DESCRIPTIVE MODEL OF INFLUENCE OF OWNERSHIP CONCENTRATION ON THE CORPORATE CAPITAL MANAGEMENT

Introduction. Significantly important factors that define the company's efficiency are the structure of proprietorship and capital structure. Therefore, the item of the relationship between these factors is reflected in the works of scientists. The necessary issue is the pick of correlation between own and borrowed funds since the optimum structure of capital leads to magnification of the market value based on company performance results. The relevance of deciding on the capital structure determines the feasibility of determining the effect of concentrated ownership on capital structure. In an unstable political, social, legal, and economic environment, ownership concentration turns into a compensatory mechanism that fills numerous institutional gaps. Concentrated possession enables it possible to influence the capital structure through agency costs.

Aim and tasks. The main purpose of the article is to determine the link between concentration level of ownership and capital structure, between ownership structure and leverage. This paper substantiates the problem of “principal-agent” to identify problematic issues to further develop recommendations to strengthen appropriate market incentives.

Results. The paper shows that the problem of the “principal-agent” exists independently of the rate of ownership concentration in the corporation. Agency costs are one of the determining factors in the composition of a corporation’s capital. This paper has clearly shown approaches to identifying the nature of the effect of ownership structure on the capital structure. It has been established how this influence is carried out, taking into account the mismatch of various groups of owners’ interests and the effect of their “entrenching”, as well as the consequences of monitoring and expropriation with a highly concentrated structure of ownership.

Conclusions. The choice of the ratio of own and borrowed funds depends on the actual ownership structure. Assumptions are made, the increase in the corporation's leverage owing to an increase in the blockholders shares. There is a reciprocal interconnection between leverage and agency costs. Because changing leverage is an instrument that helps to overcome agency conflicts and not just only proves is the result of their presence. The selected special characteristics gave grounds to conclude that the adjustment of the ratio of a company's debt to the value of its equity also depends on the goal of management solutions, as well as the current facility and prospects of the corporation.

Keywords: ownership structure, capital structure, corporation, leverage, corporate governance, agency costs.
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Вступ. Структура власності та структура капіталу є суттєвими факторами, що визначають ефективність діяльності компаній. Саме тому питання взаємозв’язку між зазначеними факторами знаходять відображення в роботах науковців. Важливим питанням є вибір структури капіталу, оскільки його оптимальна структура призводить до максимізації ринкової вартості фірм за результатами діяльності компанії. Важливість вибору структури капіталу обумовлює доцільність визначення впливу концентрації власності на структуру капіталу. В нестабільному інституційному середовищі концентрація власності стає компенсаторним механізмом, що заповнює численні інституційні порожнечі. Концентрована власність дає можливість через агентські витрати впливати на структуру капіталу.

Мета і завдання. Метою статті є визначення зв’язку між концентрацією власності та структурою капіталу, структурою власності та левериджем, обґрунтування виникнення проблеми «принципала-агента» для виявлення проблемних питань та подальшої розробки рекомендацій щодо відповідних ринкових стимулів.

Результати. Незалежно від ступеня концентрації власності в корпорації, існує проблема «принципал-агент». Агентські витрати є одним із визначальних факторів у структурі капіталу корпорації. У статті описано підходи до визначення характеру впливу структури власності на структуру капіталу. Встановлено, як здійснюється цей вплив, враховуючи дивергенцію інтересів різних груп власників та ефект їх «окопування», а також наслідки моніторингу та експропріації з висококонцентрованою структурою власності.

Висновки. Тип структури власності дійсно здійснює вплив на вибір структури капіталу. Було висунуто припущення, що збільшення левериджу компанії обумовлюється підвищенням ступеня концентрації власності. Зв’язок між левериджем і агентськими витратами є взаємоспрямованим. Так як зміна левериджу, окрім результату наявності агентських конфліктів, є дієвим інструментом їх подолання. Виділення особливих характеристик дало можливість зробити висновок, що коригування левериджу залежить також від мети управлінського рішення, а також поточних можливостей і перспектив компанії.

Ключові слова: структура власності, структура капіталу, корпорація, леверидж, корпоративне управління, агентські витрати.
**Introduction.** Sustained development of the corporate sector is one of the major contributing factors in the efficient functioning of the modern economy. Recently, the significance of the corporation's activities is increasing. Capital formation and development are an important area of joint-stock companies. Legal issues, civil liberties, political situations have a significant impact on the corporation's activities. In this case, the ownership concentration is a means of corporate management that can be used to correct institutional shortcomings if the country has underdeveloped economic institutions. Thus, especially in an unstable institutional environment, this tool can affect the company's results.

Whenever a company raises the issue of division property and control, arises a problem between the principal and the agent. The root of the mentioned problem is that owners (investors) cannot be sure of the following: managers adhere to the interests of the owners in the matter of management or do work maximum efficiency, which can maximize the firm's value and the owner's wellbeing.

Despite the corporate form widely used, many important issues concerning the regulation of corporate interaction and the effect of the concentration of ownership on the ratio of equity and debt of JSC remain insufficiently examined.

**Analysis recent research and publications.** Issues related to the separation of types of corporations by the criterion of ownership concentration, comparative advantages and disadvantages of these types were considered in the works of R. I. Kapelyushnikov [1], M. Becht [2]. Leading scientists and researchers in the field of corporate governance study the problems of the relationship "principal-agent". Peculiarities, influence on the corporation's activity and possible solutions to this problem are reflected in the works of such scientists as E.V. Frank [3], E. C. Claire, M. R. H. Jensen, J. S. Jahera, J. E. Raymond [4], Hongxia Li, Liming Cui [5], Pankaj M Madhani [6]. The issues of ownership structure, the relationship of ownership concentration with the capital structure and performance of the company are reflected in the works of Juan Gallegos Mardonesa, Gonzalo Ruiz Cuneo [7], Saleh F A Khatib, Dewi Feriha Abdullah, Ernie Hendrawat, Ibrahim Suleiman Yahaya [8], Ali Al-Thuneibat [9], Noelia Granado-Peiró José López-Gracia [10]. However, in an economy with an underdeveloped financial market and weak development of corporate legislation, the concentration of ownership and the creation of an optimum structure of financial capital are pressing and interrelated issues of corporate management.

**Aim and tasks.** The main purpose of the article is to determine the link between concentration level of ownership and capital structure, between ownership structure and leverage. This paper substantiates the problem of “principal-agent” to identify problematic issues to further develop recommendations to strengthen appropriate market incentives.

**Results.** In the general sense, ownership concentration means the sharing of capital stock among different owners within a single corporation. There are two main models of such a sharing: corporations with dispersed ownership (deconcentrated) and with concentrated ownership. It is worth noting that such a division is quite conditional.

A company with a dispersed ownership structure, known in international practice as the W model (the widely held corporation model), is controlled by professional managers and a loyal Board of Directors and a passive mass of small shareholders [1, p. 4]. This model provides the opportunity to diversify, distribute corporate risks to a wide range of investors. This is also due to higher secondary market liquidity and, consequently, lower cost of capital. The model of dispersed ownership in a corporation involves significant potential costs. The most obvious way to solve the problem of dispersion of property is to move to the model of concentrated ownership [2, p. 5].

If a corporation has concentrated ownership is called a model with dominant blockholders – Model B (the Blockholder model). In this case, we are talking about a corporation controlled by large owners, who can form the Board of Directors at its discretion (if necessary, to head it), as well as to appoint and change top management. Some authors distinguish between the American and British models within the framework of the concentrated ownership model.
The main difference between them is that in the American system, managers, in whose hands a significant share of ownership is concentrated, are protected from "hostile" takeovers, and the British are characterized by a fairly active market of mergers and acquisitions [1, p. 16].

In the company at any degree of ownership concentration, there are agency conflicts between managers of the corporation and its owners. It is these conflicts that are reflected in agency costs.

For example, according to E. Frank, significant agency costs appear both in with wide share ownership structure of the joint-stock capital and in concentrated. In a dispersed ownership structure, the effectiveness of the internal control system is limited because shareholders seek to transfer control functions to others. As a result, managers get considerable freedom of action and can use it in their own interests [3, p. 33].

Because of the concentration of stockholder equity raising costs increased because of liquidity of shares or reduction of opportunities for investors to diversify their investments. Furthermore, the high concentration prevents additional monitoring of managers by the equity market, available with greater dispersion of share capital and the related high liquidity shares.

Agency expenses are one of the determining factors in the structure of equity. Since the parties to agency conflicts try to reduce such costs, borrowed funds are an effective tool for such a reduction.

There are different approaches to determining the nature of the impact of ownership structure (through determining the nature and estimation of agency costs) on the capital structure. For a corporation with a dispersed capital structure, where the manager and shareholders are at the center of the conflict, the hypothesis put forward by Brailford and Oliver is relevant. According to it, a company with a higher degree of confrontation between managers and blockholders is probably characterized by a higher level of leverage [11, p. 4].

The assumption comes from the desire of shareholders to protect their own investments by monitoring the work of management.

The greater the share of blockholders, the more this desire. From one side, the ownership share of large external investors is growing, the ability to vote accordingly, too, which provides real opportunities to influence management decisions. High financial leverage is the internal financial influence of the investors.

Leverage change can also be the opposite. This happens when large shareholders conspire with corporate insiders against other owners [11, p. 4].

Another possible management option is introducing inefficient activities, including to shareholders, with free cash flows. Debt accrual is a disciplinary device that may be used to decline agency costs of free cash flows. [11, p. 6]. To reduce the risk of opportunistic management, executives are interested in participating in the company's share of capital. Occasionally, this measure may have negative consequences, because instead of reducing agency conflicts, increasing the share of the manager will lead to the so-called phenomenon of "entrenching".

Some empirical studies have established the direct nature of the interconnectedness between the concentration of a considerable part of the shares in management’s hands ("entrenching management") and the financial lever. More leverage allows managers to increase their control through voting rights for a given level of equity investment. Thus, debt is one way of easing several constraints inherent in corporations, where one person or a small group of people seek to gain dominant control [12].

The opposite hypothesis on this issue was put forward by T. Brailsford and B. Oliver. They found that with the manager’s share in equity relatively low, the company's leverage probably would rise. Under other conditions, namely with a high level of its share, the opportunity to shift leverage will have the opposite effect [11, p. 8].

For taking the position of "entrenching" managers can resort to constraints on the transfer of votes from one shareholder to another, setting limits on the maximum number of voting shares, which can participate in the general meeting of an individual shareholder, etc. [1, p. 6].
This behavior of the manager can be dictated by at least two reasons: the benefits of owning a share capital and the benefits of personal control. The benefit of owning a share of equity capital arises during management monitoring because of concentrated voting shares and the effect of increasing personal benefits. If the manager's share grows, he has further incentives to increase the market value of the company [12, p. 54].

The benefits of personal control are, first, the ability to personally or through attorneys to directly influence management decisions. Second, there is the opportunity to use corporate resources, or other corporate governance benefits that are not available to minority investors. These can be benefits in the form of increased wages for a particular group of people and not monetary benefits.

Particular attention should be paid to the impact of a highly concentrated ownership structure on the capital structure. After all, for example, according to Gerasimov S., companies operating in emerging markets are characterized by a high concentration of ownership [13, p. 100]. For some reason, in countries with inefficient economies and imperfect institutions, it is natural to expect the dominance of Model B.

The logical explanation for this is that the ownership concentration becomes a compensatory mechanism that fills numerous institutional gaps. With a low level of trust, weak contractual discipline, limited and non-transparent economic information, lack of independent courts, the unreliability of information transmission and dissemination mechanisms, high corruption, etc. Family ties help to create a semi-autonomous business environment in which there are possible rather complex agreements designed for the long term.

When participants in economic interaction belong to one family or one related clan, the level of trust increases, the risk of opportunistic behavior decreases, the effectiveness of informal mechanisms increases, transaction costs decrease [1, p. 8].

Returning to the theoretical justification of the impact of ownership concentration on the capital structure, it is important to establish how this impact is carried out considering the differences of interests of different groups of owners and the effect of their “entrenching”, as well as the effects of monitoring and expropriation. If we consider agency conflicts in the classical form, i.e. as a confrontation between management and shareholders, the transition to a concentrated ownership structure is a kind of panacea.

If Model B eliminates certain conflicts, it is obvious that due to its imperfection other conflicts arise. But some difficulties arise from the fact that agency costs, which are divided into property costs, bankruptcy costs and debt costs in the modern literature, as a rule, are not differentiated specifically for each type of ownership structure [4, p. 180].

The presence of large owners helps to reduce agency costs that arise from the asymmetry of information, monitoring the work of management, as well as losses from management decisions that are contrary to the interests of shareholders. Moreover, the presence of large owners leads to an increase in the market value of the company. This follows from the idea that the manager and the owners have a common interest in maximizing profits and sufficient control over the company's assets [5, p. 13].

In a situation of convergence of interests of managers and owners, the interests of minority shareholders may be violated. In this case, the agency costs of the majority owners will be expressed in losses from unrealized management initiatives and investment programs [12, p. 14].

The high activity of majority investors is reflected in the receipt of expropriation rent, which on the other hand, according to the authors, can be identified as agency costs of minority owners.

In general, expropriation exacerbates the agency conflict, as well as reduces the value of the company in the market [14, p. 9]. The other side of the conflict may be the owners of the company's debt. They can also be negatively affected by the expropriation process. An interesting example is given by Mara Fazzo with pyramidal corporate structures [15, p. 5].
Within the corporate pyramid, the increase in debt of one of the structural elements should not be accompanied by restrictions on expropriation by the controlling shareholder, because debts can be transferred by group, transformed into external loans, guaranteed by other branches, and so on. Even the default of one branch will not damage the reputation of the holding. In any case, liability for damages may be imposed on shareholders.

Thus, even with a critically high level of liabilities (meaning a high debt of the branch), a large shareholder may not care about this problem. On the contrary, it can facilitate the expropriation of a branch by allowing the controlling shareholder to control more resources without diluting its controlling stake. That is why the issue of expropriation may concern not only minority shareholders but also creditors [15, p. 5].

Moreover, sometimes holding corporations are composed of loyal captive financial institutions. As a result, such companies have greater access to borrowed resources. The presence of a pyramidal structure helps to increase the ability to attract long-term financing at a good price. Not infrequently, these corporations themselves are a source of long-term financial resources.

As the concentration of ownership can significantly weaken the opportunism of management, it is obvious that the manager will not be able to adjust the leverage in accordance with their own interests. Therefore, the hypothesis put forward by Garcia and de la Torre Olvera, shows that the higher the degree of concentration of ownership, the greater the leverage of the company [16, p. 2].

The relationship between ownership and leverage is quite complex. Empirical studies have shown a nonlinear relationship between ownership concentration and agency costs, as well as between ownership concentration and company value [16, p. 2].

Of interest is another hypothesis put forward by Garcia and de la Torre Olvera [16]. They believe that for a company whose owners have already taken a position of expropriation, the positive relationship between concentration and leverage will be weaker than in their absence. This is due to the weakening of the desire of shareholders to monitor the activities of managers.

However, returning to the conflict between minority and majority owners, we note that the depth of this conflict depends on the relationship between the right of control and the right to cash flows from large owners. The delimitation of these rights was devoted by the works of Mara Fazzo [15], Schliefer and Vishny [17], La Porta [18], Edwards [19] and others.

The right of control is related to the ability of the owner to influence the development of the company, while the right to cash flows allows you to claim a share in the profits. That is, the greater the right of control of the owner, the more opportunities he has to obtain private benefits of control at the expense of other owners. The greater the share of cash flows concentrated in the hands of the owner, the more his interests correspond to the interests of other owners. After all, a large owner is not interested in pursuing an aggressive investment policy. Thus, the conflict of interests is likely to be more powerful when the discrepancy between the rights of control and the rights to cash flows of the dominant owner is stronger [19, p. 1].

In nowadays literature, the right of control is equated with the right to vote. Then you can distinguish between the right to control and the right to cash flows, for example, by issuing shares with different shares, or different dividend payments. Another way is the already mentioned pyramidal structures. If the owner owns 60% of the voting shares in company A, which has 55% of the voting shares in company B, this pyramidal structure gives the owner full control over company B, despite having a cash flow of only 33 percent (product rights to cash flows of the owner in companies A and B) [19, p. 2].

Researchers of the Department of Control Rights and Cash Flow Rights have also noticed that it is not uncommon for a large shareholder to take an open stimulus position in relation to cash flows and a closed and aggressive one in relation to the right of control. This effect is called "hoeing". To maintain this position, blockholders resort to cross-ownership of shares; issue of shares with an unequal number of votes (i.e. deviation to a greater or lesser
extent from the principle of "one share-one vote"); construction of pyramidal holding structures already known to us with a wide base and a narrow top [1, p. 6]. Experience has shown that pyramidal structures are the most common and effective tool for "entrenching" under Model B. Their creation allows the formation of branched, multi-level business groups in which the owners at the top of the pyramid have the opportunity to manage huge capital, in many times exceeding their personal investment. The concentration of ownership and the organization of big business on a group basis are thus closely interrelated. Therefore, if the owner has, for example, a 60% stake, it does not indicate the same value of control rights and cash flow rights. After all, most decisions require more than 50% of the vote (while 60% of the package allows full control). At the same time, such an owner will be entitled to receive only 60% of the company's cash flows.

By assessing the rights of control and rights to cash flows of Mara Fazzo, it was proposed to establish their impact on the degree of expropriation by large owners [15; 20-23]. To do this, first calculate the ratio of the right to cash flows (OR) to the right of control (CR). Low OR / CR leads to increased financial leverage, but with weak creditor protection, and vice versa. In the first case, a higher lever gives the dominant investor more resources for expropriation. In the second case, minority shareholders and external creditors are able to limit the debt of a group of affiliates, which is more vulnerable to expropriation. Given the company's concentrated ownership, leverage can be affected by a number of characteristics or circumstances. Among them are the presence of intangible assets, investment opportunities, the availability of net cash flow, the level of protection of investors' rights and the cost of raising capital (Fig. 1).

![Diagram](image)

**Fig. 1.** The impact of different characteristics on the capital structure through agency costs under a concentrated ownership structure

*Source: author's development*

The presence of intangible assets provides information about the company's growth opportunities, which can be perceived as a call option, the value of which is determined by discrete investments in the future. Among external potential investors, access to these assets is limited, so this creates information asymmetry.
Debt holders take this as a negative signal. It can be offset by outsiders' expectations of the likely high efficiency of managing these assets under concentrated ownership. If the borrower's anxious expectations are offset in this way, leverage is likely to increase. The next assumption is that investment opportunities are more likely to reduce leverage. It is believed that the need to repay obligations in the future will require money, which will distract from the implementation of investment projects.

The use of Free Cash Flow is the cornerstone of the relationship between shareholders and managers. The latter seeks to accept investment projects with a negative net present value. Therefore, debt financing limits the activities of the manager only in their own interests, but not for the benefit of shareholders. But in the case of convergence of interests of the manager and shareholders, the manager himself will initiate the increase of leverage in the presence of free cash flows.

The low protection of investors' rights, which is especially characteristic of developing economies, creates agency conflicts between minority owners of corporate rights towards large investors. It could be assumed that this situation provokes a decrease in the company's leverage.

Agency conflicts are exacerbated by the confrontation between debt holders and large shareholders of the company. This can happen, for example, if shareholders want to share the risks of bankruptcy with creditors, which will affect the cost of external financing. Leverage will then decline. The cost of financing is also affected by falling liquidity of shares, reducing the ability of investors to diversify their investments and the asymmetry of information.

Conclusions. Thus, it was possible to determine that the type of ownership structure really influences the choice of capital structure. The ratio of such categories as "ownership structure", "agency costs" and "leverage" is quite complex and ambiguous. The authors perceive the model of concentrated ownership as an objective response to the low level of corporate control, underdeveloped financial markets, ineffective legislation to protect shareholders' rights, and so on.

Given the concentration of ownership, the adjustment of leverage follows from the desire of those who make management decisions to increase the efficiency of the corporation, and as a consequence of their own well-being. With a relatively low level of agency conflicts, the value of the company is likely to increase. In general, it was hypothesized to increase the company's leverage with increasing concentration of ownership.

Contrary to the notion of no agency costs in a concentrated ownership model, the author's view of the nature of the conflict between majority shareholders on the one hand and minority shareholders and debt holders on the other was established.

The relationship between leverage and agency costs is reciprocal. After all, changing leverage is not only the result of the presence of agency conflicts, but also an effective tool for overcoming them. The allocation of special characteristics (they are with concentrated ownership, able to influence the capital structure through agency costs) allowed us to conclude that the adjustment of leverage also depends on the purpose of management decisions, as well as current capabilities and prospects of the company.
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