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The development of the real estate market in the context of sustainability

Key words: green buildings, deregulation of real estate professionals, financial market development direction

S u m m a r y: The author presents contemporary issues and current trends in the property market, including touching timely and important topic as sustainable development and applies it to the real estate market, especially the construction sector. The first part is a description of regulatory changes in the real estate and financial markets. You can find information on the deregulation of real estate professionals and new professions which have recently been in the field of real estate brokerage. In the second part, the author goes back to the definition of sustainable development, the beginnings of the formation of the concept, to be able to provide a description of the implementation of the concept of sustainable development in the real estate market, especially in the construction market. The last part is devoted to ecological construction, the so called passive houses. The author presents the examples of the construction and operation of passive buildings in Poland and the opinions of residents and builders. The article ends with the statement that rising energy costs in the future and the requirements of the European Union will be important factors in determining the choice of modern house buildings technology. Eco-building is now eco-efficient and economically justified.

1. Introduction

The real estate market in the first half of 2013 can be summed up as a fall in real estate prices, rising credit costs and deregulation of real estate professionals. The real estate market in Poland is a dynamically changing market, interesting in terms of research and science. This is a market, which provides opportunities for comprehensive development and exciting career prospects. A visible trend in the Polish real estate

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market is to implement the concept of sustainable development, so called *ecological trend*. Changing regulations, both in the operation of the real estate market and the availability of credit, will significantly influence the direction of development of the market. The aim of the research described in the article is the identification, analysis and evaluation of contemporary problems of the real estate and finance market, as well as the scheme of improvement factors of property management in the context of sustainability. According to acquired thesis, the sustainable development of the real estate market is a determinant of efficiency improvement of economic, social and environmental performance of organizations operating in the real estate market.

2. Trends in the real estate market and the financial market in Poland

2.1. New professions of real estate market and deregulation

The real estate market in Poland develops dynamically. There is growing competition between intermediaries in real estate market, growing customer demands. On 19th April 2013, the Polish government adopted a draft of the law on changing laws governing the exercise of certain professions, including real estate professionals. The parliament decided to completely open competition of real estate agent and property manager. An amendment adopted in the field of professional appraiser increased the scope of deregulation, i.e. it involves lowering the requirement of higher education (from master's degree to higher), introduces the possibility of exemption from professional examination conferring authority on the basis of the powers of diploma. The adopted amendment introduces an obligation of fall practice while studying in a place of professional practice, provided that the practice's programme is based on an agreement between the university and the organization of professional appraisers, and also exempts persons who have documented two years experience in a position involving the valuation of real estate (1). It remains the obligation to perform professional practice within at least six months. It will continue to run a central register of experts by the minister of construction. On 1st January 2014, information about disciplinary sanctions against appraisers were removed from the register provided they have already been blurred. The new regulations in the field of real estate professionals apply from 1st January 2014.

In terms of real estate professionals the Parliament adopted the amendments of the Senate providing for the maintenance of the obligation to take out liability insurance. The real estate agent and real estate manager can perform actions on the basis of an agreement in writing (2). Accordingly, the decision of the Parliament and signed by the President eliminate the articles of the law on real estate, which previously governed the legal nature of the profession of manager and real estate agent. However, the fact of liquidation provisions does not mean that the real estate market competi-

tion will no longer exist. On the contrary, you can see a lot of interest specializations related to real estate management at universities. The associations of brokers and property managers are looking for new solutions. These organizations plan internal training and issuing certificates that will stand out educated people from a multitude of agents and managers who will appear on the market. Currently, the number of licensed property managers is (according to the Central Registry of the Ministry of Infrastructure and Development) 25,952 persons (3) and 20,599 real estate agents (4).

For some time distribution of the real estate market into smaller segments can be observed. A good example is the company Home Broker, which develops new professions, such as primary market trader, specialist in land, real estate advisor or specialist holiday letting. Home Broker is a real estate advisory firm, providing services to real estate agents (5). Trader primary market is an expert on housing development, working together with developers and real estate advisors, i.e. negotiates special housing prices, and gaining information about the demand for properties with specific parameters. Combined information in such a way allows conducting transactions of purchase/ sale of real estate in a short time. A person who wants to become a trader in primary market should have negotiating skills. Such a person should examine the local primary market, creating confidence, be convincing and have necessary legal knowledge, economic and in terms of the real estate market.

In recent years, increasing the amount of land transactions, so grows the need for advisors specializing in this segment of the market. Home Broker created profession—land's specialist—partner in the investment Earth. Relevant investments in land can generate several times higher rate of return than previously reported annual increases in agricultural land. Work of land's specialist is associated with the work 'in the field'. Here is needed indispensable knowledge of the local market, the ability to assess the prospects of rising prices, the predictability, the ability to reach out to people who have suitable land and want to sell it. Moreover, land's specialist should have orientation in the local development plan and the plans for the development of local authorities.

Another interesting specialization in real estate is brokerage in sales of holiday property. In this segment, profits depend largely on the potential rent, occupancy, length of the season or the attractiveness of the area. Specialists from Home Broker company estimate that the return on such investments may be as high as 10% per year. Necessary in this profession is knowledge of finance and law.

A person with experience in real estate, having intuition, skills, foresight, risk assessment, forecasting can find his/ her place in commercial premises. Home Broker company defined this position as adviser in the service sector or profession combining analytics and accounting in one. Very important is knowledge about local services market and knowledge of trends and factors influencing prices.

In Home Broker company, experienced and meritorious advisors can be promoted to a senior real estate advisor (6). Also on the local (Tarnów) real estate market is a noticeable trend in which real estate brokers specialize in a particular segment of

the market. The agents of KNC Global Real Estate are good example—they specialize in indebted transactions of real estate market.

The well-known profession of agent in real estate allows everyone to choose their own career path and grind specialized knowledge and skills in a narrow field, allowing to be professional. The abolition of formal requirements and belief in the 'invisible hand' of the market of real estate may carry certain risks, but that will pick up managers and brokers prepared for professional issues. Many real estate professionals, including well-known professor Ewa Kucharska-Stasiak (Head of Department of Investment and Real Estate, University of Łódź), warn against the belief in the reliability and validity of the deregulation of real estate profession. According to Kucharska-Stasiak, there are no reliable markets, which would not need instruments to support their operation and also the real estate market is not a perfectly functioning one. The question arises, whether a person without education will know how to determine the right to the property, to evaluate the economic merits of investing in real estate, how he/ she will be able to professionally advise property owners as a manager (7).

2.2. The current situation and direction of changes in the financial market in Poland

According to analysts from Open Finance, the biggest in Poland and only listed on the stock exchange financial advisory firm (8), 2013 was the best time to purchase a home for several reasons. Analysts pointed to the low installments of housing loans. With the lower credit cost, creditworthiness is higher than last year, which means that the same income can apply for higher credit. Housing prices have fallen to 2006 levels. Analysts argue their opinion, saying that since April 2012 the number of housing starts and permits issued to developers for the construction fell, which can translate into a reduction of the new homes available on the primary market. Under the conditions of continued demand, the decline in the supply of new housing may increase prices. In a situation of falling interest rates, banks will be more willing to increase the profit margins of credit, which is an important component of interest (9). What is more, the Financial Supervision Commission introduced from 1st January 2014 the obligation to hold at least 5% of their own contribution, which can eliminate a certain group of customers applying for credit. In 2015 it will be the 10%, and from 2016—15%. The current observations indicate that 26% of borrowers in the apartment are not even 5% of the amount needed to purchase. When the threshold for savings held will be an increase up to 10% of the dwelling, 35% of customers will still not stand for a loan. According to the analysis of the Open Finance, which works with 20 banks, 12 banks borrowed for 100% or more property prices, one for 95%, three for 90% and four at the rate of 80%. According to the creators of the amendment to Recommendation S, the ratio of loan repayments to income should not exceed more than 40% (10; 11).

3. The concept of sustainable development

The 'sustainable development', according to the Report of the World Commission of Environment and Development, the so called *Brundtland Commission Report*, in 1987, is 'a process aimed at meeting the development aspirations of the present generation in the way the same aspirations are to be met by the next generation' (12, p. 13). This report points to the failure of the current social and economic doctrines production growth and improving the welfare and quality of life of people in the world, which lead to environmental degradation, poverty of mankind and stratification between rich and poor. In contrast, the concept of sustainable development is beyond care for natural resources and environment, including social justice (12, pp. 13–14).

The two most important concepts in the concept of sustainable development are 'limits of growth' and the 'triplebottomline' of sustainable development. *Limits of growth* determine the technological capabilities of societies in the use of natural resources and the ability of the biosphere to absorb the negative effects of human activity. The concept of *triplebottomline* comes down to taking into account all decisions and actions relating to sustainable development of social, economic and ecological at the same time, i.e. the three pillars of sustainable development: society, economy, environment (12, pp. 14–15).

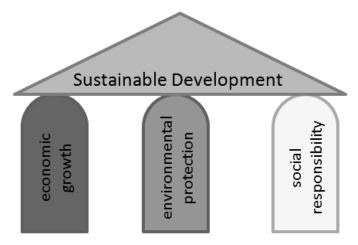


Figure 1. The three pillars of sustainable development

Source: (13).

The vast majority of the definition of regional development is reduced to the problem of 'harmonizing economic growth and the management of economic resources and natural. In this way, a definition created includes Włodzimierz Bojarski (14) and Marion Donhoff (15). Małgorzata Burchard-Dziubińska in her definition indicates

that sustainable development is the development of social, economic and natural systems. Krystyna Dubel defines sustainable development as one that is 'socially desirable, economically viable and environmentally acceptable' (16).

An important element of the concept of sustainable development is the *quality of people's lives*—their raising and maintenance. Quality of life is understood as meeting the needs of modern human life generation, without over-exploitation of nature, so as not to impair the quality of life for subsequent generations. In this spirit, for example, write Franciszek Piontek and Bazyli Poskrobko. Frequently appearing criterion of sustainability is to harmonize the components of socio-economic development of the requirements of the environment/ biodiversity (12, pp. 16–17).

Ecological trend—sustainable development in the real estate market

An important area of implementation of the concept of sustainable development is the construction sector. This sector plays a significant role in the national economy, economic growth in emissions, use of natural resources and energy or production of waste. Basic aspects of the implementation of the concept of sustainable development in relation to the buildings is elimination of problems, among others CO₂ emissions and its reduction, minimization of construction and demolition, the prevention of air pollution inside the building. The research shows that direct energy consumption by the construction sector is about 30% (data not shown in intermediate consumption in industry and transport). The study in Japan indicates the increased energy consumption during operation than the construction of buildings. The highest energy consumption refers to the heating and cooling of buildings, water heating, lighting and use of household electrical appliances.

In common parlance, sustainable buildings are referred to as green buildings. These are buildings that are characterized by minimal consumption of natural resources at all stages of the life cycle of the building, and low negative impact on the environment compared to traditional construction. In his definition, Charles Kibert, defines sustainable buildings as a healthy built environment, responsibly created and managed, taking into account the principles of environmental protection and efficient use of resources (12, p. 70). Examples of energy-efficient construction in housing construction are *passive houses*. Passive buildings are the latest generation of energy-efficient buildings, with the highest thermal comfort and extremely low demand for thermal energy ratio of a maximum of 15 kWh/m², which is less than 1.5 liters of oil, or 1.5 m³ of natural gas for electricity m²/year or 5kWh and heat pumps. Thanks to the use of passive energy, the building itself heats and cools (17).

The studies of commercial real estate market show that users of office space tend to choose sustainable real estate due to lower operating costs, lower energy costs in such buildings or benefit branding. Further, such buildings have a higher value. Eco wear of passive house is smaller than in conventional buildings, so the value is more stable. It is worth to mention the cost of construction of sustainable buildings, which, as follows from the calculations, is higher than traditional buildings. It is assumed that if the buildings generate sustainable benefits for a long period of use of the building, it must be aware of the high investment required in the initial phase of investment. In the case of investments in the housing market, the investor can benefit from financial assistance. In 2013, the National Fund for Environmental Protection and Water Management launched the programme of subsidies for energy-efficient buildings. 'The programme is targeted to individuals building a single-family house or buying a house/apartment from a developer. Funding is a partial principal repayment of the bank loan for the purchase/ construction of the facility. The funds are paid at the time of completion and confirmation of the required standard of energy through the building. The programme budget is 300 million PLN, or the ability to finance about 12 000 houses and apartments in multifamily buildings' (18). The programme is a response to the Directive of the European Parliament and of the Council 2010/31/ EU of 19th May 2010 on the energy performance of buildings, which obliges EU countries to bring the situation to the end of 2020. All newly created objects of the buildings were 'almost zero-energy' (17). According to the ranking Eco-Innovation Scoreboard 2011, Poland occupies the last place in terms of eco-innovation among the 27 countries of the European Union (Croatia was not taken into account), but in the commercial market it is becoming a leader in green building among the Central-Eastern Europe countries last years (12, p. 180). For Polish cities with the largest number of objects undergoing organic certification (LEED, BREEAM) there are Warsaw, Wrocław, Łódź, Poznań, Krakow and the TriCity. Deloitte and Deutsche Bank are an example of tenants interested in leasing in green buildings (19). According to the estimates, in 2012 around 2%—3% of office space in the above-mentioned Polish cities was certified. In Warsaw, participation in the area of environmentally certified buildings in the first quarter of 2012 was 58%, 24% in Łódź, 15% in Katowice and 3% in TriCity. Cracow, although it has the second largest stock of modern office space in Poland, has a market share of certified area of less than negligible. The biggest developers of ecological office in Eastern Europe are Ghelamco, Skanska, Erste ImmorentGroup, GTC and HB Reavis. Warsaw is also mentioned as one of four regional centres (next to Prague, Bucharest and Budapest) with the largest cumulated big projects related to green building. According to a report by Jones Lang Lasalle, Poland will happen in the next few years the leader in the region in the field of green building. In the years 2012–2014 the usable space of 510 000 m² in environmental office buildings will be real, and provided all the planned projects have been completed, in 2015 Warsaw would have a chance to become the main building centre in the region (almost 550 000 m² of usable space). One of the most sustainable buildings in Poland is office complex Rondo 1 in Warsaw (12, pp. 190–194).

In conclusion, sustainable buildings are characterized by higher rents, lower operating costs, higher value, lower risk and higher usability. Higher capital expenditures are offset by direct saving supplies and slower consumption of functional and moral objects (12, p. 143).

The first passive house in Poland, confirmed by certified Passive House Institute in Darmstadt, was a house built in 2006 in Smolec near Wrocław (20). Certified passive houses in Poland are still relatively little. One of the examples is the project of home by companies MultiComfort and Studio Z500, with an area of 119.9 m² in Boruszowice, near Tarnowskie Góry. The building takes part in a five-year research project, during which the parameters are being monitored. The cost of construction of this passive house, prefabricated, timbered was higher by almost 13% than any other building prefabricated offered by MultiComfort. According to the inhabitant of the house, co-owner of MultiComfort, you must learn how to live in such a house. The house does not have drafts, in all areas there is the same temperature (21–23 °C) and silence. The house is very bright and sunny, due to large windows. The problem is, that you need to wash the windows (a 3-metre mop becomes helpful) as well as remember about draining the blinds in the summer to protect against excessive sunlight. Due to the fact that it takes part in research experiment, the house was equipped with more than 100 sensors, whose data goes directly to the central computer research lab at the University of Agriculture in Krakow. The house can be seen on the web at www.buduj-pasywnie.pl. The biggest result of the research will be recording the actual energy consumption of the building. If the test is successful, the basic thesis will be a statement that the traditional Polish wooden house should be like the ones over the centuries, as it harmonizes with the natural environment and friendly people (21).

As another example, you can specify a passive house with an area of 162.5 m² in Słomczyn. The finished house but without installation costs 340,000 PLN gross. The windows and doors of the house are very massive, the door alone weighs 150 kg. This house has not been certified as passive house because the tightness of the walls did not meet the minimum requirements. Residents of the home are of the opinion that the investment will pay for itself quickly and they are very happy with the decision (20, pp. 13–23).

5. Conclusions

Recognizable direction of the change which the current real estate market in Poland chooses is the implementation of the concept of sustainable development, especially in the construction sector. The 'green' construction is now eco-efficient and economically justified.

It can be expected that a large impact on the functioning of the real estate market in the coming years will be the deregulation of professions of real estate and tightening requirements for mortgage loans. By 2014, the rules for granting loans for apartment or house construction changed. They assume, among others, five-percent contribution of their own. In addition, the period of repayment obligation can not exceed 35 years. A big impact on the housing market in Poland will have a government programme 'Apartment for Young'. Experience of the 'Family on Their Own' programme can provide that a new programme will gain popularity.

In Polish conditions, the construction of passive houses (green) raises a lot of doubts, it is more cost-effective than building a house in a traditional way. These factors put off potential investors who do not have easy access to detailed analyzes and so they do not take into account the lower cost of home maintenance in the future. However, rising energy costs in the future and the requirements of the European Union will be an important factor in determining the choice of modern house building technology (10, p. 29).

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Rozwój rynku nieruchomości w kontekście sustainability

Streszczenie: Autorka przedstawia współczesne problemy i bieżące trendy na rynku nieruchomości, dotyka aktualnego i ważnego tematu, jakim jest rozwój zrównoważony, i odnosi go do rynku nieruchomości, zwłaszcza do sektora budowlanego. Pierwsza część zawiera charakterystykę wprowadzonych zmian regulacyjnych na rynku nieruchomości i rynku finansowym, wpływających na kierunek rozwoju obu rynków. Można tu znaleźć informacje na temat deregulacji zawodów rynku nieruchomości oraz nowych zawodów, które wyodrębniły się w ostatnim czasie w zakresie pośrednictwa w obrocie nieruchomościami. W dalszych rozważaniach autorka sięga po definicje zrównoważonego rozwoju, po początki tworzenia się tej koncepcji, aby móc przedstawić opis wdrażania koncepcji zrównoważonego rozwoju na rynku nieruchomości, zwłaszcza na rynku budowlanym. Ostatni rozdział poświęcony jest budownictwu ekologicznemu, tak zwanym domom pasywnym. Zaprezentowane zostały przykłady budowy i eksploatacji domów pasywnych w Polsce, opinie ich mieszkańców i konstruktorów. Artykuł kończy się stwierdzeniem, iż rosnące koszty energii w przyszłości i wymogi Unii Europejskiej będą ważnym czynnikiem decydującym o wyborze nowoczesnej technologii budowy domów. Budownictwo "zielone" jest obecnie efektywne ekologicznie i uzasadnione ekonomicznie.

Słowa kluczowe: budynki ekologiczne, deregulacja zawodów rynku nieruchomości, rynek finansowy, kierunek rozwoju