

Public-private Partnership and Smart Growth — Principles, Challenges, and Mechanisms for Effective Action

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Abstract: The term smart growth is not new, but in the context of public-private partnerships, it gains a new meaning for social development, creation of a favorable environment for actions and successful entrepreneurial thinking. Essentially, smart growth combines a well-functioning educational system, medical and transport infrastructure, energy sector, etc. The triangle of knowledge and the triple helix (universities, government policies and business environment) can successfully be implemented in these sectors. PPP presents all favorable conditions for smart growth and forms a circle of organizational measures and scalable models of interaction. In order for any society to prosper, quality and effective educational environment are needed, as well as new knowledge and innovations that enhance the quality of life. Smart growth plays a significant part of the development of any economy and social environment. Why is PPP the basis for this growth? What is included and what are the benefits of public-private partnerships? The answer to these questions can be found in the interpretation of the partnership as a whole. It is used in the concept of “inclusive growth” as part of “inclusive business”, “cross-sectoral partnership”, a partnership for continuous development, etc. This study aims to find the factors that will ensure sustainable development and functioning of the PPP in support of smart growth. The barriers to this desirable interaction and possible ways to minimize them will be examined.

Key words: PPP; smart growth; role challenges; efficiency

JEL codes: A20, B10, F00, H00, I25, I28, O3, O40

1. Introduction

In recent decades, the European Union directs its policy towards the construction of “smart, sustainable and united economy delivering high levels of employment, productivity and social cohesion” of regions. Among the main objectives of the EU is promoting innovation in all regions, while ensuring complementarity between EU, national and regional support for innovation, R&D, entrepreneurship and ICT (COM (2010), EUCO 13/10).

Smart growth is defined differently from various authors or authorized structures.

Anthony Downs describes smart growth as “a set of common policies aimed at countering urban expansion. Objectives of these policies usually include limiting expansion, promoting development of higher density, promoting mixed zoning instead of the full isolation of land, reducing travel by private cars, revitalizing older

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areas and preserving open spaces” (Downs, 2005).

The EC strategy, called “Europe 2020”, considers “smart growth as strengthening knowledge and innovation, which are engines of our future growth. Smart growth, according to EU documents requires improving the quality of education, strengthening research, fostering innovation and transferring knowledge throughout the Union, making full use of information and communication technologies and ensuring that innovative ideas can be turned into new products and services that lead to intelligent growth, quality jobs and help in the identification of the European and global societal challenges. This set of activities must be combined with activation of entrepreneurship, strengthening and concentration of financial resources and all this is in response to the needs of target customers and market opportunities.”

This approach actually predetermines the new understanding of global development, where smart growth is perceived as a complex development of economy, urban life, promotion of knowledge, innovation and entrepreneurship, long-term cooperation between the public and private sectors, etc. aimed at building society based on knowledge and innovation.

2. Basic Principles of Smart Growth and Their Implementation in Public-private Partnership

The development of any community and in particular its economy is directly related to the interaction between the public and private sectors. Smart growth is also influenced by this partnership while respecting the fundamental principles which guarantee the basis for sustainable use of resources and investments.

The basic principles of smart growth can be structured by using the principles developed by the US Environmental Protection Agency (EPA) and the Smart Growth Network (2007). They are a set of activities such as:

- (1) Mixed land use.
- (2) Taking advantage of compact building design.
- (3) Creation of a range of accommodation options and choices.
- (4) Creation of pedestrian neighborhoods.
- (5) Promotion of distinctive and attractive communities with a strong sense of place.
- (6) Preservation of open space, farmland, natural beauty and critical environmental areas.
- (7) Strengthening and direct development towards existing communities.
- (8) Provision of a variety of transport solutions.
- (9) Decisions taken for development to be predictable, fair and effective.
- (10) Promoting public cooperation with stakeholders in decisions on development.

Various authors have their vision for them.

For example Anthony Downs presents the principles of smart growth as follows:

- (1) Limiting the passive expansion of new construction, to make settlements more compact and preserve open spaces.
- (2) Increasing the density of residential areas both in developing and in existing neighborhoods.
- (3) Usage of more mixed land and pedestrian layouts to minimize the use of cars for short journeys.
- (4) Transfer of public expenditure for new construction on its users through impact fees, and not on the municipality.

- (5) Increased public transport to reduce the use of private vehicles and consequently lower emissions.
- (6) Revitalization of dated existing neighborhoods.
- (7) Creating more affordable housing.
- (8) Reducing the barriers to development.
- (9) Adoption of different provisions on aesthetics, street layouts and design (Downs, 2005).

According to Douglas Porter the main principles of smart growth bear signs of “development in accordance to those basic principles that lead to better design, have a multi-community usage that offers people a range of options for living, working, recreation and travel”. For example:

- (1) Compact multi-community development;
- (2) Preservation of open spaces;
- (3) Developed mobility;
- (4) Improved viability;
- (5) Effective management and infrastructure expansion;
- (6) Filling, reconstruction and adaptive use in built-up areas.

As far as smart growth is a function of the activities of public and private organizations, PPP is of interest seen in the context of tangible smart growth.

The American Association for planning assumes that the implementation of public-private partnership as part of smart growth is developing, taking into account the following factors:

(1) Role of the different levels of government, federal, state, regional or local in adopting and implementing policies to support smart growth.

(2) Feedback to the PPP policy, coming from the results of permanent regional monitoring of a certain community, created through a process of regional planning and implementation (Smart growth recognizes the interdependence of neighborhoods and communities in urban areas and promote balanced and integrated regional development) to the PPP policy

(3) Degree of integration in land use and transport planning in which more transport solutions are provided. Transport planning involves alternatives to personal vehicles such as public transport, bicycles and walking.

(4) Efficient use of space and infrastructure which implies:

- Effective results in the use of land from compact residential housing, developing and reducing the amount of necessary areas, compliant to infrastructure standards of streets and parking lots.
- Effective use of public and private infrastructure — from the creation of neighborhoods that increase the use of existing infrastructure to building of new areas of growth, roads, sewerage, water lines, schools and other infrastructure, which are planned as part of the overall growth and investment strategies.
- Regional cooperation in the field of urban planning, as necessary for the production of large infrastructure investments aimed at reducing inefficiencies.

(5) Existence of a mix of use and choice of housing in neighborhoods and areas focused around community centers accessible by multiple types of transportation. Availability of neighborhoods of mixed-use includes homes ranging in type and price, integrated with commercial development and employment

(6) Adequate design in accordance to the needs of the population, compatibility with the existing urban environment and quality of construction, leading to the successful compact and mixed development promoting privacy of life, security, visual consistency and compatibility between applications and users.

(7) Protection of the environment and cultural resources. Smart growth protects the natural processes that

sustain life, keep agricultural land, natural habitats and cultural resources; sets up common ecological environment; promotes innovative storm water management, which is less utilized; protects natural resources; and ensures long-term quality of air and water.

(8) Sustainable planning process and regulation at all levels, promoting diversity, equity and principles of smart growth. Local authorities are responsible for land use and infrastructure resources developed through its regional policies. Smart growth recognizes this trend and accepts the leadership of the federal and state governments as well as the importance of their partnership for smart growth regions, for example.

(9) Active participation of citizens in all aspects of the planning process and at all levels of government to ensure that the planning results are based on the principle of collective decision-making. If we take into account the profound demographic transformation, the ethnic diversity of society, the importance of public welfare in general and the development of social capital, it is necessary to shape up prosperous, vibrant neighborhoods and communities. In this context is implied the development of long-term strategies for engaging community participation in planning processes where there are guarantees of equality in the distribution of community resources.

Considering the principles of smart growth raises several key questions such as:

- How they can be implemented in modern life;
- How they build a public-private partnership and can it be the basis for a sustainable economy — building a competitive environment;
- How to achieve equitable way of life in all regions, effective transfer of knowledge, etc.

As far as PPP is seen as “a form of cooperation between public authorities and the business world, which aim to ensure funding, construction, renovation, management and maintenance of infrastructure or services” (European Union, 2004), the cooperation between government and business should lead to improved quality of life; initiate a public interest in economic growth, etc. In this sense, the Organization for Economic Cooperation and Development (OECD) has answered some of these questions, which are reflected in the Council Recommendation on the principles of public management of public-private partnership. The recommended actions envisage:

(1) Development of a clear, predictable and legitimate institutional framework supported by competent and well-resourced authorities;

(2) Substantiated choice of PPP in terms of cost;

(3) Transparent use of the budgeting process in order to minimize fiscal risks and ensure the integrity of the process of public procurement (OECD, 2012).

Due to the fact that one of the objectives of public-private partnership is to achieve sustainable development and inclusive economy, and according to Douglas Porter many of the goals of sustainable development are reflected in the principles of smart growth (Porter, 2002, p. 5), it must balance different goals and assist communities to develop sustainably (Mahayni, 2008). This requires that a mandatory element to smart growth reflecting the continuous development of PPPs to be added. This development may be a result of:

- Implementation of infrastructure projects
- Providing services to the public
- Financing innovation of administrative capacity building
- Risk sharing, etc.

The partnership between government and business is becoming a constant exchange of best practices, sharing

of resources, rights and obligations. These activities are to some extent observed in the implementation of smart growth.

Economic development is directly dependent on the support of innovation and efficient industries that reflect quality of life. Therefore, the need of effective tools to ensure a new type of economic prosperity is essential.

Smart growth, attributed initially to urban growth improvement, gradually transposed on all sectors of economic development. In this context, public-private partnership is a key factor that creates all favorable conditions and forms a circle of organizational measures and models of interaction. Public and private sectors acquire a special meaning in the creation of partnership programs with industry where human capital development, technology transfer and absorption of new products are essential. The main objective of this partnership is to ensure lasting joint efforts to achieve innovative growth of the global economy.

3. PPP Models in Smart Growth-challenges and Problems

One of the main goals of smart growth, defined in the European strategy “Europe 2020”, is to outline a course to maximize the social and economic potential, where public-private partnership is a key element. This objective should result in addressing global challenges and provide European citizens with a better quality of life - through better healthcare, safer and more efficient transportation solutions, cleaner environment, new media opportunities and easier access to public services and cultural content.

Since public-private partnership is a horizontal priority of a number of sectoral policies, it affects the coordination of public research, technology transfer and respectively the construction of appropriate policy frameworks. Investments through it are essential for effective innovation and increase the added value of the inputs.

Two examples of public-private partnership are analyzed in various regions as a contribution to improving the quality of life of European citizens.

(1). The European cross-border program Interreg IVA France is addressed to four specific challenges for smart growth that are relevant to the Europe 2020 strategy:

(a) Uniting a critical mass of partners by strengthening:

- **Interaction** between different stakeholders in the sector and
- **Innovations** through strengthening of innovation clusters and promoting collaborative innovations

To achieve the required critical mass different approaches could be applied:

- Establishing links between SMEs and universities to stimulate innovation and promote scientific knowledge into practice
 - Increase the usage of research results by SMEs
 - Increase the development and creation of clusters in strategically important areas for business and industry
 - Encouraging innovation clusters in different industries (e.g., software industry)
 - Supporting the development of innovative solutions directed towards societal challenges that are typical to coastal, marine and rural areas:
 - Redirection of research to contribute to the achievement of social goals (climate change, energy efficiency, health, aging, etc.)
 - Meeting new expectations of the public for better services by providing innovative ICT applications
- Encouraging innovation in SMEs in emerging sectors by:

- supporting intermediary organizations (industrial federations of clusters, chambers of commerce);
- encouraging SMEs to invest in research and development to create innovative cross-border environment;
- strengthening a favorable economic environment and support for creation and development of new businesses in industries with high growth potential

(b) Provision of consultancy services for business such as:

- Acceleration of ongoing structural changes through diversification of fishing and agricultural sectors;
- Creation of conditions necessary to allow SMEs gain access to free capital
- Creation of a favorable environment for cross-border creation and development of new businesses :, promotion and provision of support for the ideas of cross-border SME, support for their internationalization and support to projects for increasing their penetration in international markets
- Provision of advanced ICT services in order to stimulate economy in rural areas (INTERREG, France (La Manche channel) England http://interreg4a-manche.eu/index.php?option=com_content&view=article&id=286%3Aobjectif-de-croissance-intelligente&catid=133%3Avotre-avis-nous-interesse-&Itemid=97&lang=en-15.3.2015).

In this case the PPP is regarded as a strategic process for the “convergence” of the two sectors. This partnership is a good example for achieving lasting relationships and interactions between business and research centers through the development of products and services, technology transfer; implementation of social and eco-innovation, and building networks and clusters based on smart specialization.

The second study was done on building the metropolitan subway in Sofia, Bulgaria. The scope of this partnership includes feasibility and investment studies, development of conceptual designs and regulation plans, preparation of documentation to appraise the need to assess the environmental impact (EIA), an analysis of costs and benefits, and financial analysis and preparation of documentation for an open public procurement procedure for the construction of the subway. As a part of the transport strategy for construction of the Sofia subway, PPP must solve the following tasks:

- (1) Generation of adequate joint action to improve and develop an integrated system of public transport
- (2) Application of innovative solutions through the public sector (such as universities) designed to protect and improve the natural and urban environment
- (3) Creation of a strategy for expected growth rates of traffic since they cannot be maintained for a long term
- (4) Cooperation with the private sector to ensure maximum understanding of the needs of the public sector.
- (5) Minimizing the risks of preliminary negotiations, such as problems with the land and its use-identification and assessment in view of security operations by the public sector
- (6) Modern management methods, for example the private sector partner is able to take technological risks, as it understands and can confidently control it.

In this case the PPP is a tool for accelerated work on the necessary transport projects.

The initial private investments for financing certain types of preparatory activities, substantially reduce costs in the early phases and release public funds for next construction phases. Additionally a favorable environment for work is created by offering bargains, efficiency of alternative supply and/or management strategies, for reducing traffic jams, for achieving reductions in the emissions of carbon dioxide and for early completion of the planned transport network. The public sector provides all the necessary prerequisites for effective administration and execution of the project.

As a result of this partnership, the Sofia subway was able to expand its network twice within 5 years. Both projects, different in their nature and thematic focus, solve basic problems and provide concrete solutions to this.

PPP is becoming a major driver for specific activities such as demand, supply of the most appropriate solutions, exploration of the specific environment, creation of infrastructure, promotion of research, etc. strengthening of technological development and innovation by business investments in innovation and research.

A major challenge for public and private sectors is to identify and implement the most appropriate models for their effective functioning. According to Stainback, in order for a PPP model to be effective it must meet several criteria for strategic cooperation: “clarity of objectives, coordination of missions, strategies and values; creation of public value; links to purpose and municipalities; communication between partners, constant learning from each other and the project, as well as commitment to partnership.” (Stainback, 2000, p. 47).

Successful measures for public-private partnerships in the context of smart growth eliminate the risk of: poor environmental infrastructure, lack of standards and processes for quality, frequent cases of reluctance to introduce solutions. The PPP models can clearly fit in the principles of smart growth and outline the allocation of risk in the implementation of strategic projects. This kind of partnerships is accompanied with some challenges that can affect and retain smart growth. The tender procedures, regulatory frameworks for the delivery of PPP projects and the national interpretation create barriers that increase cost (Graeme A. Hodge, Carsten Greve, Anthony E. Boardman, 2010, p. 229). Empty niches can still be seen in public management and political commitment.

4. Mechanisms for Effective and Long-term Actions and Achieve Smart Growth

The integration between education, innovation and business (The Triangle of Knowledge) and the cooperation between universities, business and government (triple helix within a certain range) stay at the basis of any sustainable economic and social development. In this sense, the PPP has its place and role in this development. Joint projects create conditions for long-term PPP partnerships which are useful for provision of new types of products and services needed by the community for the development and growth of the smart economy (Figure 1).

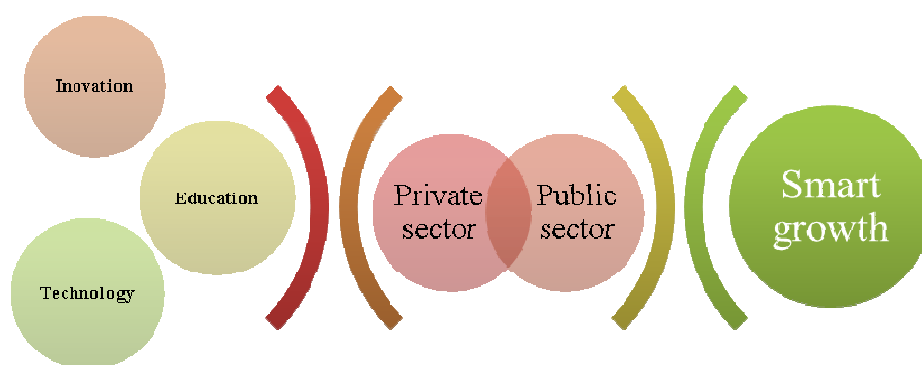


Figure 1 Interconnection between Public-Private Partnership and Smart Growth

Universities, as a generator of new knowledge and innovation, initiate joint actions of public and private sectors aimed at sustainable economic growth and social development. This interaction between the two sectors outlines the foundation of achieving smart growth — “a development which is deliberate and effective to the needs of public interests, conditions, values and characters” (Sherry, M. Orchard Park Town Council). Smart growth implies a broad range of development strategies and storage that promote protection of the natural environment and build a society that is more attractive, more powerful economically and socially more diverse

(EPA 2008). We should look for the location of specific mechanisms to achieve a wide range of PPP models which may vary, e.g.:

(1) The government defines a scope of services, depending on the specific outcomes and impacts, key indicators and performance criteria, to which the private provider must adhere throughout the implementation period of the project (10-30 years).

(2) The government receives a tangible asset in advance or a service before making any payments. Funds are distributed after the construction phase of an asset or after the activity is carried out in accordance to agreed standards and regulations for implementation. This frees up public funds that can be used for other activities during the same period.

(3) The private sector builds, manages and is responsible for the previously agreed period and all risks remain its responsibility. “Risk” meets “situation of coincidence, faced by the economic object and can be presented in the form of precise numeric objective or subjective probability (Shah, 2005, p. 139).

(4) Universities have an active role in the implementation and use of new knowledge, as well as the creation of new academic knowledge (Etzkowitz H., 2003). Universities are an element of the “innovation chain” through its research and educational activities that are the basis for achieving new knowledge and skills. This respectively has a positive effect on an innovative model for sustainable economic growth which also provides new jobs.

Motivation in terms of PPP is different for both partners.

For the public sector it is achieving a partnership (assignment) with a maximum value, usefulness and efficiency of the services, eligibility of expenditure by the service and achieving effective public interest. For the private sector it is cost recovery, the possibility of marketing through sustainable interest and effective applicability.

However, regardless of the different expectations of both sides, there is a mutual benefit that makes this partnership very promising.

PPP creates all favorable conditions for smart growth and forms a circle of organizational measures and models of interaction.

5. Conclusion

Any society that sets itself the task of achieving smart growth should develop economically and socially in a way that minimizes those activities whose costs are borne by future generations, and where these activities are inevitable-to provide compensation for these costs to future generations. PPP is the foundation for building a competitive economy and coordination of policies so necessary for sustainable and smart growth. Investment management is a key factor which strongly influences the effect of partnership between government and business. It is a guarantee for the sustainable development of any economy. The parallel examination of PPP and smart growth has a huge impact on the further development of Europe, providing an opportunity for overcoming future challenges thereby forming a range of organizational measures and models of interaction.

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