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DETERMINANTS OF REAL ESTATE INVESTMENT

ABSTRACT. On the capital market, one of important criteria for investment decision is the issue of selecting sources, possibilities and methods of raising the value of the investment object (Rogowski 2004, p. 38) Familiarity with sources of value as well as factors of which determine the value and impact upon the attractiveness of a capital market segment in question, allows capital owners to make effective and rational investment decisions. Issues concerning economic and physical properties of the estate that constitute its value, are of great importance for prospective investors on the real estate market.

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Introduction

On the capital market, one of important criteria for investment decision is the issue of selecting sources, possibilities and methods of raising the value of the investment object. Familiarity with sources of value as well as factors of which determine the value and impact upon the attractiveness of a capital market segment in question, allows capital owners to make effective and rational investment decisions. Issues concerning economic and physical properties of the estate that constitute its value, are of great importance for prospective investors on the real estate market. One of the crucial aspects that defines current and future value of the estate is the local authorities' policy on town and country planning. Moreover, what should not be disregarded is the country overall economic environment and the situation on the real estate market.

Investments in real estate - legal regulations

According to Civil Code regulations of 23rd April 1964, properties are part of the terrestrial surface, forming a separate property subject (land), as well as being buildings permanently fixed to the land or part of other such buildings, if in force of separately detailed regulations they make a separate entity from the land property subject. 'Property' also means an assigned land area together with buildings and other devices constructed on it which form components of the property. The Civil Code in Article 143 also states that in the ranges defined by socio-economic land designation, land ownership extends to the space over and under its surface.[1]

The Civil Code distinguishes between two types of property (Civil Code of 23rd April, 1964, Art. 46 § 1)

1) A property as a general idea; understood as part of the ground making a separate property subject (land), as well as buildings permanently fixed to the land or part of other such buildings, if in force of separately detailed regulations they make a separate entity from the land property subject.
2) Agricultural property; agricultural land understood as properties, which are or could be used for conducting agricultural production activity (for plant and animal production, not including horticulture, fruit cultivation and fishing).

As a result, in the enterprise's assets records, the properties are listed based on their designation as evidence of tangible assets used for the enterprise's own needs where the following property group types are distinguished:

1) Land (including perpetual land usufruct law)
2) Buildings, civil engineering premises and objects
3) Long-term investments.

Investments in property issues were also regulated as part of the International Accounting Standards.[2] Following regulations contained in the IAS, investments in a property (land or building or part of the building, or both connecting components), owned (by the owner or entity using it based on the financial leasing agreement) in order to obtain profits from renting or other profits resulting from increase of the property's value under the conditions that it is designated for:

- Own needs use in the production process, supply of goods and provision of services or to own administrative activity,
- Sales in the course of own activity.

When analysing property economy in the enterprise, two fundamental approaches to the property by the Company's Board may by distinguished. They result directly from the company's investment strategy, and especially to its structure. The first approach relates to financial investments where the properties may be subject to investment. The second approach results from regarding the property as a subject of objective company development investments, both new, modernised and reconstructed. (Nowacki 2006)

Due to property's capital absorbency, from the point of view of the enterprise, property purchase is usually related to serious financial exercise. What purchasing (or building) a property means for the income-generating company is the possibility of gathering a depreciation fund, which is the main source for their next investments, or eventually favour completion of other enterprise's objectives. Whereas, the enterprise in bad economic condition looks at the property from the point of view of maintenance costs. These include surveys, maintenance and repair costs as well as payments and taxes related with owning the property.

Current business entities no longer limit the investment process for purchase or forming of tangible assets for their own use. They are undertaking investment decisions on their own assets, including properties, in order to obtain additional income. According to the Act on accountancy by investment, it is understood that assets are acquired in order to obtain economic profit resulting from the increased value of those assets, obtaining income from them in the form of interest, dividend or other profits, and especially financial assets and

[1]The exceptions are the cases defined in the provisions regulating rights to water – see Water Law of 24th October 1974, and rights to mines regulated by Geological Law and Mining Law regulations of 4th February 1994

[2] International Accounting Standards IAS 40 Investment Property, International Accounting Standards Committee, London 2000.

those properties, as well as immaterial and legal values which are used by the entity but were acquired in order to obtain those profits. Therefore, properties not used to obtain additional profits do not make investments and are enclosed within the enterprise's tangible assets.

The specificity of investments in property

Typical investment examples are mentioned in the quoted standard:

- Land kept to obtain long term profits resulting from increases in its value.
- Land kept without any specified designation, which is recognised as an investment to obtain an increase in its value,
- Building kept by the entity or included in their assets based on the financial leasing agreement which was given for rent, and not used for own needs,
- Building which the entity keeps in order to be rented.

Based on the quoted MSR notes, the conclusion may be formulated that the purchased properties may be treated as investments, if the purpose behind their purchase is to obtain economic profits in the long term. From that point of view, investment in property classification is worth quoting, which could be distinguished depending on investment subject and characteristic investment features: (Jajuga 2003, p. 90)

- Investment in property: residential, office, commercial, warehouse (infrastructure factor) as well as land: agricultural, forest, special designation,
- Investment in property generating regular income in the future, increased future property value.

As many economists have pointed out, the following type of investment behaviour among investors may be found to be directed in different ways for obtaining profits based on conducted investments:[3]

1) Investor being a property owner, obtaining profits from the property as a result of using its capability to create regular income,
2) Investor being a property owner obtaining profits from the property as a result of property value appreciation,
3) Investor being a property owner using the property's qualities of high property desirability as mortgage protection when financing other types of activities,
4) Investor being the subject of investment realisation on a property as part of the developer's activity principle, for whom property investments are a form of conducted economic activity,
5) Investor acquiring the property for speculative purposes, referring to the profits as a result of short term value increase in the investment subject.
6) Investor being a property owner uses the property's qualities where investment in the property fulfils the needs of the investor/user.

Investors, when selecting the location for a specific property, should consider not only the specific conditions for the given type of property, but also some of the fundamental features common to all types of property, which could be called the 'economic' factors. Most of all, these include:

- Undeveloped property prices,
- Accessibility of developable land,
- Specific investment process conditions (difficulties for construction investments caused by special environmental protection norms, or limitation of spatial planning conditions e.g. building heights),
- Developed property prices,

[3] See also: The works of M. Bryx, K. Dziworska, H. Gawron, K. Jajuga, E. Kucharska-Stasiak.

- Tax and local payments,
- Adjacency levies and re-zoning fees,
- Access to infrastructure or territorial development system,
- Easy obtaining of necessary permits and decisions,
- Access to network, transport and communication junctions,
- Types of development in the nearest areas,
- Social environment (neighbourhood's demographic and social-occupational characteristics),
- State of social infrastructure (location of educational facilities, recreational/sport, cultural)
- Availability of services necessary to maintain the property,
- Technical infrastructure state and its anticipated development (especially transport and communication),
- Fundamental characteristics of economic activity (consumption and inhabitants' income levels, market absorbance, employment etc.)
- Functioning of financial institutions (investment services, bank loans, financial accounts),
- Competition on the property and rent market,
- Spatial planning.

As mentioned previously, investments should be considered as assets acquired in order to obtain economic profits resulting from the increased value of those assets; obtaining income from them in the form of interest, dividends or other profits, also including commercial transactions and particularly financial assets, and those properties and immaterial and legal values which are used by the entity, but were acquired in order to obtain profits. (Art. 3.1, Pt. 17, Act on Accountancy of 29th September 1994)

In summary, it might generally be stated that investments in property are divided into three fundamental groups: (Śliwiński 2000, p. 57)

1) Investments in property purchase,
2) Investments in property building,
3) Investments in indirect property laws.

It should be point out that the classifications accepted above allow us to approach them from the perspective of demand (on the investor side), and allow for: [4]

- Short term property sale,
- Property transformation and sale,
- Long term increases in investment value,
- Steady income in the future.

Investment in property may be done by direct or indirect means. Indirect investment involves obtaining an investment certificate and participating investment fund entities[5] on the one hand, and capital engagement on the other, and by purchasing shares in business entities acting in the property sector. Whereas direct investment is related to property purchase in order to obtain current profits in the form of tenancy rent, or as a result of waiting for the value of the investment subject to increase. Property makes an alternative investment in relation to other investment instruments in the capital market, as well as for other property market segments, because of the relatively low risk level.

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[4] Definition of 'below division' not only includes income factor, but also time and the way the property is used as an investment subject.

[5] Investment funds are financial broking institutions acting on the capital market as institutions of collective money investment by investors, per. collective work. Ed. Pyka I., Rynek pieniężny i kapitałowy, Wydawnictwo AE w Katowicach, Katowice 2003, p. 141

Table 1 Classification of real estate investment from an object perspective

Investment in real estate				
Indirect		Direct		
Company owning a real estate	Specialised real estate investment funds	Housing estates: - detached houses - terraced houses - blocks of flats	Commercial estates: - office - service - industrial - hotels - warehouses - sport and recreational facilities	Land

Source: own research

Due to their specific physical and economic characteristics, resources being part of the enterprise's assets may be essential elements taken into consideration during strategic restructuring decisions. The properties may remain vital determining factors to repair and development restructuring success.

The following enterprise strategies concerning owned properties should be distinguished:

1) Conservative – Conducted as part of optimisation of investment costs considering the current form of property usage. Operational activities in this strategy remain as renovation and modernisation costs in order to maintain property resources in unchanged states (not worsening).
2) Offensive - The operational activities are still cost-free expenditures for newly developing objects, own investments increasing fixed asset values.

Fundamental factors indicating property specifications and the property market include:

- Property unchangibility (not-moving) in terms of location,
- Property value resulting from location,
- Considerable capital absorbency,
- A lack of sufficient, commonly available information on property and transactions made on the market,
- Short term stability; supply price flexibility,
- Low supply price flexibility,
- Dependence of the property's value on its intended (or future) functions.

The aim of analyzing the profitability of real estate investment is to identify the situation in which the market level of rent will balance incurred capital expenses in terms of the purchase price or expenses on the realization of the investment. During decision making process regarding real estate investment some characteristics of the process are confronted with general business rules.

Literature research (Kucharska-Stasiakb1999, p. 45) have proven that the main aspects which influence investment decisions are as follows:

- purchase price of real estate,
- increase in market value of the real estate,
- maintenance costs,
- real gross income,

- interest rate applied to a credit,
- credit repayment period,
- ratio between credit and investment value,
- tax allowance,
- tax rate,
- forecasted time of owning an estate
- desired return on investment.

Determinants of profitability of investing in real estate

A very important, one of basic factors that determine the attractiveness of real estate investment and influence investment value is the location, so a geographical location factor may be one of the main determiners of making investment decisions. Location aspect is understood in a broader way by M. Bryx i R. Matkowski (Bryx, Matkowski 2001, p. 81) who indicate that location covers both physical location of an estate as well as its place in the socio-economic environment (economic location).

The economic location is comprehended by the authors as accessibility to social and technical infrastructure as well as an opportunity to use synergy effect resulting from the activities of nearby business entities. Good location translates into prospective high income and increasing value of real estates, while bad one means high likelihood of a loss (Bryx, Matkowski 2001, p. 81). A decision concerning location is influenced particularly by such factors as: infrastructure, transport access, market absorption rate, distribution channels, qualified workforce, well-developed industry and promotion. (Belniak, Najbar 2003, p. 232)

The first group of criteria of real estate investment valuation included within frames of the presented methods constitutes traditional, static measurements of efficiency of investment in real estates.[6] Some of the fundamental traditional measurements are as follows:

1. capitalisation rate – understood as the ratio between net operating income and market value of the real estate[7]
2. return on investment – which reflects any achieved or prospective income from the investment versus the expenses on the investment.

Among traditional measures we can also distinguish other methods to assess the effectiveness of investment in estates which are presented below:

1. multiplier of net income – understood as the ratio between overall capital investment and net operating income from the estate,
2. minimum debt-service coverage ratio – the ratio between operating net income and debt-service coverage expenses (capital instalment and interest),

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[6] In order to perform assessment of real estate investment effectiveness it is crucial to determine net operational income and cash flow. Net operational income and cash flow are defined based on the below algorithm:
Potential gross income
– Loss resulting from uninhabited flats and outstanding rental fees
= Real gross income
– Operational expenses
= Net operating income
– debt-service coverage expenses (capital installment + interest)
= cash flow before tax
– income tax
= cash flow after tax

[7] capitalisation rate indicates the investors expectations related to profitability of capital engaged in the investment. The received or intended to be received amount of capitalisation rate provides the answer for a question what return may be expected from each unit of capital spent on the real estate.

3. operational expenses ratio – the ratio between operational expenses generated by the estate and real gross income,
4. return on equity – understood as the ratio between net operating income and market value of the real estate,
5. profitability measure – the ratio between annual net expenses and market value of the real estate.

Detail level of profitability analysis of investing in real estates as well as selection of variants and methods of efficiency calculus method depend on above all the investment scale and level of recognizing market situation and parameters. Mączyńska says (Mączyńska 2001, p. 35) that the most detailed form of analysis preceding any investment decisions is due diligence.

Due diligence of real estates covers in particular all micro and macroeconomic aspects, financial (income and expenses related to owning and managing estates), legal, tax, technical, organisational, purpose of the estate, psychological and informational. All above factors considered in terms of analysing investment in real estates include economic characteristics of the real estate. Economic characteristics of the real estate cover the properties of the estate that impact upon the level of net operating income. They encompass such factors as maintenance costs, quality of management, selection of tenants, rent discounts, rent terms and conditions, agreement expiration dates and possibility to prolong agreements. (Wycena nieruchomości 2000, p. 14)

It can be concluded that the most important determinants of profitability of investing in estates are as follows:

- the value of purchased estate,
- income from the estate,
- operating costs related to the estate,
- the time of entering and retreating from the investment,
- time of owning the estate,
- costs of capital engaged to finance the estate,
- legal regulations.

The above factors should be treated as basic determinants of profitability of investing in estates. In addition, in terms of financial analysis of the investment and assessment of related risk, we should emphasize financial capacity as regards needs and debt as well as sources and ways of financing. Each investment made in market conditions should be regarded in terms of conditions for acquiring the sources to finance the investment. It requires making a choice with respect to type, structure and sources to finance the investment project. As it was already mentioned, the decisions on capital structure should take into account the influence of capital structure on the weighted average cost of capital that defines the necessary return on investment which the investment project must achieve in order to be accepted and approved by the investor.

The first stage of the analysis of factors determining the profitability of investing in estates is the analysis of the level, dynamics and structure of values of purchased estate, potential income from the estate in the researched period as well as operating expenses incurred by the owners of the estate in relation with the maintenance costs.

A value indispensable to determine the rate of return on investment in estates is the sale price on the primary market.[8]

Another determinant of investment profitability is the rental rate constituting income for estate owner. However, the objective of operating costs analysis, i.e. expenses for

[8] Sale prices of the estate are treated as investment expenses incurred in order to obtain income from the investment object.

maintaining the estate when it is owned, is to examine the levels of particular types of these expenses and changes occurring in the relation between particular types of expenses and rates of return on investment. When analyzing the maintenance expenses the following items should be considered:

1. costs of utilities in common areas,
2. cleaning costs,
3. maintenance expenses as well as upkeeping architectural details and plants,
4. security and supervision costs,
5. management (manager's) costs,
6. ongoing repairs and maintenance costs,
7. estate insurance costs,
8. estate taxes,
9. costs related to payments on repair and renovation reserve.

So far, I have presented the benefits from investing in real estates (expressed as profitable rate of return) achieved by investors who are estate owners, as gaining benefits due to using their ability to create steady consistent income (in certain periods of time on conditions agreed with tenants). Apart of benefits related to creating ongoing income to investors, an investor who is an owner of the estate, can gain profits from the real estate investment resulting from appreciation of the value of owned estates. Therefore, joint income and capital effects create together a full picture of profitability of investing in real estates. The rate of the above benefits can be expressed as follows:

$$Rc = R + Rk$$

where:
Rc – is the entire rate of return
R – is the profit rate of return
Rk – is the capital rate of return

Where capital rate of return in case of investment in estates should be understood as a change in the value of capital engaged in the estate treated as a change in the value of estate being the transaction object, which occurred in a certain period of time in relation to the value of real estate at the time when the investment in the estate was made.

Therefore, cash flow generated by the investor as a result of finalising the investment is composed of two elements. The first one is the price (value) of the estate at the time of the sale and the other is the price of the estate which the investor had to pay at the time of purchasing the estate. In such a situation the capital rate of return in the time when the estate was owned can be described with the following formula:

$$Rk = (Wn_{t} – Wn_{t-1}) / Wn_{t-1}$$

where:
Wn_{t} – is the value of the estate at the time of the sale
Wn_{t-1} – is the value of the estate at the time of the purchase

The formula Wnt – Wnt-1 can be defined as a capital gain of an investor putting funds in real estates. The following assumption indicates that in the case that the value of estate at the end of investment, i.e. at the time of sale of estate is higher than in the initial period of investment, i.e. at the time of purchase, the overall rate of return on investment will be positive.

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