

DESCRIPTION FOR THE GENERAL PUBLIC:

Financial Mechanisms in the Economy Resulting from the Phenomenon of Urban Sprawl

The phenomenon of urban sprawl is associated with chaotic and distributed sprawl of single-family houses in areas of municipalities surrounding the city. This phenomenon is considered to be disadvantageous due to the costs it may generate. This conviction about the phenomenon results from previous studies that have characters selective to: the sole analysis the costs but no benefits or examination of the impact of this sprawl on one feature of the economy, eg. travel costs. Therefore, the main objective of the project is to identify the financial mechanisms active in economy that result from the phenomenon of urban sprawl. Research undertaken in the project will also make an attempt to explain the mechanism of the impact of the phenomenon on the economy; the economy will be understood as a collection of entities such as households, businesses, local government units, and the state.

Achieving the objectives of the project requires studies in two layers:

Initially, urban sprawl must be represented in numbers as opposed to the generalized presentation of this phenomenon on a map. Only quantified urban sprawl enables economic modeling. In addition, urban sprawl will be quantified as an index comprising of many features/forms (as indicators) of spatial structure. The index will also enable the research profile of urban sprawl in Poland, a phenomenon of domination of one/several features, as well as the impact of these forms on the condition of the economy. Therefore, intended for the quantification of the phenomenon is the application of a method using measurement indicators (form) of land development using grid squares with an area of 1 km² and 250 m² by which buildings are summed. Based on the grid squares the following indicators describing the degree of sprawl will be identified, (density, continuity, concentration, clustering, centrality, nuclearity, mixed uses, proximity).

The second layer refers to the impact complexity of the occurrence on the economy. Meaning that the impact of urban sprawl only on one specific economic indicator will not be studied, neither will just the costs of sprawl. Because both the costs and benefits of urban sprawl in relation to the economy, understood as a set of entities in the real sphere economy (households, businesses) and regulation sphere (municipalities, counties, regions, country) will be studied. The study reveals the mechanism of the impact of urban sprawl on the local, regional and national economy. Therefore, a detailed study will be carried out at the level of: households and businesses; municipalities where urban sprawl occurs and the cities which are spreading; counties, regions, and country. In order to obtain the necessary economic data for these levels of analysis, records from public authorities and surveys will be analyzed. After collecting data, the relationship between urban sprawl and the economy will be evident (including a detailed analysis of the entities mentioned) with the aid of statistical and econometric models, together with the identification of costs and benefits. The relation between urban sprawl and the economic conditions in the real as well as regulation economy will be presented.

The chosen topic is associated primarily with the need fill the gap in the present state of knowledge regarding the impact of urban sprawl in Poland on the economy (national and local). A significant value to economy and spatial planning holds the rating of urban sprawls' economic consequences particular to Poland (beneficial vs. not beneficial), together with an explanation of mechanism which impact sprawl, namely: the relationship between urban sprawl and its forms and the condition of households, businesses, municipalities and cities, counties, regions and countries. In fact there is no current literature in the field discussing the complex consequences of urban sprawl on the economy, especially in relation to the costs and benefits of sprawl. Such knowledge will help to formulate assessments, classification, consequences of urban sprawl on the economy, as well as the mechanisms for the relationship between sprawl and the economy. Such knowledge will not only fill the gap in the current state of the given research field, but will also allow the future use of the formula in spatial policies at the national, regional and local levels. The research knowledge in mechanisms of impact forms/features of urban sprawl on the individual components of the economy; can be used in the future beyond Poland in areas dominated by this certain form of spatial structure.