FINANCING OF HOUSING THROUGH REAL ESTATE FUNDS: THE RELATIONSHIP BETWEEN LEGAL, TAX AND ACCOUNTING ASPECTS

Abstract. The article examines the processes of housing construction financing through the mechanism of creating funds for real estate transactions from the standpoint of legal and scientific-theoretical justification. The interrelation of legal, tax, and accounting aspects in the process of housing financing through real estate funds and the impact of the issuance of property certificates as equity instruments on the activities of managers of real estate funds are determined.

In the context of providing the housing with financial resources, the dynamics of the index of capital investment in housing construction and the commissioned area of residential real estate as indicators of housing development are analyzed in recent years in Ukraine.

It is determined that the current Ukrainian legislation provides five mechanisms of financing of housing construction: construction financing funds, housing cooperatives, real estate funds, mutual investment institutions, issuance of interest-free (target) bonds. However, not all of them are widely used. In the course of the research, it was established that real estate funds are created for the owners of certificates of this fund to receive income from real estate transactions. Certificates of the real estate fund, which the manager issues when creating such a fund, are securities that certify the right of its owner to receive income from investing in real estate transactions and are in their economic essence equity securities.

Emphasis is placed on the accounting aspect of such financing as the main source of financial information for managing the activities of the real estate fund. To improve the accounting and analytical support for the management of such a fund, the correspondence of accounts is proposed to reflect the typical business transactions related to the management of the property of the real estate fund.

Based on a critical analysis of the current domestic legislation, the tax consequences of the processes of housing construction financing through the mechanism of creating funds for real estate transactions are substantiated.

Keywords: financing, housing construction, real estate fund, objects of accounting, taxation.

JEL Classification G23, H25, L74, M41, R21

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ФІНАНСУВАННЯ ЖИТЛА ЧЕРЕЗ ФОНДИ ОПЕРАЦІЙ З НЕРУХОМІСТЮ: ВЗАЄМОЗ'ЯЗОК ЮРИДИЧНОГО, ПОДАТКОВОГО І БУХГАЛТЕРСЬКОГО АСПЕКТІВ

Анотація. Присвячено дослідженню процесів фінансування житлової будівництва через механізм створення фондів операцій із нерухомістю з позицій нормативно-правового і науково-теоретичного осмислення. Визначено взаємозв’язок юридичного, податкового і бухгалтерського аспектів у процесі фінансування житла через фонди операцій із нерухомістю і вплив емісії майнових сертифікатів як інструментів власного капіталу на діяльність управлячих фондів операцій із нерухомістю.

У контексті забезпечення будівництва житла фінансовими ресурсами проаналізовано динаміку індексу капітальних інвестицій у житлове будівництво та прийняття в експлуатацію площу об’єктів житлової нерухомості за останні роки в Україні як нідкаторів розвитку житлової будівництва.

Визначено, що при житловому будівництві чинним українським законодавством передбачено п’ять механізмів фінансування: фонди фінансування будівництва, житловобудівні кооперації, фонди операцій із нерухомістю, інститути спільного інвестування, випуск безпроцентних (цільових) облігацій, проте не всі з них набули широкого застосування. У процесі дослідження встановлено, що фонди операцій із нерухомістю створюються для отримання власниками сертифікатів цього фонду доходу від операцій із нерухомістю. Сертифікати фонду операцій із нерухомістю, які управлять випускає при створенні такого фонду, є цінними паперами, що засвідчують право його власника на отримання доходу від інвестування в операції з нерухомістю і є за своєю економічною суттю пайовими цінними паперами.

Акцентовано увагу на обліковому аспекті такого фінансування як основному джерелі фінансової інформації для управління діяльністю фонду операцій із нерухомістю. Для вдосконалення обліково-аналітичного забезпечення управління діяльністю такого фонду запропоновано кореспонденцій рахунків для відображення типових господарських операцій, пов’язаних з управлінням майном фонду операцій із нерухомістю.

На основі критичного аналізу чинного вітчизняного законодавства обґрунтовано податкові наслідки процесів фінансування житлової будівництва через механізм створення фондів операцій із нерухомістю.
**Introduction.** Frequent fraudulent schemes to raise funds, the high level of risks of investing in housing construction, as well as the important socio-economic role of this sector of the economy in ensuring the quality of human life have highlighted the need for strict regulation of housing finance. In response to these challenges, legislative and regulatory documents have been developed and approved, which define an exclusive list of mechanisms for raising funds to finance housing construction, among which — real estate funds (hereinafter — REF). Most of the imperatively permitted mechanisms, including the REF, generally make it impossible to transfer funds directly from investors to developers and involve intermediaries in the process of financing the construction (mostly financial investment companies or banking institutions) with the possible use of special securities (bonds, certificates). These aspects complicate not only the legal features of the relationship between investor and developer but also the accounting and taxation of housing and its financing, the methods and methodology of which are not properly regulated by law and require scientific justification. The volume of housing construction is one of the indicators of economic development because the needs of this industry form the demand for products of other sectors of the economy, including the production of engineering products, building materials, woodworking, energy, and stimulates small business-related economic activities, such as repair, decoration works, furniture production, etc. The length of the operating cycle and the high cost of housing construction cause an acute problem for Ukrainian developers to find resources to finance it. Taking into account the limited financial capacity of most Ukrainian developers, they need to attract financial resources at the stage of housing construction. At the same time, investment in housing in the early stages of its construction is highly risky, as evidenced by the existence of fraudulent schemes such as «Elita-Center» and the financial and operational inefficiencies of certain developers (eg, AT JSCB «Arcade»).

**Analysis of recent research and problem definition.** Many Ukrainian and foreign scientists have studied the problems of construction financing. G. K. Majumdar, D. K. Manda [1], A. Warszawski [2], I. Chalyi [3, 13] investigate the role of cash flows in financing a construction project. The subject of research of S. M. R. Alavipour, D. Arditi [4] was a model of minimizing funding costs, considering various financing alternatives.

Problems of housing construction and strategies of its development in Ukraine are covered by V. I. Voskalo [5]. Some nuances of domestic tax legislation and accounting for construction financing are studied by N. I. Gordienko in [6—11]. I. G. Chalyi [13] attempted to draw parallels between the specifics of global mechanisms for construction funds financing and domestic realities.

V. O. Onishchenko and T.V. Momot in [14] interpret the accounting identification of equity securities as an instrument of equity, which can lead to a revival of the activity of REF managers, the ability to receive larger amounts of remuneration for services provided to trust management and raise large amounts of funds without compromising regulatory financial finances indexes.

However, the issues of accounting and analytical support and taxation of housing financing processes through the use of real estate funds mechanisms remain unresolved.

The purpose of the article is to critically analyze the legislation of the organization of the housing financing process through the creation of real estate funds and to improve the legal aspects of accounting and taxation of such a financing mechanism.

**Research methodology.** Methods of analysis and synthesis are used to study the problems of housing construction and trends of its development in Ukraine and thus justify the relevance of the chosen research topic. A systematic approach was used in the critical analysis of the current legislation. The survey method allowed us to form the conclusion that validity is based on the specificity of the legally established norms.

**The results of research.** The problem of housing construction financing, as well as the efficiency of the construction industry in general, is primarily related to the high level of costs for
attracting financial resources. In this context, the availability of sufficient sources of financing for housing construction is perhaps the most important condition for the development of the housing market in Ukraine. An indicator that characterizes the dynamics of the development of housing construction in Ukraine is the index of capital investment in housing, which, according to the State Statistics Service of Ukraine [15], during 2012—2019 has a slight downward trend (Fig. 1).

![Fig. 1. Relationship between the index of capital investment in housing construction and commissioned area of residential real estate](image)

Source: built by the authors based on [15].

The resulting indicator of investments in housing construction is the commissioned area of residential real estate, which in recent years has shown fairly stable dynamics with some decrease in 2016 and 2018 (see Fig. 1).

Analyzing the sources of financing of housing construction in Ukraine [15] it is established that the main source of financing of housing construction is the funds of the population, as well as enterprises, institutions, and organizations. The authors also surveyed developers in Lviv, Ternopil, Ivano-Frankivsk, Volyn, and Zhytomyr regions. The author's analysis of housing financing allowed identification and combining real non-standard problems faced by investors and developers during the organization, accounting, and analysis of housing financing.

Although the legislation [16] stipulates that at least five financing mechanisms can be used in housing construction: CFF, HC, real estate funds (REF), mutual investment institutions, issuance of interest-free (target) bonds. Each of the construction financing mechanisms has its specifics, advantages, and risks, so it needs thorough disclosure.

The purpose of creating a REF is to obtain the income from real estate transactions by the owners of certificates of this REF (founders of its management body). That is, the REF is not created to receive the habitation in property by owners of management.

REF certificates, which the manager issues when creating REF, are securities that certify the right of its owner to receive income from investing in real estate transactions [16; 17]. The procedure for registration of the issue of REF certificates and the prospectus of their issue, redemption of REF certificates is determined by a separate Regulation approved by the Decision of the National Commission on Securities and Stock Market [18].

Real estate transactions mean:

a) financing of construction under the terms of the contract with the developer for further acquisition by the manager of REF into the ownership of the constructed objects or implementation of operations with the rights of claim, acquired as a result of such participation in the construction. In cases where the developer has not fulfilled its obligations to the manager, the real estate transaction is the receipt of funds from the developer, in the manner prescribed by the contract;
b) participation in the CFF for the subsequent acquisition of ownership of investment objects acquired in this way.

According to the law of Ukraine, the REF is the money received by the manager of the REF to manage, as well as real estate and other property, property rights, and income acquired by managing these funds, including such property and property rights or claims arising from agreements on participation in the CFF [15]. REF certificates entitle their owner after the expiration of the term for which the REF was created, to receive income from the redemption of REF certificates, which corresponds to the value of net assets, which is the number of investment certificates due to the founder of the management under the conditions provided by the Rules of the REF and the prospectus of their issuance. Besides, REF certificates entitle their holder to receive part of the income in cash as a result of REF’s real estate transactions carried out by the manager, in the form of interim payments, if it is provided by the REF Rules.

REF certificates belong to equity securities. According to [17], equity securities entitle their owner to receive a profit, the amount of which is not guaranteed. REF certificates (as well as investment certificates), in contrast to shares, do not confirm the ownership of corporate rights but indicate the right to receive income from investments in real estate in proportion to the number of certificates. After all, REF is only an accumulated mass of money and property. REF money and property cannot be considered as the authorized capital of the company.

From an organizational point of view, creating a REF is quite difficult. This can be done by a bank or non-bank financial institution. REF is not a separate legal entity, so it is not necessary to enter it in the state register of financial institutions. A non-bank financial institution must obtain a permit from the National Securities and Stock Market Commission (NSSMC) to issue REF certificates and organize its issuance of certificates (develop and approve the issue prospectus, investment declaration, register the issue and the issue prospectus with the NSSMC, etc.) [19].

REF is considered to be created after approval of the REF Rules, investment declaration, a prospectus of REF certificates issue, registration of the issue of REF certificates and the prospectus of their issue, the opening of the REF account, conclusion of the agreement of the REF manager with the developer, in the cases provided by the law and the REF Rules, execution of contracts that ensure the fulfillment of obligations of the developer under the contract with the manager.

Registration of the issue of REF certificates, registration of the issue, and approval of the prospectus of REF certificates may be carried out by fulfilling the following requirements:

- the total nominal value of REF certificates issued by the issuer may not exceed ten times the amount of the issuer’s equity;
- the amount of issued REF certificates should not be less than the equivalent of 100 thousand Euros at the official rate of the National Bank of Ukraine on the day the decision to issue REF certificates [18].

Payment for REF certificates upon their placement is made exclusively in cash. All REF certificates are registered and exist exclusively in undocumented form.

Let’s show schematically the functioning of the REF (Fig. 2).

![Diagram](image-url)

Fig. 2. The mechanism of financing the construction through the REF

*Source: developed by the authors based on [15; 17].*
When conducting accounting, managers (issuers of REF certificates) must be guided primarily by national regulations (standards) of accounting. Earlier, the State Commission for Regulation of Financial Services Markets of Ukraine approved Guidelines for the management of the construction financing fund and/or real estate fund accounting of their property and property under their management [20].

However, these Guidelines have expired, but no alternative normative document has yet been adopted.

Since, as noted above, REF certificates are equity securities and are economically similar to investment certificates, REF for the organization of accounting of its activities may take into account the provisions of the Regulations on accounting features of operations of collective investment institutions [21]. Therefore, for the accounting of transactions during the management of property received under control by a contract with legal entities and individuals, REF has to apply these recommendations, but only insofar as it does not contradict current legislation conducting accounting and reporting.

Taking into account the lack of guidelines for accounting for housing finance processes through REF, adhering to the current domestic legislation in the field of accounting, we proposed the content of typical business transactions related to the management of REF’s property and correspondence accounts, which are presented in *Table 1*.

**Accounting for property management transactions REF**

| №  | Contents of business transactions                                                                 | Dt    | Ct    |
|----|-------------------------------------------------------------------------------------------------|-------|-------|
| 1  | Receipt of borrowed funds from the founders of property management in the payment of REF certificates / Initial placement of certificates at face value | 311   | 402   |
| 2  | Use of funds to finance the construction                                                         | 151   | 311   |
| 3  | Use of funds for the purchase of real estate / paid value of the purchased real estate            | 63    | 311   |
| 4  | Enrollment of real estate on the balance sheet:                                                   |       |       |
|    | 4.1 to fixed assets                                                                               | 103   | 151, 63|
|    | 4.2 for sale                                                                                     | 286   | 151, 63|
|    | 5.1 Insurance of real estate acquired by the management of REF                                    | 949   | 311   |
|    | In the case of an insured event                                                                  |       |       |
|    | 5.2 cost recognition                                                                             | 949   | 103, 286, 151|
|    | 5.3 accrued income in the amount of insurance indemnity                                          | 375   | 746   |
|    | 6.1 Sale of real estate acquired by the management of REF / determination of cost                | 943   | 286   |
|    | 6.2 Accrual and receipt of income from the sale of real estate acquired by the management of REF | 36    | 712   |
|    |                                                                                                 | 712   | 641   |
|    |                                                                                                 | 311   | 36    |
| 7  | Transfer of real estate for financial lease (leasing):                                            |       |       |
|    | 7.1 the value of the object transferred to financial lease is excluded from the lessor's assets   | 286   | 103   |
|    |                                                                                                 | 131   | 103   |
|    | 7.2 accrued tenant's debt and determination of income from the transfer of real estate           | 181   | 712   |
|    | VAT liabilities are reflected                                                                    | 712   | 641   |
|    | 7.3 accrual of costs of the lessor for concluding a financial leasing agreement                  | 977   | 311, 685|
|    | 7.4 accrual of the monthly amount of the part of the value of the object of financial lease, which is subject to reimbursement | 377   | 181   |
|    | 7.5 accrued remuneration of the lease in terms of interest on the property                        | 373   | 732   |
|    | 7.6 Received rent                                                                                |       |       |
|    | for real estate                                                                                  | 311   | 377   |
|    | remuneration                                                                                     | 311   | 373   |
|    | 7.7 Receipt of funds to repay the residual value of the object of financial leasing              | 311   | 377   |
|    | 8 Redemption of REF certificates by the manager                                                   | 402   | 311   |
|    | 9 Accrual of remuneration to the REF manager (in the accounting of REF)                          | 79    | 685   |
|    | 10 Payment of remuneration to the manager of REF                                                  | 685   | 311   |
Table (continued)

| №  | Contents of business transactions                              | Correspondence of accounts |
|----|-----------------------------------------------------------------|-----------------------------|
| 11 | Accrual of remuneration to the manager REF (in the accounting of the manager) | Dt | Ct |
| 12 | Determining the financial result of REF                         | 377 | 79 |
| 13 | Use of profit for payment under REF certificates               | 79 | 441 |
| 14 | Profit distribution between REF founders                       | 441 | 443 |
|  | Source: developed by the authors based on [16; 17; 21].        | 443 | 671 |

The property transferred to the management must be separated from the other property of the founder and the property of the manager. That is, the property transferred to the management should be accounted for by the manager in a separate balance sheet, and it should be kept separate. Settlements related to property management are made in a separate bank account. Analytical accounting of operations by the management of the property received in supervision, the manager carries out separately for each REF, for each object of construction, and the developer.

Depending on the construction financing mechanism, not only the list of taxes payable but also the tax burden may differ.

The manager of REF, who carries out activities following the Law [16] on operations and results of trust management activities carried out by him through the fund, is a payer of income tax. With this in mind, the manager of such REF keeps separate accounting of transactions and results of trust management activities carried out by such manager through the fund, separately prepares financial statements, and determines the pre-tax financial result. Such financial result adjusted with the tax differences is the object to corporate income tax under the provisions of the Tax Code of Ukraine (TCU) [22] in the general order.

According to the TCU [22, subparagraph 180.1] for tax purposes, the payer of value-added tax (VAT) is a person — property manager, who maintains a separate tax accounting for VAT on business transactions related to the use of property received under the management of property management agreements. It is also stated that «... for tax purposes, economic relations between the manager of property for his economic activity and his property management activities are equated to relations based on separate civil contracts. The provisions of this subparagraph of the TCU do not apply to property managers who manage the assets of mutual investment institutions, banking management funds, construction financing funds and real estate funds established following the law». The supervisory authorities interpret this rule as the fact that REF managers are relieved of the obligation to register as individual VAT payers under each property management agreement (similar to the registration of a joint venture agreement). However, real estate funds are VAT payers.

The transactions of an issue (emission), investment in all forms of management and sale (redemption, repurchase) at the expense of the securities issued in circulation by business entities, including the certificates of real estate funds are not an object to VAT [22, 196.1].

The manager of REF receives the real estate in trust management and the property right (though by the principal) is also registered on him. In this case, the real estate is not transferred to the owners of REF certificates in any way.

Income transactions of REF (for example, rent) for VAT purposes are equated to ordinary transactions for the supply of goods (works, services). Therefore, the manager of REF is an ordinary landlord or seller of real estate by the rules of the TCU and his transactions are subject to VAT in the general order.

As for the sale of housing on the secondary market, this transaction is exempt from taxation. Regardless of the method of financing the construction, following [22, 197.1.14], the transactions for the supply of residential facilities, except for their first supply — transfer of new housing to the ownership of the buyer; construction of housing at the expense of the customer (including from materials purchased at the expense of the contractor); the first sale to the buyer of reconstructed or overhauled housing, if such buyer is not the owner at the time of decommissioning of this housing; provision of services for reconstruction or overhaul (including materials purchased at the expense of the contractor) — are not subject to VAT.
Regarding liability and risk reduction within the funding mechanism through the REF, it should be noted that the original version of the Law [16] provided several types of compulsory insurance. In particular, in different editions, there were such types of compulsory insurance as:
- insurance of construction and installation works for the entire duration of the construction object and the warranty period from the risks of its damage or destruction (in favor of the manager as a trustee);
- liability insurance to third parties — the founders of the fund during construction and installation work from the risks of violation of construction deadlines and causing moral and material damage to third parties due to poor performance of construction and installation work (in favor of the founders of the fund). In essence, it was close to the obligatory insurance of construction works by the customer/contractor;
- insurance of the manager’s liability (at the expense of own money) for losses which can be caused to owners of REF certificates by actions or inaction of the manager.

However, the legislation [16] has been repeatedly revised to include (exclude) these types of insurance as the compulsory types of insurance. In the current version, all these types of insurance are removed as mandatory. Thus, insurance of property and other risks that accompany the investment and may arise in the process of functioning of the REF can be carried out as a voluntary type of insurance. Besides, the above law obliges to insure the real estate purchased by REF against the risks of death or damage, at its full cost (in favor of the manager as a trustee) at the expense of REF.

In the case of issuance of REF certificates, their placement is carried out among a predetermined number of persons, the number of unqualified investors among whom may not be equal to or exceed 150 persons, except in the case of a public offer by the issuer in the issuance process. Qualified investors, according to the rules [18] are:

1) international financial organizations;
2) foreign states and their central banks;
3) the state of Ukraine represented by the state authorities empowered by it, the National Bank of Ukraine;
4) professional securities market participants, banks, and insurance companies;
5) legal entities, including those established under the legislation of another state, if they meet at least two of the following criteria:
   - the balance sheet total is at least 20 million Euros at the exchange rate of the National Bank of Ukraine as of the date of the last annual report;
   - the annual net income from the sale of goods, works, and services for the last financial year is not less than 40 million Euros at the rate of the National Bank of Ukraine as of the date of the last annual report;
   - own funds amount to at least 2 million Euros at the exchange rate of the National Bank of Ukraine as of the date of the last annual report.

Thus, the current legislation has sufficiently limited the number of REF investors.

The state regulation of housing construction and its financing determines not only the legal and financial relations between the participants in the construction (investors, developer, contractors) but also sets high demands on the control procedures for effective use of financial resources. These control procedures are based primarily on financial information, the main source of which is the accounting system.

**Conclusions.** Based on the above, we conclude that the current legislation provides certain opportunities for optimizing the tax burden in the construction industry, which contributes to the development of enterprises and their competitiveness. Concerning the use of REF to finance housing construction, there are no separate tax preferences for this mechanism, and due to the vagueness of the REF tax rules for investment, there are certain risks. Besides, given the clear legal limitations on REF investors, it becomes clear why the mechanism is not widely used in the realities of domestic financing of housing construction.

Based on the experience of countries with developed investment infrastructure, it seems appropriate to improve Ukrainian legislation by approving guidelines on the peculiarities of accounting by managers of real estate funds while considering their property and property under
their management. Besides, it is necessary to make adjustments to the tax legislation, clarifying the interpretation of the Tax Code of Ukraine on VAT taxation of the activities of real estate funds.

**References**

1. Majumdar G. K., & Mandal, D. K. (1995). Role of cashflow in project financing of building construction projects. *Journal of the Institution of Engineers, Civil Engineering Division*, 76, 82—85.
2. Warszawski, A. (2003). Parametric analysis of the financing cost in a building project. *Construction Management and Economics*, 21(5), 447—459.
3. Chalyi, Y. (2005). Doveryitel'nuye upravleniye sredstvami v sisteme finansirovaniya stroitel'tvom [Trust management of funds in the construction financial system] Kharkov: Faktor (in Russian)
