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dozwolonego użytku.

## CHOSEN RULES OF PUBLIC REAL ESTATE RESOURCES MANAGEMENT IN POST-SOCIALIST COUNTRIES

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**Abstract.** Managing real estates from public stock meets unique conditions and limitations, as they should be used only for public purposes, such as satisfying current and future social needs. Therefore, rational management is necessary, but in this special case the term ‘effectiveness’ cannot be applied only to the economic side of management. Governments are obliged to make much more sophisticated decisions, which require not only quantitative assessments, but also qualitative evaluation, as they influence many aspects of society’s living conditions. Measuring the effectiveness in public sector should be conducted with the use of adjusted methods and analytical instruments, which are presented and described in the article.

**Key words:** land management, public land resources, effectiveness, public land policy, costs and benefits analysis

### INTRODUCTON

Currently, many contemplations and studies are directed to find the answer to very important question – how to improve the efficiency of public real estate resources management, which should lead to satisfying both economic and social needs. Managing public resources, as a kind of public management, requires costs reduction and efficient decision making processes. Therefore, the often raised issue is the justification of maintaining various public organizations responsible for management [FAO 1999, Barnes et al. 1999, Struzik and Żróbek 2009].

This article focuses on chosen economic determinants of public real estate resources management in post-socialist countries within the frames of transition forward market economy. Some solutions introduced in Poland, where transition started in 1990, can be applied in other countries with similar political history.

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## SPECIFIC CHARACTER OF PUBLIC REAL ESTATE RESOURCES MANAGEMENT

Real estate management in public sector can be considered as a set of activities undertaken for realization public purposes and satisfying various public needs, such as providing goods and services. However, such activities are carried out in specific conditions typical for public sector. Therefore, it results in individual approach to management rules and peculiarities of efficiency assessment procedures (Figure 1). Management in public sector is determined by public servitude mission, character of public purposes, assumed criteria of success and legal rules. These determinants have direct impact on the scope of management, as they strictly shape the procedures for financial policy in public sector units [Rajack 2008, Struzik and Żróbek, 2009, 2010, ULI 2010].

Primary purpose of public real estate resources management is the realization of public duties and satisfying current and future social needs. Fulfilling this task has to be consistent with the rules of proper economy, which can be identified with economic rule of rational allocation of limited resources. However, in the case

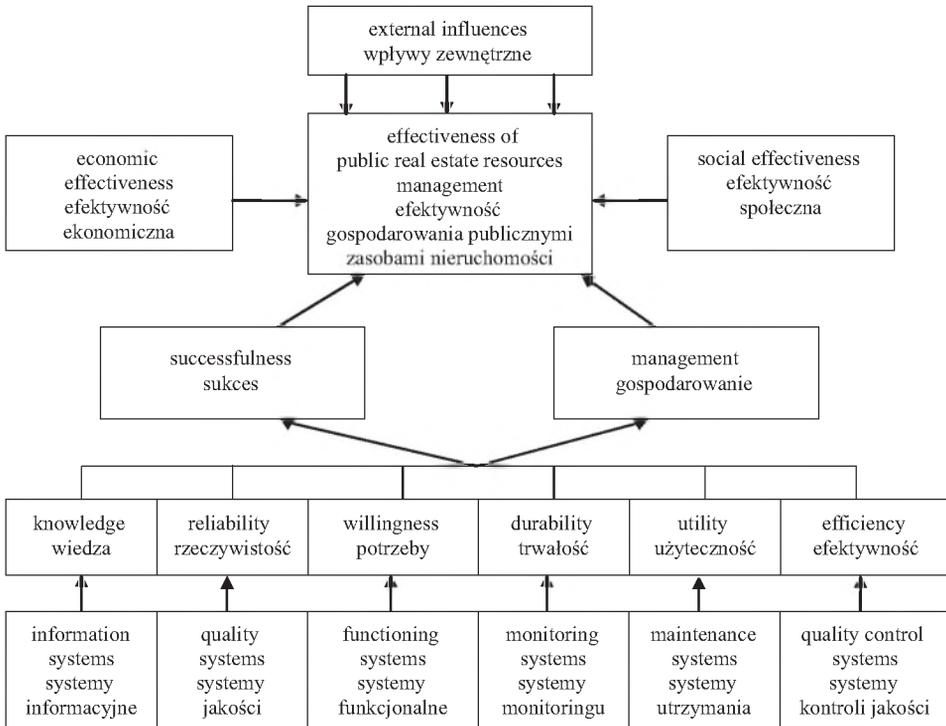


Fig. 1. Model of efficient public real estate resources management system

Rys. 1. Model efektywności zarządzania publicznymi zasobami nieruchomości

Source: Own studies

Źródło: Badania własne

of public sector, this rule must be completed by following issues: balancing expenses, providing public goods and services and including public interests in costs and benefits analysis.

Rational allocation is fundamental term in the economics, which focuses on presentation, how units, operating in different social-economic conditions, benefit from limited resources through allocating them into various, competitive applications. Therefore, the choice is another significant economic category, strictly related to rational allocation [Struzik and Żróbek 2009]. Economic rationality means that unit collects, transforms and creatively uses all available information on possible resources allocations in decision making process. However, in practice, complexity and changeability of market conditions cause limited access to information (it is expensive and unreliable). Thus, decisions have to be made with the acceptance of some level of uncertainty. Moreover, market failures, such as public goods, external effects and other problems noticed in macroeconomic scale, can justify the intervention of governmental units.

Taking into consideration the specific character of real estate market, the efficiency assessment of investments requires full analysis and should include:

- identification and definition of strategic goals;
- analysis of market conditions and factors from internal and external surroundings;
- defining set of possible alternatives of activity and evaluating the consequences of each one;
- preparing the forecast of expected incomes from investment and necessary inputs for investment and exploitation;
- summing up the analysis and general efficiency evaluation of each alternative, which leads to decision on optimal project (where the difference between benefits and costs is maximum).

Generally, the procedure for efficiency evaluation of investment projects does not seem to be complicated. It includes critical analysis of long-term benefits and costs connected with project. Efficiency evaluation methods used in private sector is supported by firm methodological basis. However, some solutions can be successfully applied in public sector, such as the most common used technique – Net Present Value (NPV) and Internal Rate of Return.

$$NPV = \sum_{t=0}^n \frac{NCF_t}{(1+i)^n}$$

when:

- NCF<sub>t</sub> – net cash-flow (incomes – inputs) in all periods,
- i – discount rate.

Investment is efficient when NPV > 0. IRR indicated discount rate, for which NPV = 0. However, these popular measures do not include social and external effects, thus they are not sufficient for public investments. In the case of governmental activities, taking into consideration only financial aspect of investment is improper, as they generate more effects then considered in financial analysis. Each public program, which after financial analysis seems to be inefficient, needs careful

Table 1. Set of crucial methods of investment projects evaluation with their features  
 Tabela 1. Zbiór podstawowych metod oceny projektów inwestycyjnych wraz z ich cechami

Characteristics Cechy	Private sector investments Inwestycje w sektorze prywatnym	Public sector investments Inwestycje w sektorze publicznym
The base for investment project evaluation Podstawa oceny projektu inwestycyjnego	financial effectiveness analysis analiza efektywności finansowej	Social/ economic effectiveness analysis Społeczno-ekonomiczna analiza efektywności
Common methods used in effectiveness evaluation Metody używane w ocenie efektywności	NPV, IRR	ENPV, ERR CBA CEA multicriteria analysis analiza wielokryterialna
Costs and benefits calculation Metoda obliczeń kosztów i korzyści	financial finansowe	Financial and non-financial Finansowe i pozafinansowe
Costs and benefits valuation Szacowanie kosztów i korzyści	market prices ceny rynkowe	– dual/social/calculation/hedonic prices – podwójne/socjalno-obliczeniowe ceny hedoniczne – with the use of term ‘willingness to pay/bear costs’ – z wykorzystaniem spodziewanej ceny
Costs and benefits corrections Korekcje kosztów i korzyści	none brak	– fiscal effects – efekty fiskalne – external effects – efekty zewnętrzne
Discount rate Stopa dyskonta	Financial (capital cost or buildup method) Finansowa (koszt kapitału)	– financial (capital alternative cost or threshold rate) – finansowa (kosztu alternatywnego) – social (i.e. social preferences) – społeczna (preferencje)
Profitability criterium Kryterium opłacalności	NPV > 0 IRR > capital cost	ENPV > 0 – CBA > 0 ERR > social capital cost – społeczny koszt kapitału individually established criteria for CEA and multicriteria method – indywidualne kryterium CEA
Decisive criterium Kryterium decyzyjne	project has to be economically effective projekt ma być efektywny ekonomicz- nie	project has to be socially effective – projekt ma być efektywny społecznie

Source – Źródło: A. Struzik, R. Żróbek, 2009. Efektywność w gospodarowaniu publicznymi zasobami nieruchomości. „Przegląd Geodezyjny” nr 9, 3–8.

analysis of social costs and benefits, i.e. although the level of inputs is not justified by financial benefits, program should be realized because of its positive impact on public welfare in at least regional scale. Consequently, analysis of cost and benefits of particular investment on real estate market done by public sector units can be conducted in the way similar to private sector, but after including some significant differences resulting from social contexts of public real estate resources.

In above mentioned cases Social/Economic Net Present Value (ENPV) and Social/Economic Rate of Return (ERR) can be applied. ENPV takes into account additionally fiscal effects (i.e. taxes and donations) and external effects (social costs and benefits) in calculation prices and discounted with social discount rate. ERR presents borderline for both economic and social costs of capital necessary to project realization (social discount rate). Traditionally used in private sector market discount rate is not proper for public sector. However, it is argued how to calculate social discount rate. Taking into consideration character of public investment, which will have impact on further generations, social discount rate does not reflect preferences towards consumption, nor alternative cost, and its valuation is very complicated. It presents the part of resources that society is able to sacrifice in the name of particular future effects. Thus, its value is determined by individual expectations and assumption, that society is satisfied by the thoughts, that future generations will be able to take advantage from rare resources.

Among significant differences between the costs and benefits analysis made public and private sector the risk problem should also be indicated. Many public investments in the field of real estate management are aimed at decreasing the health impairment risk, i.e. storage reservoirs, flood banks, toxic waste disposal sites). The need for such projects does not raise any arguments, but methods of risk assessment and procedures of risk limitations are quite controversial, as governments must choose between many hazards demanded "social care".

Costs and benefits analysis methods, which can be successfully applied to investments in the frames of public real estate resources management, include especially 'social cost and benefit analysis' (CBA) and 'cost-effectiveness analysis' (CEA). These methods are commonly used in evaluation of European Union projects in Poland [Analiza... 2005]. Synthetic set of crucial, the most often used in Poland evaluation methods are presented in the table below:

## **PUBLIC LAND POLICY CHALLENGES IN POST-SOCIALIST COUNTRIES IN CENTRAL AND EASTERN EUROPE (CEE)**

Currently, it is quite obvious that one of the engines of economic development is freedom on the land market. However, history of CEE countries presents opposite idea. These countries, when influenced by Soviet Union policy, started in 1946 transition from market to socialist economy. All socialist economies based on public ownership of all production means, allowing only for marginal private ownership. Thus, transition process involved restricting private property rights. Over forty years later, socialist system was replaced by another transition – back to market economy.

Fundamental feature of this process was privatization of public (State) owned land and its parts.

Transitions caused various problems that CEE countries still are forced to solve, i.e. privatization. It is not clear who possesses the right to particular property [Barnes 1999] and institutions are not able to cope with this problem. Another problem is bringing land market to its proper path. In some countries – The Czech Republic, Slovakia, Poland and Slovenia, nationalization of land did not cover all agricultural land and small private farms survived. For example, in Poland 75% of farmlands remained in private sector, but in Estonia about 70% were owned by the State [2000]. Other examples are shown in Table 2.

Table 2. State owned agricultural land in CEE countries in 2008

Tabela 2. Własność państwowa ziemi rolniczej w krajach Unii Europejskiej w 2008 r.

Country	Total land area [million hectares]	Rate of agricultural area [%]	Rate of State ownership [%]
Estonia – Estonia	4,343	31	30
Hungary – Węgry	9,303	45	22
Latvia – Lotwa	6,229	28	60 <sup>1</sup>
Lithuania – Litwa	6,268	42	35
Poland – Polska	31,269	50	13
Romania – Rumunia	23,839	62	27
Slovakia – Słowacja	4,903	31	5
Slovenia – Słowenia	2,027	30	5

Source: Own study based on data from national statistical offices

Źródło: Własne badania na podstawie krajowych statystyk

Other problems with land ownership in Europe relate to forests – about half of total area is owned by private units and the rest by the State. In CEE countries ownership structure is quite different – woodlands are mainly owned by the State, i.e. Bulgaria (85%), Czech Republic (78%), Lithuania (68%), Poland (84%) and Romania (81%).

According to above mentioned numbers, private land market has been created through the privatization of State owned land, supported by the creation of land tenure and property rights [FAO 2006]. Transition process has brought a number of challenges for land management, including the creation of infrastructure for efficient market economy through proper land policy. State agencies have wide mission within the frames of land management [FAO 1999], as State cultivates its own land, leases and sales it out [Knezevic and Marosan 2010]. In this situation, the issue of efficient public land management becomes even more important.

## CONCLUSIONS

Many countries, especially post-socialist, leave some areas of land in the hands of authorities to be managed to society's advantage. Thus, public land and other real estate management should be supported by objective analysis, especially concerning effectiveness of particular activities. Taking into consideration the specific character of real estate market, the efficiency assessment of investments requires full analysis and should start with the definition of strategic goals and analysis of market conditions and factors from internal and external surroundings. Then, it is necessary to define the set of possible alternatives of activity and evaluating the consequences of each one, prepare the forecast of expected incomes from investment and necessary inputs for investment and exploitation. Process is completed when summing up the analysis and general efficiency evaluation of each alternative, which leads to decision on optimal project (where the difference between benefits and costs is maximum), is done. However, it is important to include social and external effects, as public investment generate more effects then considered in financial analysis. In Poland adjusted financial measures are successfully applied, such as ENPV, ERR, CBA, CEA and Multicriteria analysis.

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**WYBRANE ZASADY ZARZĄDZANIA PUBLICZNYMI ZASOBAMI  
NIERUCHOMOŚCI W KRAJACH POSTSOCJALISTYCZNYCH**

**Streszczenie.** Zarządzanie publicznymi zasobami nieruchomości zawiera specyficzne warunki i ograniczenia. Zasoby te są wykorzystywane do celów publicznych związanych z realizacją potrzeb socjalnych. Niemniej konieczne jest racjonalne nimi zarządzanie. W tej sytuacji pojęcie efektywności nie może uwzględniać tylko aspektów związanych z ekonomią. Władze samorządów muszą brać pod uwagę trudne do zmierzenia aspekty społeczne. Pomiar efektywności w sektorze publicznym może być wykonany z wykorzystaniem wybranych metod i analitycznych instrumentów, które są zaprezentowane i opisane w prezentowanym artykule.

**Słowa kluczowe:** zarządzanie nieruchomościami, zasoby nieruchomości publicznych, efektywność, polityka, analiza kosztów i korzyści

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