

The imperfect real estate market – functioning and development

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Abstract: The real estate market is less formalized than many other markets. While the market seems to function relatively efficient, it is characterized by a large number of imperfections, while the specific features of real estate increase the transaction costs of exchange. In this article, the most important characteristics of the imperfect real estate market are discussed in the context of its functioning in Poland.

Keywords: real estate market, imperfect market, Poland

1. Introduction

The real estate (or immovable) market plays an important role in the economy (Bryx, 2006: 40-42). Although the market is rather informally organized (there are no institutions organizing the exchange) (Kucharska-Stasiak, 2006: 40), the market facilitates real estate trade and allows for reliable analysis of transactions. A specificity of the real estate market is that one of the most important attributes of real estate is the permanent location in a certain area. This characteristic implies a range of other specific characteristics of the real estate market. This market differs significantly from other good markets, as it is less organized, less transparent and more difficult to analyze and research. Its functioning and development has to be researched in the context of its imperfect character.

The aim of this article is to present the most important characteristics of the imperfect real estate market, and assess their influence on its functioning. Economic aspects of problems in the

real estate market are discussed in the Polish context. The specificities of the real estate market in the context of its characteristics are presented. This allows for defining the notion of a real estate market, and the identification of its specific features. These specific features of the market as well as specific features of real estate itself hamper the efficiency of the market mechanism. Identification of the most important attributes of the imperfect real estate market allows for elaborating its functioning in Poland.

2. The importance and specificity of the real estate market

In order to define the „real estate market”, it is first necessary to discuss the term „real estate” itself. The definition of real estate in Poland is determined by the Civil Code (*Kodeks Cywilny*) and other legal regulations. Article 46 of the Civil Code states that real estate is “the part of the surface of the earth being a separate object of ownership (land) as well as the buildings permanently related to the land or parts of the buildings, when by terms of regulations they are considered an object of ownership separate from land (Kodeks cywilny Dz.U. z 1964 r., nr 16 poz. 93 z późn. zm.).

As a consequence buildings, or their parts, are only considered to be real estate when by terms of regulations they are considered to be an object of separate ownership. In any other case they are elements of the real estate.

Article 46 § 1 of the Civil Code distinguished three types of real estate:

1. land property (nieruchomość gruntowa),
2. buildings (nieruchomość budynkowa),
3. housing / premises (nieruchomość lokalowa).

According to the Civil Code, land is, from the point of view of ownership, a separate part of the surface of the earth. This ownership concerns the land and the elements belonging to the land such as buildings and integral parts of the land (in the form of trees and plants from the moment of planting or sowing (art. 48 of the Civil Code) as well as rights related to the ownership (art. 50 of the Civil Code).

Separation of buildings appears by terms of regulations of the Civil Code as well as particular regulations. According to art. 235 of the Civil Code, “buildings and other installations

constructed on land belonging to the state treasure or land belonging to a unit of territorial self-government or their subsidiaries by the hereditary user are his property. This also concerns buildings and other installations purchases by the hereditary user in accordance with the appropriate regulations regarding the conclusion of the contract on the dedication of land for perpetual usufruct. The separation of the building from the land also occurs in the case of the dedication of land for perpetual usufruct, as this occurs at the same time as the sale of the buildings being located on the land. A building as a real estate can be considered a legal fiction, as the land and the building belong together.

In accordance with art. 2 par. 1 and 3 of the Law from 24 June 1994 on ownership of premises, housing as a real estate. Housing includes an independent residential premise as well as an independent premise used for non-housing purposes (e.g., offices) under the condition of separated ownership. The premise must be independent in an architectonic or functional sense. An independent premise for housing purposes is separated by permanent walls within a building or house, which together with auxiliary spaces is designed for permanent residence of people. The separate components of residential property, i.e., associated facilities, include the storage room, the attic, the cellar and the garage, even if they are not located directly on the premises. Rights associated with the separate property of the premises also involve the ownership of the common parts of the building as well as the shared ownership or usufruct of land property. Separate ownership of the premises arises at the moment the notarial deed is signed and land registration for this property is established in the district court. In summary, the concept of real estate should be understood as the land with all its component parts connected permanently to the ground. Only in special cases, a separate building or premises in apartment building can be considered as a separate property.

In order to understand the essence of real estate, it is necessary to identify their characteristics, in particular physical and economic characteristics. Characteristics of real estate, their manifestation and consequences are presented in Table 1. The particular characteristics of real estate determine its specificity and distinguishes it from other economic goods. Real estate as a specific good requires specific market arrangements. The real estate market can be defined as (Kucharska-Stasiak, 2006:40) economic activity and interaction between people being involved in the buying, selling, exchange, use and development of real estate as well as a range of

mechanisms allowing the buyer and seller to come together in order to establish the price at which the change of ownership takes place and to transfer the ownership.

Table 1. Characteristics of real estate, their manifestation and consequences

Characteristics of the real estate	Manifestation of the characteristic	Examples of consequences of the characteristics
Physical		
Complexity	multiplicity of components (land, buildings, constructions)	problems with the assessment of the market value due to the complexity and heterogeneity of elements of the real estate
Immovability	lack of possibility of movement of most of the components	possibility for taxing real estate, real estate as a safeguard for credits, local character of real estate markets, changes in the environment influence the value of the real estate
Permanence	indestructability of land, long-life of buildings and constructions	real estate as a stable capital investment, possibility for the existence of different legal types of ownership and use and management rights in the same real estate, possibility of separating use rights from ownership rights
Heterogeneity	no real estate is identical to another	difficulties with comparison of real estate causes problems with establishing the price
Economic indivisibility	impossibility of separating land from buildings, indivisibility of the volume / capacity of the building	different use of real estate (reconstruction, renting, sale of the whole or parts of the real estate)
Scarcity	in general, demand exceeding the available amount of real estate	fluctuation of the value of real estate, necessity of the modernization of real estate objects in order to satisfy demand
Localization	physical location and economic situation	the opportunities for using the real estate and change if its functions depends of the location, accessibility and environment
Interdependency	functions of the area and the realization of these functions influence the value of real estate, while the function of one real estate may influence the value of other real estates	the individual characteristics of a real estate may be of little importance due to the significance of the influence of the environment
Capital intensity	high investment outlay for the purchase of land and construction of the real estate	necessity of using external sources of financing in the form of credit during the realization of an investment project, long economic durability of the real estate and long period of return of the invested capital
Low liquidity	uncertainty and difficulties in the sales of the real estate	difficulties with quick recovery of invested capital

Source: author's own elaboration based on Kucharska-Stasiak (2004)..

A similar definition is given by Bryx (2000: 12), emphasizing that the market is “a process of exchange, where the demand of the buyers, supported by their financial means, are satisfied by the sellers. In this process both parties agree on the type of good (regarding quality and quantity), the price, the time and place of delivery of the good. From the point of view of one specific segment – the real estate market, the localization of the good is exactly defined.” Thus, the real estate market can be defined as the entirety of conditions under which the transfer of rights on the real estate takes place, as well as the entirety of conditions under which contracts defining the mutual rights and duties regarding the possession of the real estate are concluded

The definitions of the real estate market discussed shown that this market is internally inconsistent. This market can be divided into (Kucharska-Stasiak, 2006: 55):

- market investments, which involve the transfer of property rights (ownership, alienation, management rights),
- the rental market, where contracts are concluded, defining the mutual rights and obligations connected with the reign of property.

The real estate market is characterized by general features that are present in each market and specific characteristics that result from the nature of real estate. The general characteristics of the real estate market include:

- voluntary turnover,
- equivalence of the market,
- lack of dominance of one participant (monopoly).

The specific characteristics of the real estate market are features derived from the characteristics of the property and the distinguishing features of this market, including (Kucharska-Stasiak, 2004: s. 37-44):

- The local character of the real estate market, due to the uniqueness of the property itself. Competition in this market is a strongly local, covering the often only one city, or even specific neighborhoods. The potential buyer must personally evaluate the property he / she is interested in, in order to compare to other properties. This feature is far less important in the case of commercial and industrial properties, where the market often covers a wider area.
- Non-uniformity of the real estate market. A wide range of sub-markets can be distinguished, such as residential and commercial markets, rental and investment markets.

Due to the local separation of markets and the heterogeneity of the real estate, large price differences may exist between seemingly similar goods, while good substitutes are often not available. Transactions regarding the same object do not take place regularly, and there exist a wide range of determinants influencing the market price while the market lacks transparency, creating the need for serious analysis.

- Low price elasticity of demand and supply. The supply of real estate is fixed in the short-run. The source of the low price elasticity of demand is the lack of good substitutes (heterogeneous goods), while the market mechanism tends to function more slowly compared to other markets due to time lags (turnover of houses is low, people tend to live in one place for a relatively long time).
- Requirement of professional services. The real estate market is serviced by numerous entities, where often licenses and permissions are required. The volatility on the market makes continuous improvement of professional qualifications necessary.
- Low levels of efficiency, leading to a weak relationship between successive changes in the market and the result of valuation measures. Investors in the market face high risks as it is not possible to develop a single, efficient investment strategy;
- Imperfectness of the market, which is discussed in the next section.

3. Characteristics of the imperfect real estate market

The imperfectness of the real estate market is determined by many factors. The most important factors are (Kucharska-Stasiak, 2004: 37-44):

- stability of the real estate,
- sensitivity of the value of the property to changes in its environment, positively or negatively affecting the value of the property,
- the existence of monopolistic speculation practices,
- large financial outlays are needed creating a barrier to enter the market,
- irrational behavior of market participants (decisions of buyers and sellers are not only based on the price but also on other factors such as fashion, the impression of the neighborhood, tradition, advertising and place of residence of the family,
- asymmetric and incomplete information, leading to lack of transparency where in

- particular the buyer often possesses less information,
- diversity of real estate, leading to high costs of obtaining information for the buyer when comparing different offers,
 - fixed supply in the short-run, leading to quick changes in price when the income of potential buyers change,
 - influence of the actual use of the real estate on its value (the value of a tenement house, used for residential purposes, is lower than the value of the same building used for other purposes, such as services),
 - different methods of financing real estate transactions (own savings, mortgage, emission of shares or bonds),
 - instable government intervention.

The local character of the real estate market has as a consequence that it is significantly different from other markets. The real estate cannot be transferred to markets with more favourable prices, while the real estates are, as mentioned, rather heterogeneous goods. As a consequence, prices do not change radically. This does not mean that there are no speculative investments from international companies. The real estate market can be divided into a wide variety of sub-markets, where, as mentioned before, different rights on the real estate are transferred (use rights (rent), alienation rights, management rights).

As mentioned, the supply of real estate is fixed, or at most very inelastic, in the short run. First of all, the factor of production land is limited. Furthermore, the amount of land which is assigned for construction purposes is fixed in the short run. The construction of new objects is time consuming. In the context of the mentioned specificity and differentiation of markets, increase in supply may lead to small shocks in particular markets when the demand for the objects was overestimated. An example may be the excessive increase in office space.

Demand for real estate is determined by access to funding, income and the needs of the potential buyers. As the size of households changes slowly, also the demand changes slowly. However, for example the moment the income of households increases quickly due to strong economic growths, the increased demand for housing may lead to increased house and rent prices due to the fixed supply. The increase in prices makes investment in new real estate attractive. However, the time delays regarding the increase in supply creates uncertainty, while long term

investments reduce the financial liquidity of an investor (difficult to sell the project during the construction phase) (Brzeski, 1994: 22-26).

The sometimes difficult to understand, difficult to predict, but necessary public intervention is another important determinant of market imperfection. Intervention takes place in many aspects of the real estate market. While regulation of the market by way of licenses for intermediaries and the creation of security of property rights via notary and land register services support market transparency, other activities may lead to disturbances. While a change in spatial development plans may be needed for urban development, it leads to changes in prices. An unpredicted change in the location of ne new highway may lead to unexpected reduction or increase in the value of real estate, depending on the location. Uncertain government policy regarding spatial development plans creates uncertainty of the real estate market. Regulation regarding emption rights or the protection of tenants also changes the value of a real estate. Houses with protected tenants may be more difficult to sell, in particular when rents are regulated. Often, the influence of government intervention has a direct character, as in the case when the aim of increasing supply or influencing the real demand in the housing market by supporting citizens with insufficient financial resources. An example is the program of the Polish government “rodzina na swoim” (family at home), functioning between 2007 and 2012, supporting young people with cheap mortgages. In this period more than 182,000 households obtained preferential credits, exceeding the amount of 33 billion Polish złoty (about 8 billion euro). The program dominated the sales of houses and may have saved many housing developers and investors (<http://www.bgk.com.pl/program-rodzina-na-swoim>).

High barriers to entry cause a market failure which is has mixed effects. On the one hand, there is the mentioned problem of large financial outlays needed. A high share of equity and little use of credit leverage may significantly reduce demand. However, on the other hand, equity reduces the probability of bad credits (see Admati and Hellwig, 2013). When 100% of the value of a house is financed, people without savings may enter the market. When financing, for example, 110% of the value, the buyer may spend money on renovation, furniture, etc., which on a macro-level may lead to an increase in aggregate demand, in turn supporting economic growth. Easy access to credits, under conditions of fixed supply, may drive house prices up. At such a moment, paying back of mortgages is unlikely to become a big problem. However, house prices may be artificially inflated, and the moment house prices decline there the market value may

quickly decline below the value of the mortgage. While exit from the market is difficult, in Polish circumstances the house owner may still have a debt when the bank sells the house in case of failure to pay back the mortgage. Equity, say 20% of the value of the house, creates more stability, as when house prices decline by, say, 10%, the equity level is still about 11%.

Maybe one of the most important failures in the real estate markets is related to the lack of market transparency. The costs of measurement, i.e., establishing the exact features and values of a property are very high (see Furubotn and Richter, 1997). While a building possesses many different features which are rather known by the owner through experience, it may also be difficult to find out the exact legal state (a land register and well-educated intermediaries may reduce these costs) and to assess all the characteristics of the environment (state of the local environment, activities of neighbours, access to different services, etc.). As it is almost impossible to obtain complete information, buying decisions are made under uncertainty, which may lead to mistakes and may disrupt and frustrate investment decisions. Furthermore, many transactions in the real estate market are private, and the real price and contractual conditions may be kept secret by the transacting partners. In particular the informal part of transactions may remain confidential, which may create large information problems. The problem becomes larger the moment the transacting partners, who are obliged to enter the sales price of the property in the notarial deed, reduce the official value in order to reduce the amount of tax paid. The money which is paid off the books, when used for further real estate transactions, increase the problem of establishing the real value of property.

As a consequence of market imperfections, it is difficult to achieve a market equilibrium as well as relatively stable prices. Prices do not react quickly to short-term changes in the market due to the mentioned inelasticity at the demand and supply side. This problem is strengthened when part of the transactions are kept off the books, which is strongly related to the mentioned difficulties in assessing the value of a real estate. Owners tend to wait and see instead of reducing the sales or rent price, and it may be that in particular reduction in prices are slower than an increase, as the owner appreciates a gain more than a loss (Kucharska-Stasiak, 2006: 50).

4. Determinants of the function of the real estate market in Poland

As discussed above, while the functioning and development of the real estate market is conditioned by similar factors as in other markets, it is the specificity of the characteristics of the real estate that cause specific problems. Following Bryx (2006: 74), the Polish real estate market can be described as inflexible and imperfect. Although the reasons are similar for all real estate markets in the world, the market has been developing quickly only for two decades in the process of transformation from a socialist to a market-oriented economy. Based on my many years of experience in the Polish real estate market, I would argue that buyers, sellers and intermediaries may react differently than in more developed markets due to lack of knowledge and experience, which may have unexpected influences on supply and demand. In particular access to and verifiability of information seems to be a problem. This is not only a result of the imperfect functioning of public administration and ambiguous government policy and legal regulation, but also due to the lack of educated experts as well as the lack of developed routines and standard mechanisms. The lack of proper regulation (e.g., clients of banks may still have debts when the bank has sold their house in case of inability to pay back the mortgage) and excessive informational problems increase the risk for potential buyers. In the Polish case, where regulations are often ambiguous and change regularly, it will be difficult to develop standards and routines reducing information, negotiation, monitoring and enforcement problems as players on the markets need to get acquainted to a new situation each time (compare Furuboth and Richter, 1997).

The following factors tend to support the development of the real estate market and eliminate existing barriers (Pawlikowska-Piechotka, 1996: 9-10):

- free flow of investment capital (through favorable legislation and favorable financial provisions to facilitate access to capital, efficient servicing of investment),
 - an efficient construction industry (through reforms in industry, provision of trade and services related to construction, training of staff, streamlining procurement procedures, supply information regarding the industry),
 - increase in the wealth of society as well as streamlining operations and aspirations to reduce costs of real estate leading to increased accessibility for a broader group of people.
- However, the borrowing capacity and levels of savings are still low, hampering the

development of the real estate market.

The functioning and development of the real estate market requires the existence of certain resources in the form of buildings, structures and land. As was discussed, the supply is fixed or very inelastic in the short run, and is determined by the structure of existing resources which changes through the creation and destruction of these resources. While the supply of land to be used for construction can be increased, this reduces the land available for agriculture and forestry. This process proceeds quickly in Poland, which in the context of poor or a lack of spatial planning creates quick suburbanization and problems with developing proper infrastructure, while artificially influencing prices of agricultural lands and threatening the environmental property (Cymerman et al., 2001: 23).

Real estate markets are highly conditioned by the socio-economic environment. The challenges in the real estate market are closely connected with the challenges faced by the economic as well as the socio-political system (Breski, 1994). The following factors hamper or support the business climate in the markets: demographic developments, wealth of citizens and enterprises, the legal system, economic policy, etc. Construction is an important determinant of economic growth, causing multiplier effects leading to additional benefits. However, as could be observed during the last years, when investments in infrastructure and construction finished, a local downturn in economic activity could be observed.

The credit market is slowly developing, but a problem remains relatively high interest rates which was a significant problem at the beginning of the 1990s (see Breski, 1996). The markets for financial instruments remains underdeveloped. One of the main issues in developing finance for real estate investment may be education. Some years ago mortgages in foreign currency, in particular Swiss francs, were very popular (TVN24, 2012). Banks did not really inform clients about exchange rate risks, while emphasizing the lower interest rate. The moment customers themselves do not appreciate the possibility of large changes in the value of foreign currency in the Polish case, they run a quite large risk. Even in the case of 20% equity of the value of the house, a 25% appreciation of the foreign currency may wipe out this safety buffer. That such a scenario is not unlikely shows the volatility of the Swiss Franc, which was sold for PLN 2.01 in July 2008, PLN 2.75 in January 2010 and PLN 3.61 in January 2011 (NBP, 2012).

The withdrawal from credits in foreign currencies is one step towards creating a stable real estate market. However, the existing market imperfections are likely to remain large for many years, as government policy is not stable, and learning processes take place slowly.

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Niedoskonały rynek nieruchomości – rozwój i funkcjonowanie

Streszczenie

Rynek nieruchomości jest w mniejszym stopniu sformalizowany aniżeli wiele innych rynków. Wprawdzie rynek ten wydaje się działać względnie efektywnie, jednak cechują go liczne niedoskonałości, a specyficzne właściwości nieruchomości podnoszą koszty transakcyjne zawierania umów. W niniejszym artykule omówiono większość istotnych cech niedoskonałości rynku nieruchomości w kontekście jego funkcjonowania w Polsce.

Słowa kluczowe: rynek nieruchomości, niedoskonały rynek, Polska