R.C., Reeb, D.M. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *Journal of Finance*, *58*, 609–633, doi.org/10.1111/1540-6261.00567.

Astrachan, J.H., Shanker, M.C. (2003). Family Businesses' Contribution to the US Economy A Closer Look. *Family Business Review*, *16*, 211–219, doi.org/10.1111/j.1741-6248.2003.tb00015.x.

Casillas, J.C., Acedo, F.J., Moreno, A.M. (2007). *International entrepreneurship in family business*. Cheltenham: Edward Elgar.

Faccio, M., Lang, L.H.P. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics*, *65*, 365–395, doi.org/10.1016/S0304-405X(02)00146-0.

Heck, R.K.Z., Trent, E.S. (1999). The prevalence of family business from a household sample. *Family Business Review*, *12* (3), 209–224, doi.org/10.1111/j.1741-6248.1999.00209.x.

Klein, S.B. (2000). Family Businesses in Germany: Significance and Structure. *Family Business Review*, *13* (3), 157–182, doi.org/10.1111/j.1741-6248.2000.00157.x.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, *54*, 471–517, doi/abs/10.1111/0022-1082.00115.

Siebels, J.-F., zu Knyphausen-Aufseß, D. (2012). A Review of Theory in Family Business Research: The Implications for Corporate Governance. *International Journal of Management Reviews*, *14* (3), 280–304, doi.org/10.1111/j.1468-2370.2011.00317.x.

Waśniewski, T., Skoczylas, W. (2004). *Teoria i praktyka analizy finansowej w przedsiębiorstwie*. Warszawa: Fundacja Rozwoju Rachunkowości w Polsce.

EFEKTYWNOŚĆ RODZINNYCH GRUP KAPITAŁOWYCH NOTOWANYCH NA WGPW

Streszczenie

Podmioty rodzinne dominują we współczesnej gospodarce, zwłaszcza w sektorze MSP. Na znaczeniu zyskują jednak również duże, rodzinne podmioty, w których własność i kontrola znajduje się w rękach jednej rodziny. Część z nich tworzy grupy kapitałowe, badania światowe wskazują, że już jedna trzecia światowych globalnych podmiotów to rodzinne spółki holdingowe. W Polsce możemy również zaobserwować coraz więcej rodzinnych grup kapitałowych, które odgrywają znaczącą rolę w gospodarce. W artykule przedstawiono problemy funkcjonowania i rozwoju rodzinnych grup kapitałowych. Celem jest ocena struktury własnościowej rodzinnych grup kapitałowych i jej wpływu na sytuację finansową tych podmiotów.

Słowa kluczowe: firmy rodzinne, rodzinne grupy kapitałowe, analiza efektywności przedsiębiorstw

Kody JEL: G30, G31, G33