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PREMISES FOR BUILDNG A LAND BANK BY DEVELOPERS

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Abstract

In a development project, land is the key factor of production. The concepts of its identification, selection and development are fundamental to the pre-investment phase.

The purpose of the article is to present a definition of a land bank and identify the factors which have an impact on creating land banks by developers. If the length of time between the actual acquisition of land and the commencement of construction work is difficult to predict, developers will increase the size of their land banks.

The author assumes that one of the most important premises for developers to accumulate land resources is the land development system which creates land availability.

Keywords: land, land banks, developer, land development system.

JEL Classification: L21.

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1. Introduction

In developers' investments, land is the basic production factor. Its proper identification, selection and development are the key activities in the pre-investment phase. Changes in the real estate market force developers to professionalize their operations by, among others, making a rational use of land resources. The time needed to adapt the land for construction makes it necessary for developers to make decisions about land purchases and land bank creation early enough to ensure the smooth realization of investment undertakings.

The aim of the article is to define the notion of a *land bank* and identify the factors which influence the creation of such banks by developers. The author assumes that one of the most important reasons for developers to own land is the spatial planning system, which determines the availability of land suitable for building development. In order to verify the above research hypothesis, literature on the subject will be analyzed, available studies on land banks reviewed, and the results of empirical research conducted among developers in Poland and abroad presented.

2. The essence of a *land bank*

Creating a land bank consists of purchasing and owning land where building projects will be possible in the future due to the economic development of a particular area. In the available literature on the subject, the term *land bank* refers, first of all, to the activities carried out by local authorities, especially by the municipality. These government bodies, as representatives of the public sector, should possess land reserves for housing development or commercial buildings, which – if properly prepared – would contribute to the social and economic development of the municipality. As research to date shows (MAŁKOWSKA 2011, TOPCZEWSKA 2003), the preparation of land for investment purposes, which involves buying out land from private owners as well as developing and equipping it, plays an

important part in the activities undertaken by local municipality governments to promote local entrepreneurism and attract new investors[1]. Due to the topic of the paper, further discussion will be limited to the problem of creating land banks by developers.

As far as activities undertaken by developers are concerned, creating a land bank will mean purchasing the land long before utilizing it for construction works. Hence, developers buy land for future building projects, thus creating their own supply of property available for construction operations. The ownership of land by developers may be materially diversified both on local real estate markets and in the entire country. What is more, capital blocked in land for an indefinite period of time is connected with specific land property maintenance costs. Creating land banks by developers is a complex issue and needs to be analyzed both from the point of view of an individual developer and from the perspective of external conditioning which influences purchase decisions.

3. Factors influencing developers' ownership of land banks

One may broadly assume that land ownership is a part of the developers' strategy resulting largely from financial results which allow them to invest their financial surplus in land. For many years in Poland, one of the basic incentives for developers to invest profits in land property was the price growth potential, which mainly concerned land located in attractive spots or on the outskirts of dynamically developing cities. Strategy in creating land banks will also depend on the size of the company and, first and foremost, on its financial position. Small companies are not necessarily able to afford to purchase land on a large scale, hence the adopted approach is linked to the risk of the company being left without land property - the basic production factor.

Research conducted in Great Britain in 1986 (WHITE 2006) proved the assumption that most small real estate developers did not own land which was ready to be used for building projects. As a result of this, some of these firms had to make suicidal bids in order to buy land ready to be built up for the sake of continuing their development operations. Another difference between small and big firms was that the small companies used land mainly as a production factor, whereas the big ones reap more benefits, often financial. Many bigger firms found it more profitable to arrange for all the permits and official decisions themselves, rather than to build on land that had already been prepared for construction. In that way, the bigger firms could accidentally or purposefully own more land than they actually needed and the created surplus could be sold to other, usually smaller, companies.

P.White stresses the fact that a big land bank means the frozen investment capital. When land is waiting to be used for future building projects, not only does it not bring any profits, but it generates expenses such as, e.g., property tax or the perpetual usufruct charge.

Another important factor influencing the land bank owned by a company is the economic phase the real estate market is in. The experience of west European countries or the USA, and in recent years also Poland, shows that if the land had been bought before a housing market boom, the costs related to owning a land bank decreased as a result of the fast growth in the market value of the land compared to the costs of the prior purchase. Unfortunately, some developers buy land during an economic upturn, expecting a steady increase in prices and overpaying, which can be the source of a potential threat to the stability of the development sector when the land bank is built at inflated prices. Therefore, the costs involved in creating land banks and the incentive to build them can vary considerably during the economic cycle, depending on price movements in the real estate sector.

The next factors to be considered were those that were objective in nature, i.e., independent of any activities undertaken by developers. This means that we can view the creation of land banks by developers in the context of land availability. The availability of land for investment purposes is vital, especially in regions which are developing fast, which is in turn related to the land policy of the local governments in those areas. The availability of land for construction projects is a prerequisite for investment growth in a given area. Therefore, it is the task of the municipality to first establish effective demand, and then assess the need for land prepared for the planned construction. This need will then have to be compared with the inventory of potentially available land, which includes data relating to (WIERZCHOWSKI 2011):

– the size of areas for future construction use, together with a description of ownership, legal

[1] Here, a good example is the municipality Niepołomice, where over 30 big companies located their investments, including Coca-Cola, MAN, Royal-Canin, Nidec or Oknoplast. The Niepołomice Industrial Zone that was created there covers an area of about 400 hectares.

status, market value of the ground and area, etc.,
- the condition of the technical infrastructure of the land in question, its generic and technical characteristics, as well as requirements related to repairs, renovations, additions or modernization,
- the condition of the social infrastructure of the area in question and requirements regarding its necessary development,
- restrictions or requirements imposed by the spatial policy set by the local municipal government.

When municipality authorities lack a long-term approach to its development, the situation leads to depletion in the reserves of:
- land easily available for construction projects,
- technical infrastructure systems,
- social infrastructure systems,
- city transport systems.

On the other hand, the availability of land suitable for development projects will be conditioned by:
- location-related land property characteristics,
- real estate market prices,
- land owners' behaviors,
- the spatial planning system in a given country.

Assuming that the land is easily available at market prices, and also that the location of land is of no influence, the problem of land availability does not exist. In this case, developers can carry out their development projects, maintaining the continuity of their operations without the need to buy land in advance and without tying up their capital in it. The characteristics of land, such as being in limited or steady supply, make developers cover their basis by purchasing land suitable for potential development. Hence, land purchase is a part of acquiring the factor that will enable a company to act in an economically effective manner according to the natural sequence of events, thus not risking a break in the company's operations during which resources might lay idle.

Given the character and features of the real estate market, developers must start looking for land before it is needed for construction. The first factor of influence here is the lack or scarcity of information about areas that could be used for development purposes. This, in turn, generates costs related to the time-consumed searching for suitable information.

The variety of land for potential development also conditions the owners' willingness or unwillingness to sell. Owners often want to bargain and that requires time. Yet another factor in favor of seeking land for future development projects is the fact that a given plot of land can be available only for a short period of time and not later, e.g., it can be sold to another bidder, the owner may withdraw from the sale or claim that the land is worth more due to the fact that somebody outbid the previous offer. Securing the land necessary for construction in a timely manner is one of the most basic elements that must be met by every developer in order to run a profitable business (EVANS 2004).

Before the construction process even starts, each investor has to take steps to obtain land where they intend to realize their investment. It may be a non-built-up area or one built-up with buildings which will be altered, renovated or added onto. These areas of land are basically improved in the process and referred to as "development property" in literature on the subject. Their future shape and the success of the whole enterprise depend on many factors, including planning conditions for the area under development. The desired situation is such in which the planning conditions are clearly specified, whereas in the case of a lack of such specifications, investors feel that there is an increased investment risk (SIEMIŃSKA 2011). Hence, the spatial planning system and the extent to which planning decisions can be predicted are important elements of encouraging investors to make land reserves.

4. Spatial planning system in selected countries

The higher the degree of limitations and uncertainty, the stronger the need to create land banks. Subject-related literature often refers to local planning systems operating in the United States and England, where the developers' decisions to create land reserves are influenced in different ways. In most American states, there is a zoning system which makes it easy to predict development in a

particular area, thus creating reserves of areas with a specific future development function. As a result, land banks are less necessary than in the British planning system, which does not practice division into zones. The later situation restricts the availability of development land and makes obtaining planning permissions uncertain and limited. In England, the process may drag on because of on-sight visits, completing application forms, or negotiating with planners. It may take eight or nine months assuming that the application is considered favorably by the planning or development management commission. If the application is turned down, the developer can appeal or submit a new application. However, in such a situation the whole process gets considerably longer and its outcome becomes increasingly uncertain. Thus, the restrictive and shaky spatial planning system increases the period between initiating the search for land to the commencement of construction activities, which encourages developers to hold on to land reserves. In the assessment of HILBER and ROBERT-NICOUD (2009), Anglo-Saxon countries have reached the stage where the most valuable and desirable areas are subject to the most stringent planning control and restrictions. They become the source of much conflict as developers want such restrictions and planning control to be abolished, while owners who had already invested in these areas want them to become stricter. Presently, the dominant rule in Great Britain is that the most intensively used areas are subject to the most severe restrictions and regulations.

In view of the above mentioned practices which influence land banking, it can be assumed that the decision regarding development conditions which functions in the Polish system of local planning is a tool which undoubtedly encourages developers to create land banks and can lead to speculative activities concerning land property. Due to the lack of harmonized planning in Poland, preparing investment projects can be highly risky for areas without an up-to-date zoning plan or for which planning permission hasn't been issued. Therefore, the choice of investment locations will result in varied investment process flow, depending on the possible planning status (see Fig.1)

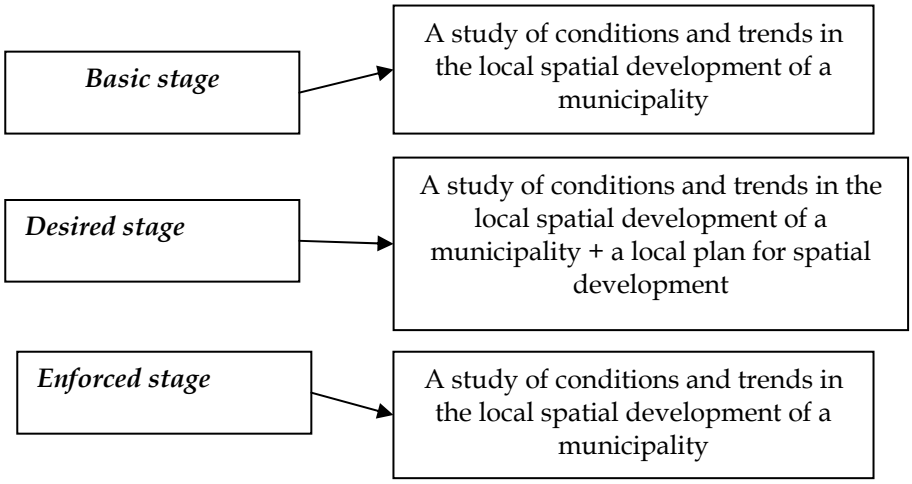


Fig. 1. Possible planning stages in Poland**,** *Source*: own study based on CYMERMAN (2011, p. 100).

Due to the fact that the amount of land fit for development is limited, developers compete with one another for the best locations. This leads to an increase in land prices and constitutes an incentive for developers to buy and create their own reserves while their competitors may find it difficult to find land that would qualify for development. Thus, the scarcity of land for development created by the spatial planning system increases the market potential of its owners.

If the spatial planning system makes the land purchase process uncertain, as in Britain or Poland, firms tend to create land banks and hold on to significant land resources suitable for future development. Such a tendency is much more visible than in the case of planning systems which offer a higher degree of certainty and predictability in decision-making.

Taking into consideration all the above mentioned factors, a company must embark on a search for land long before any actual construction work needs to be done. The fact that land is not always available at a specific market price right when it is required for investments causes developers to

create land banks. The just-in-time method[2] used in other industries does not find application in purchasing land for development projects.

5. Examples of land banks in selected countries

In practice, the level of land resources is used in the assessment of developers' future growth prospects[3]. It is often assumed that the level of natural land resources is similar to the value of apartments sold yearly. It can be said that the more stages an investment project consists of, the bigger the land bank is as a result of the lengthy construction process. Investments completed in two or three stages require considerably smaller land reserves[4].

In order to assess the size of land banks owned by developers it is necessary to compare the volume of the land owned by a company with the number of, e.g., apartments built in a given period. The created indicator shows how many years the area will be sufficient for if the number of apartments built remains consistent. The figures below present the sizes of land banks owned by developers in Great Britain and the USA. The difference between the production potential of the land belonging to developers operating on the British and American markets is significant. In Great Britain, the land owned by some of the biggest developers (fig.2) can be sufficient for anywhere from 6 up to 34 years of apartment production. In the US, however, this period for five of the biggest developers is much lower, ranging from slightly over two years to just under three and a half.

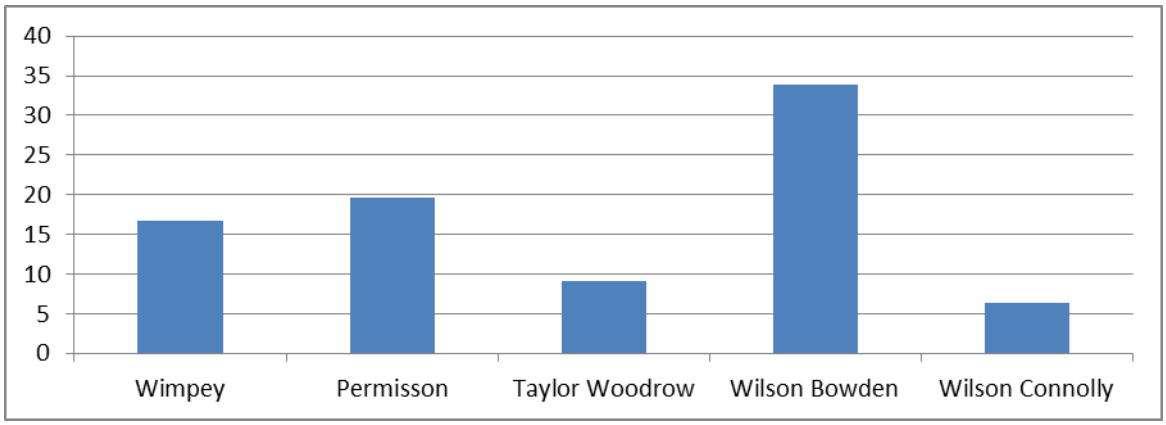


Fig. 2. Approximate land banks for 5 developers in the UK (in production years), *Source*: BARKER (2007).

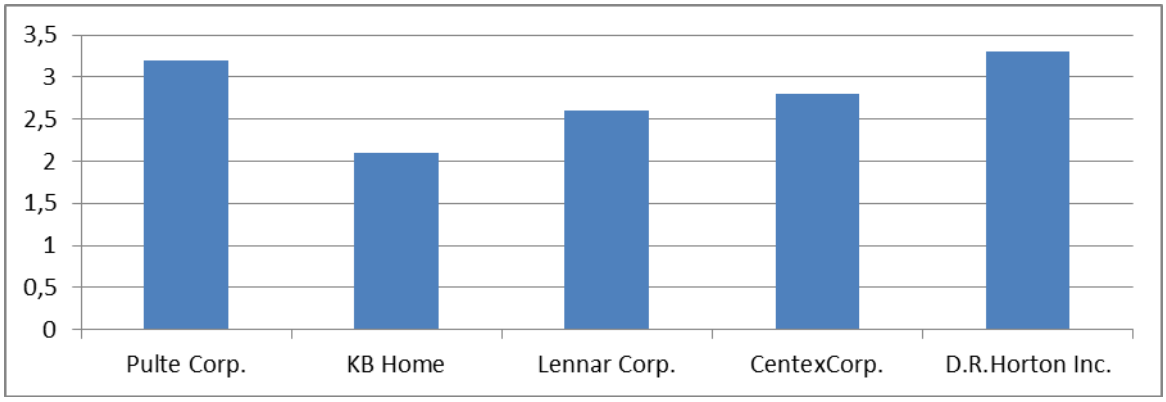


Fig. 3. Approximate land banks for 5 developers in the USA (in production years), *Source*: Ibid.

It needs to be pointed out is that American reports on the development sector do not focus as much

[2] The reserve management strategy applied in order to streamline return on investment through the reduction of inventory levels in the whole production-warehousing process and of costs related to it.

[3] BRE Investment House estimates that for the biggest listed developers, such as Dom Development, JW Construction and Robyg, the level of land reserves exceeded their yearly sales by 30%. For Polnord, the figure was 60% - the value for the end of October 2011.

[4] On the basis of emission prospectuses of selected companies listed in WIG-Developers.

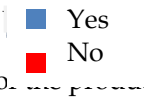
on land banks as English reports do. This stems, first of all, from the fact that it is easier to purchase land for development in the United States. A confirmation of such a thesis can be found in the situation of developers in Hong Kong, who own land banks even seven times bigger than those in Great Britain due to the total state control of land supply (CHIN 2009).

Research carried out[5] among developers – members of the Polish Developers' Association (PZFD) - at the beginning of 2012 allows us to conclude that most of the companies surveyed (63%) have a land bank. Yet, on the list of 10 factors[6] which can influence developers' operations, creating a land bank came only eighth, with an average score of 2.67[7]. The result shows that the polled developers do not consider land banks to be a very important element of their development activities.

Błąd! Nie można tworzyć obiektów przez edycję kodów pól.

Fig. 4. Land bank ownership structure of Polish developers, *Source*: own study.

Additionally, interviews with experts have proved that the size of a company is not necessarily in direct proportion to the land resources owned, [illegible]at big companies do not have to own considerable land resources. This may also be [illegible]e strategy of carrying out investment projects and, more precisely, with the standard o[illegible]ffered[8]. The research results presented in figure 5 substantiate this claim.



For companies that confirmed having a land bank, the size of the bank has been juxtaposed with the size of the company, expressed in the number of employees. And so, companies employing up to 9 people had reserves of 9.4 hectares, which gives an average land bank size of 0.85 ha per company. The group included land resources with a minimum area of 30 ares, and maximum of 3.5 hectares.

For developers employing between 10 and 49 workers, the accumulated land resources amounted to 303 hectares, which gave an average total land bank size of 37.8 ha. However, the group was dominated by land resources of under 50 hectares, and the relatively high average resulted from the biggest land bank, which had an area of 200 hectares.

The last of the development groups surveyed was that encompassing companies employing more than 49 people.

[5] The research was conducted as part of a study by K.Kania, Determinanty działalności land deweloperskiej w Polsce, doctoral dissertation written under the supervision of prof. dr hab. S. Beliniak, UEK Kraków 2012. The sample polled comprised of 97 developers.

[6] The following factors are accepted as internal ones (dependant on the developer) and having an influence on activities connected with finding, obtaining and preparing land for construction: "company strategy, which comprises of creating the land bank, the kind of development projects carried out, activities undertaken to prepare the ground for construction, organizational structure for which the number of employees was calculated, the existence of an expansion department, cooperation with external firms in preparing the area for construction, company experience, financial capital owned."

[7] Here a significance scale was applied, where 5 possible answers were specified, ranging from "totally insignificant" to "very significant". Respondents could express the importance they placed on selected factors by choosing one of the following answers: 1 – no influence, 2 - slight influence, 3 - average influence 4 - big influence 5 – very big influence. More on the subject can be found in K. Mazurek-Łopacińska's work (ed.), Badania Marketingowe. Teoria i praktyka, Wydawnictwo Naukowe PWN, Warszawa 2005, p.184.

[8] Companies within the Gant Development group, one of the leading Polish developers focused on building average-standard apartments, provide a good example of such an activity. The group often locates their investments in areas that are run-down but show investment potential. By choosing such areas, the Gdańsk company becomes a creator of locations, thus drawing other investors to them, as was the case in a housing development in the Siedlce district of Gdańsk.

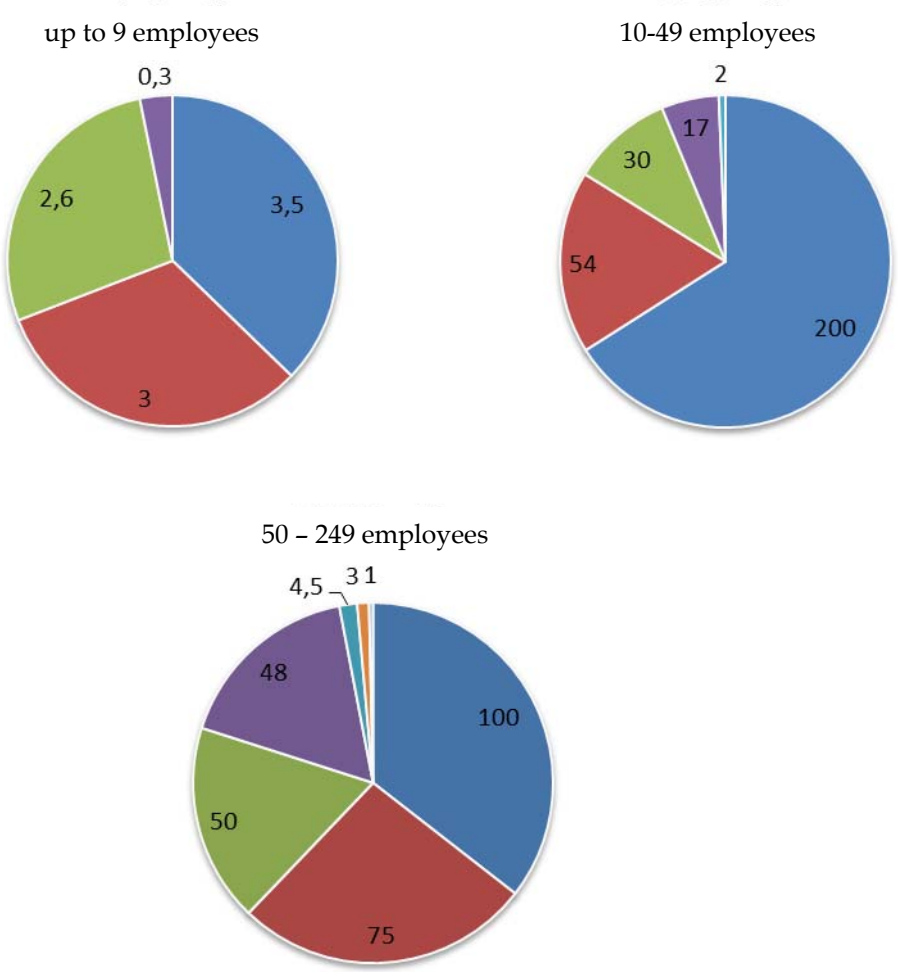


Fig. 5. Land bank size (in hectares) in relation to the size of the firm (number of employees), *Source*: own study.

Those companies accumulated a total land bank of 281.5 hectares, which corresponds roughly to 35.1 hectares of land per one firm. Banks of below 50 hectares also played a dominant role, but it must be mentioned that the size of land property owned differed extensively; the smallest bank was 1 hectare, whereas the biggest – 100 hectares.

6. Summary and conclusions

The presented examples prove that the spatial planning system can be one of the most important factors influencing the creation of land banks by developers. If the spatial planning system makes the time needed for the process of preparing land for development difficult to define, such as in Poland or Britain, firms tend to create land banks and maintain considerable reserves of land suitable for future development. This tendency is less visible in the case of planning systems which provide more certainty and decision predictability.

It can be also recognized that in Polish professional literature on the subject, the problem of land banks in the context of development operations is non-existent. Due to the dynamic changes in real estate market conditions, it seems that the problem of land banks is a topical item and ought to be analyzed in further studies in the context of bankruptcy risk of those companies that purchased land at inflated prices during the real estate market boom in Poland.

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