

Appendix No. 4
to the application for conferral of Habilitation

University of Gdańsk
Faculty of Management
Department of Investment and Real Estate

Summary of scientific accomplishments

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1. First name and surname

Anna Wojewnik-Filipkowska

2. Diplomas and academic degrees

- 2000 – The University of Gdańsk, Civic Education Project and Grand Valley State University's School of Public and Nonprofit Administration, The Certificate Course in Public Administration (2-semester studies).
- 2001 – University of Piraeus, Business Administration Department, Socrates-Erasmus (1 semester).
- 2002 – University of Oxford, Certificate of Studies, Stefan Batory Foundation, and Foreign and Commonwealth Office Scholarship Scheme (1 semester).
- 2002 – University of Gdańsk, Faculty of Management, Specialisation: Finance and Banking, **master thesis**: pt. *Project Finance – theoretical and application study*, supervisor: prof. dr hab. Krystyna Dziworska.
- 2004 – United Nations Industrial Development Organization, Certificate – Basic Training Workshop on COMFAR III EXPERT software (1-week course).
- 2004 – United Nations Industrial Development Organization Certificate – Advanced Training Workshop on COMFAR III EXPERT software (1-week course).
- 2007 – **doctor of the economy in management science**¹, granting entity: Council of the Faculty of Management at the University of Gdańsk, the title of the dissertation: Application of Project Finance in infrastructure investment, *supervisor: prof. dr hab. Krystyna Dziworska*, reviewers: prof. dr hab. Ewa Siemińska, prof. UG dr hab. Anna Górczyńska. The work received the prize of the Rector of the University of Gdańsk.
- 2013 – University of Gdańsk, Faculty of Management, **Postgraduate studies of Finance and Accountancy** (2-semester studies).
- 2019 – Aestino, Development Centre, Certificate – Training in a program costing Norma Expert.

¹ A copy of the document confirming possession of the doctoral degree is given in annex 1 to the proposal.

3. Employment in the scientific units

- 2002–2007 – University of Gdańsk, Faculty of Management, Department of Investment and Real Estate, Assistant of Professor.
- From 2007 till now – University of Gdańsk, Faculty of Management, Department of Investment and Real Estate, Lecturer (Adiunkt).

During the period of employment, I have obligations arising from maternity in 2007 and 2009.

During the period of employment at the University of Gdansk, I had an opportunity to embrace the position of Lecturer (**summer semester 2017/2018, 2018/2019**) in RhineMaine University Wiesbaden, Fachbereich Architektur und Bauingenieurwesen, where I lead one course entitled *Real Estate Development* (60 h), which is scheduled in a subordinated way to my basic responsibilities associated with the primary place of work at the University of Gdańsk.

During the period of employment at the University of Gdańsk, I was also involved in teaching activities with the WSB University in Gdańsk and the Gdańsk University of Technology, with which I also continue to work in the field of research. At the Faculty of Architecture of the Gdańsk University of Technology I teach courses in the subject of Feasibility study of investment projects (for the students of the specialisation of Spatial Management, from 2015 to - currently); the course: General principles of financing large-scale urban-architectural projects (for students of post-graduate studies Urban and architectural regeneration of urban areas) in 2009-2013. It was during the implementation of the European program financing the post-graduate studies (Development of the Faculty of Architecture of the Gdańsk University of Technology by building a new educational offer in the field of spatial economy, European Social Fund, Contract No. UDA-POKL 04.01.01-00-237 / 08-00, 2009-2013). I was also a lecturer in the graduate program of the Chemical Faculty of the Gdańsk University of Technology - an engineer with the future (Operational Program Human Capital, contract number UDA-POKL 04.01.02.-00-137 / 11-00, 2007-2013).

As part of employment at the University of Gdańsk, I received grants in the Erasmus+ program for academic teachers for teaching and research at:

- **Savonia Polytechnic w Kuopio**, Finland (2005),
- **Savonia University of Applied Science**, Finland (2006),
- **Hochschule für Wirtschaft und Umwelt Nürtingen-Geislingen**, Germany (2016),
- **RhineMaine University Wiesbaden**, Germany (scheduled for June 2019).

As part of an international cooperation, I did a research and teaching internship at **China Youth University for Political Sciences in Beijing**, where I conducted my own research entitled *Investment in city development*, and run author classes: *Investment project evaluation* (48h), and special lectures titled: *Public Private Partnership in Poland and worldwide* (4h), *Investment in city development* (4h) (2016, 2 months).

4. Scientific achievement, according to art. 16 sec. 2 of the Act of 14 March 2003 on scientific degrees and title and on degrees and title in the field of art (J. Laws of 2016, item 882, with modif. in J. Laws of 2016, item 1311.)

a) Title of achievement

Investment management in the city

– *determinants, organisation, financing and effectiveness evaluation*

b) List of publications being the basis of the habilitation procedure

As a scientific achievement, according to art. 16 sec. 2 of the Act of 14 March 2003 on scientific degrees and title and on degrees and title in the field of art (J. Laws of 2016, item 882, with modif. in J. Laws of 2016, item 1311.) I indicate a series of thematically related publications.

The publication cycle consists of 11 scientific articles published after the blind-review process. The list of publications with their designation is presented below (table 1).

Table 1. The list of thematically related publications titled: *Investment management in the city – determinants, organisation, financing and effectiveness evaluation*

No	Author/authors, the title of publication, year of publication, name of publisher, review	Type of publication	Symbol
1.	Wojewnik-Filipkowska A., Rymarzak M. (2015), <i>Decision-making in corporate and municipal asset management (literature review)</i> , [in:] Proceedings of the 26th International Business Information Management Association Conference – Innovation Management and Sustainable Economic Competitive Advantage: From Regional Development to Global Growth, Vol. 1–6 / Ed. by K. S. Soliman, Norristown: International Business Information Management, pp. 4057–4070, ISBN: 978–0–9860419–5–2. The statement of co-author (annexe 6.1)	Scientific article in peer-reviewed materials from the international conference indexed in the Web of Science and Scopus. MNiSW–15 points.	A1
2.	Wojewnik-Filipkowska A. (2014), <i>Identification and systematization of regeneration investment projects management determinants</i> , Real Estate Management and Valuation, 22 (1), pp.25–31, DOI: 10.2478/remav–2014–0003.	Scientific article indexed in Scopus, MNiSW list B–12 points.	A2
3.	Wojewnik-Filipkowska, A. (2018), <i>Municipal investment management – a comparative analysis of decision-making in Gdańsk and Edinburgh</i> , World of Real Estate Journal, 4(106), pp. 81–91, DOI:10.14659/WOREJ.2018.106.011.	Scientific article, MNiSW list B–10 points.	A3
4.	Wojewnik-Filipkowska A. (2011), <i>Principles of revitalisation investment financing on the example of chosen case studies in Gdańsk and Sopot</i> , [in:] Nalepka A. (red.), Investments and real estate, the challenges of the 21st century, Foundation of the University of Economics in Kraków, Kraków, pp. 501–512, ISBN 978–83–62511–8–8.	Chapter in a book. MNiSW– 4 points.	A4
5.	Wojewnik-Filipkowska A., Trojanowski D. (2012), <i>Principles of public-private partnership financing – Polish experience</i> , Journal of Property Investment & Finance, 31(4), pp.329–344, DOI 10.1108/JPIF–10–2012–0049. The statement of co-author (annexe 6.2)	Scientific article indexed in Web of Science and Scopus. MNiSW–5 points.	A5
6.	Wojewnik-Filipkowska A. (2011), <i>The importance and dissimilarity of partnership in revitalisation investment on the example of chosen project in Gdańsk and Sopot</i> , Scientific Journal, University of Szczecin. Finance, Financial Markets, Insurance, 38, pp.205–217.	Scientific article, MNiSW–5 points.	A6
7.	Wojewnik-Filipkowska A. (2016), <i>The impact of financing strategies on efficiency of a municipal development project</i> , Research Papers of Wrocław University of Economics, Contemporary Trends and Challenges, Wrocław University of Economics, Wrocław, 428, pp.308–324, DOI: 10.15611/pn.2016.428.26.	Scientific article, MNiSW list B–10 points.	A7
8.	Wojewnik-Filipkowska A. (2012), <i>Investment in the process of urban regeneration – concept of investment economic evaluation</i> , The Studies and Materials of the Polish Real Estate Scientific Society, 20(3), 2012, Olsztyn, pp.247–259.	Scientific article, MNiSW list B–7 points..	A8

9.	Wojewnik–Filipkowska A. (2016), Economic and Social Effects of Urbanization – Case Study Analysis, [in:] Leon–Garcia A., Lenort R., Holman D., Staš D., Krutilova V., Wicher P., Cagaňová D., Špirková D., Golej J., Nguyen K. (eds.), Smart City 360°, Springer, vol. 166, pp.760–773. DOI: 10.1007/978–3–319–33681–7_67.	Scientific article in peer-reviewed materials from the international conference indexed in the Web of Science and Scopus. MNiSW–5 points.	A9
10.	Wojewnik–Filipkowska A., & Węgrzyn J. (2019). Understanding of Public-Private Partnership Stakeholders as a Condition of Sustainable Development, Sustainability, 11(4), 1194, pp. 1-16, DOI:10.3390/su11041194. The statement of co-author (annexe 6.3)	Scientific article indexed in Web of Science and Scopus, Impact Factor: 2.075 (5-year impact factor 2,177). MNiSW list A–20 points.	A10
11.	Wojewnik–Filipkowska A. (2017), Rationalisation of Investment Decisions in the Sustainable Management of Urban Development; is a New Paradigm Needed?, Problems of Sustainable Development, 12 (1), pp.79–90.	Scientific article indexed in Web of Science and Scopus, Impact Factor: 0,804 (5-year impact 0,959). MNiSW list A–20 points.	A11

The presented achievement, which is a series of 11 related publications, for the purpose of summary of the scientific accomplishments, I organized into 4 chapters (table 2).

Table 2. Investment management in the city – determinants, organisation, financing and effectiveness evaluation

<p>1. Determinants of investment decisions in the city</p> <p>1.1. Decision making in the investment management of the investment <i>Decision-making in corporate and municipal asset management (literature review) [A1]</i></p> <p>1.2. Identification and systematisation of investment management determinants <i>Identification and systematization of regeneration investment projects management determinants [A2]</i></p> <p>1.3. The key areas of investment management <i>Municipal investment management – a comparative analysis of the decision-making in Gdansk and Edinburgh) [A3]</i></p> <p>2. Methods and sources of investment financing</p> <p>2.1. Principles of investment financing <i>Principles of revitalisation investment financing on the example of chosen case studies in Gdańsk and Sopot</i></p> <p>2.2. Public-private partnership <i>Principles of public-private partnership financing-Polish experience [A5]</i> <i>The importance and dissimilarity of partnership in revitalisation investment on the example of chosen project in Gdańsk and Sopot [A6]</i></p> <p>2.3. The impact of financial strategy on investment profitability <i>The impact of financing strategies on efficiency of a municipal development project [A7]</i></p> <p>3. Evaluation of investments effectiveness</p> <p>3.1. Economic and financial effectiveness <i>Investment in the process of urban regeneration – concept of investment economic evaluation [A8]</i></p> <p>3.2. Economic effects of investments <i>Economic and Social Effects of Urbanization – Case Study Analysis [A9]</i></p> <p>3.3. Social effects of investments <i>Economic and Social Effects of Urbanization – Case Study Analysis [A9]</i></p> <p>4. The rational investment management in city – proposal for a new approach</p> <p>4.1. Perception of the success <i>Understanding of Public-Private Partnership Stakeholders as a Condition of Sustainable Development [A10]</i></p> <p>4.2. The theories building the new paradigm <i>Rationalisation of Investment Decisions in the Sustainable Management of Urban Development; is a New Paradigm Needed? [A11]</i></p> <p>4.3. A model of investment management at the strategic and operational level <i>Rationalisation of Investment Decisions in the Sustainable Management of Urban Development; is a New Paradigm Needed? [A11]</i></p>

5. Discussing the scientific purpose of the work

5.1. Justification of the research area

Management of investment realised in the cities has a major impact on the future of the world. In cities, more than 60% of the population lives there, and it is estimated that it will be already 80% at the end of this century. Population, living and staying in the cities, requires certain investments that will meet the needs of their residents and the "users" (e.g. tourists). The city, as an area with a high concentration of population and economic activity, social, technical, administrative and political, is so interesting, but difficult subject of research. It offers many possibilities, but its harmonious development requires appropriate investments management. That means the direct and indirect responsibility of decision-makers and other, widely understood, participants in the investment processes carried out in the city. Even though the public sector is by law responsible for shaping spatial policy, stakeholders, representing the public and private sector "shape" the city. The city becomes a kind of „common good” – the community, entities which are involved in its management. The city and also preferences for concept development change. It is, inter alia, a result of changes in the conditions of its operation. There are new needs and projects redefining the structure of the city toward the friendly city. With this awareness, the research for answers relating to complex questions about the future of cities is justified. Questions relate to the role of the city, the directions of its development, the criteria for assessing this development, inspiration, creativity, activity, social capital, scope the regeneration of brownfields, informatics and new technologies, cultural heritage, education, the economy, housing, welfare and so on (Dziworska, et al., 2019). These relate to investment management in the city.

City management and investment management are not new concepts, but they require a new approach, as, inter alia, is connected with the growing and changing needs and awareness of decision-makers and residents. Not only the expectations in terms of quantity and quality of investment and related goods and services change but also mentality. perception and expectations for participation, citizenship and public accountability, co-decision and co-determination changes. The development of technology, the growing awareness of the need to respect the limited financial, produced, environmental and social resources, and other determinant, including current and also global phenomena (Frączkiewicz-Wronka, 2008) that which during the development of the city (among others urban sprawl, gentrification, migration) – all set the direction of exploration and subsequent questions, how/whether the threats and new challenges accompanying processes of development, can be used.

Many researchers believe that modern city requires or will require immediate solutions. Häjer and others predict that around the year 2050, the drastic differences in development potentials will result in significant disparities in the quality of life of their inhabitants (Images of the Future City, 2007). This process has already begun and involves taking specific actions (Dziworska, Wojewnik-Filipkowska i Trojanowski, 2019) at various levels of management. For example, the solution related activities are already reflected in the adopted Strategy Europe 2020 (Komisja Europejska, 2010) in 2010. This document formulates the priorities related to the intelligent knowledge-based growth and new technologies, sustainable growth geared to the efficient use of resources, also of the environment. The strategy stresses the need for social inclusion, creating new jobs and making social projects. The strategy, though, aimed directly to the regions, refers also to cities. URBAN (1994-1999) and URBAN II (2000-2006) are urban initiatives, which aim to support the economy, equality, regeneration and improvement of the environment, will eventually support the effective management and development of cities too. New Urban Agenda (United Nations, 2016), which concerns, inter alia, demographic problems, social inequality, land-use planning and the use of decreasing resources, was adopted in 2016. It was approved in Europe in 2016 in The Amsterdam Pact (Union, 2016). The Pact focuses on making better use of existing financial and legal resources, and knowledge. Also, the problem has been noted in Poland. The Council of Ministers has, in the form of a resolution, formulated a National Urban Policy 2023 (Ministerstwo Infrastruktury i Rozwoju, 2015) which is to strengthen the capacity of cities and urban areas towards sustainable development. The problem of cities is then visible at the strategic level.

Investments, affecting the present and future of the city, from a generic point of view, are determined by the national and local government policy. The state creates the conditions and rules relating to the functioning of all entities involved in the life of the city, but at the same time, these entities create the city. The political program of the government determines the action of local government administration, affecting development vision included in the corresponding documents (Szczepankowski, 2016). The state and local government policy, in connection with the global circumstances, determine also the level of prosperity (or downturn), which determines the financial situation of the cities, both through the prism of public finance, and entrepreneurship. **Visions of development** and financial situation will determine the specific actions related to the local planning, influencing the investment decisions of local government units, corporations, and individual citizens. The objectives of the undertaken investment activity and ways to evaluate investment decisions will then depend on the economic system, taking into account the level of latitude, the opportunities for cooperation

between the public and private sector and the intensity of the market impact (Siemińska, 2002; Wojewnik-Filipkowska i Rymarzak, 2015). This can be concerned in terms of the problem of **organizing the investment process**. The objectives and scope of the investment activity also depend on the financial system, which determines the possibilities and the level of availability of capital necessary for the conduct any activity (Jajuga i Jajuga, 1996), also investment. This relates to the problem of **investment financing**. Finally, each investment process you should be evaluated along with its effectiveness, in the context of *ex-ante* and *ex-post* evaluation.

The proposed scientific achievement is focused, among all the issues related to the management, on planning and investment decisions, their determinants, in particular, financial and organisational, and on the efficiency evaluation. The problem of decision-making, particularly by local and regional authorities, is associated with, among others, the theory of public choice and agency theory (Gwartney i Richard E, 1988; Frączkiewicz-Wronka, 2008). Synthesis of the theory of public choice in this context indicates that the reorientation of the market and competition, which is intended to reduce the negative effects of public choice theory. Agency theory and, due to the strong asymmetry of information and the variety of actors involved in the management of the city, is much more complex. The decision-making process, accountability and evaluation of effects are "fuzzy" (Kowalczyk, 2008). This makes the process of investment management in the city, contributed by the public and private sectors, difficult. On the basis of the above, it seems that the studies relating to the management of a dynamic and complex urban system, from the perspective of all participants interested in the „common good” (city), in the context of the investment management is justified. Seeking, developing and adopting a new approach to investment management is, in my opinion, urgent and necessary.

5.2. Research subject and research

Investment management is one of the key issues of the development of modern cities. In particular, **investment decision making, organisational and financial determinants and effectiveness evaluation**.

Infrastructure investment, investment in real estate, and regeneration, among others, determine the potential and capabilities of cities. They are diverse, in terms of technical characteristics, location, funding. As these investments are taken by both the local government, as well as by companies, the investment management gains particular importance, and the problem of planning and making effective investment decisions, whose consequences will be felt by local residents and entrepreneurs of the site in the future, becomes one of the key issues. The first function of the decision-making process is planning and each organization must cope

with it. The planning is carried out in certain conditions, usually “disposable” and unique. Hence, understanding of the determinants is the first step in planning and decision making. The second step is the selection of appropriate management methods. Modern management is then a challenge for the managers – operating conditions change not only in Poland, but market economy changes as a whole.

The subject of the research is investment management in a city, considered from the following points of view (dimensions):

- the entity, that is, from the point of view of the **city, as the *common good***,
- the subject of management, that is, the investment process in fixed assets, understood as an **investment in infrastructure, real estate and regeneration investment**,
- the degree of concretization of decisions and actions which in relation to the subject of management can focus on identifying broad solutions (**strategic decisions**) and their implementation (**operational decisions**),
- management functions, including **investment planning** and **investment decision making** in broad understanding, and **investment organisation**, including **methods and sources of financing**.

The study sets the research problem, which aims to organize existing knowledge, but also to provide new knowledge (Kolman, 2004; Sudoł, 2007) in the form of a new author’s conception. The research is about the processes of individual and collective decision-making by public and private sector investors, in the investment management in the city relating to infrastructure investments, real estate investments and regeneration investment of revitalisation, in the context of their determinants, in particular, the financial and organisational ones, and the investment effectiveness assessment. The research problem is also associated with the transfer of knowledge in the process of investment management. Knowledge transfer is double-sided, that is from commercial entities to local government units, but also the local government might try to use solutions from other cities, countries, institutes, organizations, including businesses. **The research problem concerns searching for the tools supporting the management of the city, as the *common good*, co-managed by the public sector, businesses, residents, making decisions relating to investment on the strategic and operational level.** Investments in infrastructure (both economic and social), investment in real estate (of different functions), or regeneration investments (often with a historical context), fulfil different needs and in this way are an expression of the city as the *common good*. Assign a category of the *common good* to the city results from determinants related to the management of the city and is, in a sense, a

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synthesis of the city as an entity in this research. A proposal for the solution of the described problem is to develop the concept supporting the process of individual and collective investment decision-making relating of public sector and the private sector, at the strategic and operational level, respecting the differences of both sectors and the implementation of the vision of the city development, taking into account the principles of sustainable development.

5.3. The current state of knowledge

The achievements of public management and investment management knowledge would be addressed in terms of the subject of research. In particular, the theory of new public management, co-governance, sustainable development, stakeholder theory and the concept of social responsibility create the grounds for the research. The question of the implementation of the investment from the perspective of the city, as a *common good*, that is, both investments made by local government and commercial sector, is the research thread relatively poorly recognized and described in the literature. Finally, the research touches the issue of the model of the modern city, its determinants and the assessment of the investment realized in a city. The above-mentioned threads will be presented below in the context of the existing state of knowledge.

The fundamental functions of the management process are, as already stated, planning and decision-making. J. Penc concludes that modern management can be considered, without much simplification, as one „string” of deciding and creating conditions for the effective implementation of decisions (1996, strony 8-9). The concept of deciding, synonymous with the concept of problem-solving, goes beyond the narrow definition of deciding. It involves a series of steps in addition to the single act of choice. It includes analysis of formulated policies, review and evaluation of decision-making criteria, application of the selected criterion and decision-making (in a narrow sense) which is a choice based on that course of action. This is a broad understanding of decision-making (*sensu largo*) (Supernat, 2003; Supernat, 2008). The author of the decision-making in administrative theory (Simon, 1947), formulated the theory of rational decisions found out and pointed out for the limitations of the rationality. Rationality, as the basic concept of decision theory, is today understood and described in different ways. It is particularly important in the case of the decision-making process ensuring a variety of values. The values are, in particular, the rule of law, justice and effectiveness (Knosala, 2006). The decision-making process in management in the city, including public investment and sustainability, is the subject of the multi-dimensional research by outstanding contemporary economists as J. Stiglitz (2000) and P. Krugman (1993). As the local government is responsible

for the management of the city legally, there are also other entities involved, (Sudoł, 2013), the concept of **public management** arise. City management is carried out by the relevant bodies and agencies of the public administration. J. Stamp (1923) indicates the specific characteristics of public management. This is the principle of unity, the external financial control and the subordinated nature. H. Simone (1946) claims, that public administration is political and bureaucratic. According to R. P. Appleby (1949) there are three important aspects which distinguish the public governance: political nature, public accountability and the impact. P. F. Drucker (1973) indicates the specific needs, values, goals, and measurement, as significant differences between public and corporate management. Public and private management is definitely different in terms of the objectives pursued (Atkinson i Stiglitz, 1980; Boland i Fowler, 2000; Alford, 2001; Frączkiewicz-Wronka, 2008). Traditionally, the public sector pursues social objectives (public) and private sector – generally, formulate financial goals. However, both sectors play an important role in the development of the city. So, despite these differences, in many developed countries, the legacy of knowledge and trends of business theory penetrate into other spheres and public governance is subject of changes (especially in modern economies), aiming to co-decision-taking process and co-management of the city by all its stakeholders. Despite the challenges of implementation (Bouckaert, 1993; Chan, 1999; Poistert i Strieb, 1999; Yang). The public interest in improving individual areas of management (such as real estate management) and as well as improving the strategic management in the broad sense is growing. According to O. Kaganova (2011) some solutions and practices are universal. With respect to the specifics of (country), solutions can be moved. This means that public governance requires continuous research. A. Frączkiewicz-Wronka, among others, indicates it directly stating a question of “the best in certain conditions” (2008, str. 25). As a result, in the context of the management of the city, in particular regarding the development of approaches to public administration (understood as the activities carried out by various entities, bodies and institutions for the implementation of the public interest), apart from the concept of public management, there are another terms used. They include *new public management* and *public governance*. It somehow reflects the diversity on the one hand, and, on the other – complementarity of public and private management.

The concept of the NPM has appeared in the 1980s (Hood, 1991). Since then, despite the criticism, the elements of the concept are implemented worldwide (Box, Marshall G, Reed i Reed, 2001). NPM is based on implementation solutions used in private sector management, in the public sector, which is possible due to the dynamic process management, where “good practices are developed during many trials related to the process under different conditions”

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(Grajewski, 2013, str. 53). These are, among others: the managerial approach, results-orientation, decentralisation, privatization, outsourcing, concentration on personal responsibility, flexible employment, organisation of work and structures, as well as asset management, performance and effectiveness improvement (Andirsani, Hakim i Savas, 2002; Frączkiewicz-Wronka, 2008). Although the NPM has become a global phenomenon, the literature of the subject indicates that this concept is insufficient (Stoker, 2006; Bryson, Crosby i Bloomberg, 2014; Fisher, 2014; Kalambokidis, 2014). J. M. Bryson et al. (2014) note that new approaches must answer to the challenges of the world, which is characterized by a number of network links and the values of democracy count more than the criterion of efficiency and effectiveness. Citizens, the private sector, non-governmental organisations – all with their needs and obligations, become active actors involved in resolving cases of public nature creating and developing **public co-management**, while the public sector must remain the guarantor of public values.

In addition to the above, the theory of **sustainable development**, **stakeholder theory**, the concept of **social responsibility** are the fundamental ideas for the research. Sustainable development, as a political category at the beginning, was soon incorporated into economic practice (Zeemering, 2009; Górczyńska, 2010; Nijaki i Worrel, 2012), as a concept according to which national wealth, thanks to the resources of financial, produced, natural, human and social resources, do not decline, and if possible, increase (Strange i Bayley, 2008, str. 106). Sustainable development requires balance in using, creation and maintaining resources that are characterized by rarity. According to J. Dąbrowski i T. Nowosielski (2013), “rules” of the concept of sustainable development are important elements the formulating the policy. T. Borys, among the key features of a sustainable development forming the rules, mentioned *sustainability*, *durability* and *balance* (Borys, 2010). These rules are reflected in the **stakeholder theory**, according to which, effective pro-investment policy results from the decision of the professionals, but taking into account the broad social entities (Heath i Norman, 2004). A stakeholder is anyone who has an impact on the decision-making process, or the decision-making process affect him (Freeman, 1984). The importance of stakeholder depends on their legitimacy, urgency and power. Legitimacy means that stakeholder has a legal, moral or another recognised claim, which may affect, behaviour, the process or the result of an organization decision. The urgency means the speed for the claims response to the interested parties in a timely manner (Mitchell, Agle i Wood, 1997). The growing interest and involvement of stakeholders in the governance process is a sign of our times (Jones P. S., 2003). M. Lyons et al. (2001) argue that the commitment of stakeholders will develop if they will have

the opportunity to learn, experience and acquire the knowledge. As a result, fully aware society will be able to contribute to sustainable development. Finally, **corporate social responsibility**, which, in essence, is a form of sustainable development at the microeconomic level, means that the social and environmental criteria are taken into account in the activities and in their relations with stakeholders at voluntary basis (European Commission, 2005). These theories form a “bridge” between public administrations, business and society (Fontaine, Haarman i Schmid, 2006) and at the same time, designate conditions of rationalization of public investment, which requires balancing and reconciliation of possible conflicts between the different objectives and reconciliation of the interests of different social groups.

Today, in the literature on the subject, the problem of the model of the modern city is widely discussed. Understanding the role of cities in the development of socio-economic, the discussion relates to an effective model of the city, its ideas, principles, characteristics and benefits. Each city, as stated by A. Klasik (2018, str. 18), is a system of socio-economic development which consists of four essential elements: (1) urban space, (2) people, (3) activities, and (4) infrastructures, facilities and services. The leading axis is people and space, where the future of the city created, determined and discussed. The second axis is the activity of all entities and infrastructure. These elements and “axes” are subjects of different focus in different concepts of city development. There is a significant number of publications about *smart city*, named also as a new generation city or 2.0-city (Szelałowska, 2014) *compact city*, *green city*, *eco-city*, *competitive city*, *creative cities* (Klasik, 2018; Pięta-Kanurska, 2013), *attractive city*, and even *slow city* (Szelałowska, 2014). The category of *a resilient city* and *vulnerable city* (Drobniak, 2015) is also important. *Networked*, *entrepreneurial*, *cluster*, *intangible-factor-based cities* have been also distinguished. What more, L. Mierzejewska claims that these concepts are not disjoint (2015, str. 7). They can be connected, such as a *smart slow city* (Farelnik i Stanowicka, 2016). For example, in recent years researchers study the idea of a *smart city* in particular. *Smart, intelligent city* (Stawasz, Sikora-Fernandez i Turala, 2012; Bryx, 2014) are high-tech cities, seeking for savings of all kind of resources, time and energy. However, smart growth is not based on innovative technologies exclusively (Girard, 2013). They are a tool, not the aims of intelligent development. Development of intelligent city aims to promote the use of modern technology in everyday life, for example, improving urban traffic and mobility of inhabitants; in the relations between city authorities, administrations and citizens – smart often means using new communication channels. In an economic context, smart solutions are associated with business information and communication technologies, and also with the creation of technology parks.

More and more new visions of modern cities confirm the interest and importance of the topic. However formulated proposals require analysis and synthesis, to manage the city, taking into account lifestyle trends, new technologies, international experience, international and regional circumstances, focusing on the interests of the community of the city, while maintaining the principles of sustainable development. The absorption of knowledge, new technologies, rapid flow of information, the free movement of people, capital, and goods and services, improvement of the quality of material capita take place in the conditions of the high sensitivity of surrounding for influences and openness of the people towards quality changes. They are desirable phenomena as long as they create new value in the sphere of the social, economic or natural environment (Dziworska, Wojewnik-Filipkowska i Trojanowski, 2019). Paradigm of **the city, as a common good** emerges in the discussion about the future of cities (Rifkin, 2016), and this perspective, “being an answer for the challenges created by the environment of the organisation” (Kozuch B. , 2016, str. 169), has been taken in the research – **the common good can be the community, engaged in co-management of the city**. Although M. Słodowa-Helpa (2015) claims, that the term a *common good*, is one of the most difficult to explain and its dimensions may not be included in the precise categories. Simultaneously she also indicates that the *common good* can be recognised from the point of view of the different types of groups. The *common good* concerns then the community, which is self-sufficient as a whole. The community decide democratically what is the *common good*. The *common good* can be then community actors participating in the city management. Therefore, the *common good* as “highly versatile system of governance, resource management and the creation of a kind of sense satisfying the human needs in an effective but overall right way – will probably be part of the new order” (Słodowa-Helpa, 2015, str. 13). M. Grabkowska (2017) says in a similar way, that the common good integrates the community and it is a set of social action, the value and standards used to manage the material and non-material resource of the common good.

The essence of modern cities refers to a visible spatial diversity and absorption of city-creating factors (**determinants**), both at a global and regional level, which is a natural and long-lasting process. Some cities actively participate in globalization, absorb immediately globalisation resulting benefits, and others are passive recipients of these benefits. The problem is the identification of the skills and use of resources. The future of the city is determined by internal and external conditions, also of global dimension, but must its development must be aimed towards the interests of the local community. The literature of the subject discuss the factors determining the development of the city. The determinants can be categorised in a

dichotomous way. External, related to the environment (further and closer) and internal. The external determinants, also known as macro-environment, are classified from the generic point of view into technical, economic, social, legal, political, ecological, international (Penc, 1996). There are organisational and spatial determinants (Nowak i Skotarczak, 2012); globalisation-related, cultural and historical (Szczepankowski, 2016). The external distant environment creates the conditions and the efficiency and degree of achievement of the goals. It defines the capabilities of development and operation. These determinants cannot be changed. Therefore understanding these terms allows determination of their impact on the environment. This helps in reducing the degree of uncertainty and allows customisation of the determinants to own strategic decisions. The external close environment, called micro-environment or competitive environment relates to entities of competitors, suppliers, etc. This environment is characterised by the feedback loop between the impact of the city and its surroundings. Next, to the external factors determining the city development, there are also internal factors, resulting from the conditions, resources and power of the entity (Griffin, 2006, str. 103). They are the types and structure of the resources, including material, financial and human resources. The financial condition is a factor of the wider economic and financial conditions, which relates to the condition private entrepreneurship development, state of public finance and the financial resources available to the public authority, availability of own resources, the possibility of obtaining additional sources of funding, and the state of local investment.

Financial resources are one of the resources which the level, structure and availability determine the development. In the context of the city development, the question relates also to produced resources (real resources), human resources, social capital and natural capital. The capital is the main economic category. According to the materialistic approach, the capital is the real goods enabling to create, new goods or services in the future, with resource existing at a given time (Hicks, 1988). It means, that the resource becomes capital only in a certain social and economic context connected with generating the benefits for the users. These benefits can have monetary and non-monetary nature because not all goods can be commercialized (Matysiak, 2008). H. De Soto (2002) proves that legislative solutions, statutes, and regulations primarily (which constitute the legal determinants) and the managing authorities determine the process of resources changing into capital. The legal ownership represents social and economic characteristics of the resource, provides knowledge about the availability of resources, tends to greater accountability and increases mobility and security agreements. A. Matysiak (2008) indicates the precedence of financial resources in the economy, as a factor determining the social and economic potential, because it provides access to all the factors. This situation,

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however, has been changing, as knowledge becomes a factor of growing importance. Knowledge is an attribute of human resources, and relationships, which is the attribute of social capital contained in the networks and used in the activities by the people (Lin, 2002). This is trust (Coleman, 1988) credibility, moral standards, which are implemented in non-material and non-market actions and behaviour of the members of the group. At the same time, the trust is attached to the values and institutions, which E. Siemińska (2002, str. 46) calls organisational culture. The social capital provides social interactions, including formal contracts, in which the financial capital plays the most important role. However, social capital provides access to common, non-market goods, which can not be acquired with money. For this reason, A. Matysiak assigns greater liquidity to social capital than to financial capital. In the context of city management in terms of financial determinants, a specific phenomenon joining the issue of the financial resources and the human and social capital is a public-private partnership. **Public-private partnership** is relatively well described in the local (Brzozowska K. , 2006; Moszoro, 2010; Jadach-Sepiolo, Sobiech-Grabka i Herbst, 2015; Szreder, 2004; Nogalski, Szreder i Walentynowicz, 2006) and international literature (Rosenau, 2000; Savas, 2000; Hodge i Greve, 2016; Shaoul, Stafford i Stapleton, 2008; Garvin i Bosso, 2008), (Brzozowska, 2006; Moszoro, 2010; Jadach-Sepiolo, Sobiech-Grabka i Herbst, 2015). It should be concerned as a method of financing, requiring special procurement and activities (organisation).

Finally, among the primary topics for the research, the achievements related to the assessment of the effectiveness of the investment should be indicated. Assessment of the effectiveness allows, at least in theory, to identify investment projects aimed at meeting the most urgent local needs (Drobniak, 2005). In theory, the concept of effectiveness can be defined in terms of the so-called Pareto effectiveness, also known as the *welfare improvement criterion*, and Hicks–Kaldor effectiveness. The first criterion means that due to the recommended project, the welfare of the people, social groups or operators participating in them will remain on the previous level or will improve (Layard i Glaister, 1999). The second criterion means that the project is effective when the sum of the benefits exceeds the costs associated with the costs (Drobniak, 2012). On the basis of the management, “added value” is searched. This category, however, is the notion of a heterogeneous perspective, adopted by the sector or stakeholder, for which the benefit is available (Rogowski, 2008, str. 82). Hence, the criteria essentially can be divided into tangible and intangible criteria, and into economic, technical, social and environmental criteria. Evaluation criteria take into account also the externalities, that is, the impact of the decision will have on the entity, synergy with other decisions, the creation of development opportunities in the long term, the distribution of added value among the

stakeholders. The rationalisation of decisions in the private sector is mainly, but not exclusively, determined by the criterion of profitability, where market factors (availability and cost of financing, capital-intensiveness), economic (the implementation of development strategies, development economy, the increase in value, profit/costs, warranties, service, etc.), perception of financial gain and the risk (Stanley, Adair, Berry, Denddis i Hirst, 2000, str. 110). From the public sector point of view, the evaluation of the benefit is unambiguous and the basic evaluation criterion will be the belief of the wider effectiveness taking into account societal benefits (improvement relating fulfilling needs, quality of service, territorial scope, security, aesthetics) and ecological (conformity with environmental policy, improving the environment, the health-related conditions), all together determining the quality of life. The other criteria will be relevance, utility and durability. At the same time, the investment decisions of cities, next to social and environmental criteria, are taken under market economy conditions and therefore are subordinated to the requirements of the economy, which requires investors to look for optimal ways to use your resource (Hayness i Nunnington, 2010, str. 45).

5.4. The research gap

Previous studies on investment management are carried out at a fairly high level of generality. Part of the significant research is carried out from the perspective of economics (Kazmierczak, Curwell S i Turner, 2007) and is concentrated one financial aspect of selected sector (Bachor, 2009; Kotlińska, 2009). Although the current knowledge exposes the role of infrastructure investment as an integral factor of local development, generator of new features and source of values (Ratajczak, 2000; Markowski, 2004), most of the research is, however, conducted from the point of view of urban and spatial planning, which does not take account of the investment management from the point of view. Investment management in the city is, therefore, a relatively new issue (Howarth, 2006), at least in Poland, both in terms of investment in infrastructure, real estate and regeneration investment. The closest to this problem are S. Belniak (2009) and the team of the Institute of Urban Development (Wańkiewicz, Janas i Jarczewski, 2010), although their work focuses on regeneration investments. Also guides of the European Commission are close to the identified problem where investment management is exhibited as a whole, but only through the prism of the project's life cycle (European Commission, 2005). Taking into account the existing state of knowledge, and on the one hand, the diversity, and, on the other hand, the complementarity between public and private management, the subject of research concerns possibilities of application of the best practices of the private sector in city investment management. This issue is the subject of research, but

in the context of the wider asset management (Gibson, 2000; Jones i White, 2008), where the special attention is given to the existing resources, and less to new resources, emerging in a result of the investment. At the current knowledge and relationships between public management and the market, the city can be treated as an analogue of the company (Kuciński, 2011) and as a „system with a complex relationship of mutual dependencies” (Grajewski, 2014, str. 276). Therefore, result-orientation, the introduction of market mechanisms, consumer-oriented, attention focused on the management, deregulation, creation of conditions for the initiative, costs reducing, flexibility, innovation, entrepreneurship, apolitical nature – are only selected features of the *new public management*. NPM can be used in the development of new, corresponding to the requirements of today's circumstances, the concept supporting the process of individual and collective investment decision-making relating of public sector and the private sector, at the strategic and operational level, respecting the differences of both sectors and the implementation of the vision of the city development, taking into account the principles of sustainable development.

The existence of gaps in the area of study also confirms B. Kozuch, noting that “organizations other than businesses have become the subject of the management science interest just recently” (2005, str. 12). Furthermore, from the research conducted by M. Marona (2017) results, that the issue of public real estate, covered also in this research, is the subject of study of researchers from the Poland, Germany and the Netherlands. However, this topic was less than 1% of all papers reported (and published respectively with certain time delay) at the Conference of European Real Estate Society (ERES)² in the period 2010-2015. M. Marona, notes that the scientific discussion is carried out from the perspective of the two levels of management: operational and strategic. The author argues that the subject of public real estate is the relatively rare subject of investigation also in Poland because only 7.5% of articles in two leading Polish real estate journals (*Real Estate Valuation*, *World of Real Estate*) published articles in this topic.

Finally, the problem in cities refers to the implementation of development concept and, from the local government point of view, making decisions based on modern and innovative management methods (Kozuch i Kozuch, 2012), although public sector organization change towards the use of tools specific to management in the private sector (Frączkiewicz-Wronka,

² European Real Estate Society (ERES) - the largest in Europe and one of the largest in the world platform for presenting research results, mainly of an economic nature, on the broadly understood real estate topic, covering the subject infrastructure, real estate and regeneration investments.

2008). In relation to the Polish cities, studies on the evaluation of the cities and of the scope of individual concepts implementation in the context of supporting decision-making process relating to the functioning and future of the city is missing (Stawasz, Sikora-Fernandez i Turała, 2012). The concept of *co-city* (common city) is considered basically only in the context of the spatial economy (Grabkowska, 2017; Iaione, 2016; Czepczyński, 2012). The studies of the relationship between the essential concepts (including **sustainable development, smart city, stakeholder theory** and **social responsibility**), creating the foundation for the city and city investment management are also missing. Today's investment management must be a synthesis of the classical, market and learning approach (Kowalczyk, 2008); must be a synthesis of functional and process approach (Weiss, 2012); must respect the diversity of entities participating in the life of the city, but also creating a city, which requires identification, classification and understanding of the diverse determinants of investment decisions taken by the above-mentioned entities. This diversity impacts the criteria of evaluation which are applied in the process of investment decisions making and success evaluation. This approach requires the operating in a modern way, which means activity, creativity and flexibility. The primary resource of the modern organization is knowledge which is a mean to achieve social and economic results. Knowledge, used to create new and better systems of action, includes knowledge of the same organization, customers needs and expectations (Wereda, 2004). This “system of action”, which covers the knowledge about the organization, the needs and expectations of stakeholders, including the classic, market and modern theories, is proposed **the concept supporting the process of individual and collective investment decision-making relating of public sector and the private sector, at the strategic and operational level, respecting the differences of both sectors and the implementation of the vision of the city development, taking into account the principles of sustainable development.**

Presented research and their results, in the form of a series of the articles, try to fill an identified gap – with regard to the first the management functions determining the success of the management. This function is planning, necessary for the decision-making in the management of the investments (investment process) in the city. Clear deficits in the planning of the investment process and the inadequacy of management methods constitute an important limitation of the Polish local government and the same cities, therefore the study of this phenomenon should be considered positively. Focus research on investments in the city is the right choice, as cities concentrate on the greatest needs and investment opportunities. At the same time, in general, the difficult financial situation of local authorities and the scale of investment needs suggest the need to develop new mechanisms of co-realisation and co-

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financing of investment with entities from the private sector. Taken research is then a part in the discussion on exploration and development of tools supporting investment management on the strategic and operational level.

5.5. The objectives, assumptions and research methods

The city, in the context of the research subject, can be perceived as the organisation, therefore the path of tinkering in the research is determined by following paradigms of management science (Sudoł, 2014):

- organizations can be considered as a system, which means the need to take into account the relationship between the components of the system during implementing the changes in the organization,
- all organizations operate under the influence of the environment, therefore the problems associated with functioning and development must be considered with regard to the relationship with the economic, social, political and cultural determinants,
- the survival and development of the organizations depend on the ability to learn and ability to flexible adjustment to anticipated internal and external determinants.

Finally, I would suggest, after S. Sudoł, the assumption that management, as a „path” of information and decision processes, requires information, progress in their processing and interpretation, and improving methods of decision making (2014, str. 24), which also goes along the aims of this research. The main objective of the research is **developing the concept supporting the process of individual and collective investment decision-making relating of public sector and the private sector, at the strategic and the operational level, respecting the differences of both sectors and the implementation of the vision of the city development, taking into account the principles of sustainable development.**

The detailed objectives (RO), derived from the main objective are as follows (the detailed research objectives recalls the relevant articles using the symbols according to table 1):

RO1. Identification, systematization and evaluation of investment management determinants in the conditions of current challenges (Chapter 1, [A1, A2, A3]).

RO2. Specification of the methods and sources of investment financing (Chapter 2, [A4, A5, A6, A7]).

RO3. Identification of the criteria for the investment effectiveness evaluation (Chapter 3, [A8, A9]).

RO4. Presentation of selected concepts to develop the author's concept of investment management in the city (Chapter 4, [A8, A9]).

The first objective is cognitive and theoretical. In cognitive terms, it is associated with increased and systematised knowledge about the determinants of the investment decision-making process regarding investments realised in the city by both the public and private sector. In theoretical terms, the objective is associated with filling the research gap relating to investment management in the city, from the perspective of the city as the *common good*. In particular, it is associated with the identification of key areas of investment management and a proposal of a systemic approach to investment management and effective action leading to maximum satisfaction relating to the identified objectives of the investment in the condition of specific (often limited) resources (assets).

The second and third objective is cognitive. The second objective is associated with increased and systematised knowledge about methods and sources of financing, and the investment effectiveness evaluation. At this point, it is necessary to indicate the distinction between the term “financing method” and “financing source”. According to the literature, the source of financing relates to the identification of internal or external, and equity-based or debt based financing. The method of financing refers to the financing of the balance sheet (meaning financing within the framework of an existing entity) or off-balance sheet (financing obtained by specially created for the purposes of the investment entity, so-called special purpose vehicle company; the method known in the literature as *Project Finance*) (Wojewnik-Filipkowska, 2006; Rogowski, 2008; Różański, Marszałek i Sekuła, 2006; Brzozowska, 2009; Czerkas, 2002; Yescombe, 2013). In the context of the second objective, the definition of the concept of effectiveness and the identification of the other criteria used in the evaluation of investment is needed. Ultimately, the realization of the aforementioned objectives is subordinated to determination because of the financial situation of the investors in the cities and the scale of investment needs, there is the need to strengthen the partnership mechanisms (including a public-private partnership) and co-governance. There is a need for proper allocation of scarce, especially financial, resources, too. In consequence, these require continuous improvement methods to evaluate investment effectiveness.

The fourth indicated objective is theoretical, because it fulfils the gap relating to the use and integration of various concepts in the process of individual and collective decision-making of investment by the public sector and the private sector, on the strategic and operational level, respecting the differences of both sectors and the implementation of the vision of the development of the city, taking into account the principles of sustainable development. It is also a cognitive objective, because the relationships between the essential concepts of sustainable development, smart city, triad creativity-circulation-synergy, stakeholder theory and social

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responsibility, creating the foundation for the management of the cities and investment management in the city, are systematised. Within the fourth objective, the approach to investment management on the strategic and operational level was developed scientifically. Finally, the fourth objective has also an application value. The proposed concept is intended to support the process of individual and collective decisions, respecting the difference between public-and private-sector entities, and the vision of the development of the city, as the *common good*.

The main research assumption is as follows: **Investment management in cities requires acceptance of a new approach, in particular, the principle of sustainable development, smart city, resilient city, stakeholder theory and social responsibility.** The above mentioned detailed objectives relate to detailed research assumptions (RA). The formulated research assumptions correspond to the problems which were the subject of research in the articles making up the publication cycle. The relevant articles are indicated along the individual research assumptions using symbols (according to table 1).

RA1. As a result of changes in Poland and changes in the market economy as a whole, there are new determinants of an economic and social nature influencing the investment decisions in cities. This shows a need to identify the key areas of investment management. [A1, A2, A3]

RA2. A consequence of the financial situation of the entities investing in the cities and the scale of investment needs is the necessity to strengthen the partnership mechanisms (including a public-private partnership) and co-governance. [A4, A5, A6, A7]

RA3. The allocation of scarce resources in a manner that optimizes the benefits requires continuous improvement of multicriteria analysis in the investment effectiveness evaluation. [A8, A9]

RA4. The new conditions of management make it necessary to deploy new concepts in investment management, both at the strategic and the operational level because the management of city on the basis of single concepts does not meet expectations all social groups. [A10, A11]

The research, in the implementation of the objectives, uses the following methods: analysis, critique and synthesis of the literature, a descriptive method, individual cases and computer simulation, logical analysis and construction. The methods of analysis, criticism and synthesis of the literature were used for: identification, systematization and evaluation of determinants in the planning of investment in city (Chapter1, [A1, A2, A3]), characterisation of the specific organisational and financial conditions (Chapter 2, [A4, A5, A6, A7]), identification and analysis of investment effectiveness criteria evaluation (Rozdział 3, [A8, A9]) as well as characterisation and connection of selected concepts relevant in the management

of investments in (chapter 4, [A10, A11]). The method of computer simulation was used to develop a financial–economic model for different variants of investments, respectively, to evaluate the impact of investment financing strategy on its profitability (Chapter 2, [A4, A5, A6, A7]) and to evaluate financial and economic and social the effects of local planning (Chapter 3). Using the description, logical analysis and method of construction, the author's concept of investment management in the city was proposed (Chapter4, [A10, A11]).

Research techniques and tools used include direct observation, analysis of individual cases, the examination of source documents, interviews with representatives of the entities involved in the process of investment decisions making. The interviews were based on a questionnaire, divided into three sections, concerning (1) the organization of investment management, (2) strategy, planning and investment financing, and (3) the decision-making process. In particular, specific questions addressed the rules and procedures in the field of investment management, determinants affecting the investment planning and decision making in the investment process, criteria and methods used to evaluate the investment. The choice of method of case study, while targeting also demands for practical application, which can be used by policymakers in the process of rationalisation and improving the investment management process, is justified by the the nature of the work within the discipline of management science as indicated by several researchers (Czakon, 2006; Marona, 2017; Sudoł, 2013; Kozuch B. , 2005). In particular, the comparative analysis of cases studies were used. Time scope of the research includes essentially the period 2008-2018 which allowed to observe changes and the development in the subject of the research. The spatial scope includes different investment and selected cities in Poland, Germany and the United Kingdom (which allowed to observe similarities and differences in different countries). Finally, formulated general conclusions were confronted with world literature. The results achieved were compared with the existing knowledge using iterative comparison, which together with an analysis, critique and synthesis of the literature, allowed to formulate the concept of investment management in the city.

5.6. A description of the results obtained during the realisation of the research objective

5.6.1. Identification, systematization and evaluation of investment management determinants in the conditions of current challenges

(research objective ROI)

[A1, A2, A3]

The issue of investment is present in the activities of every entity. Local government and companies run various investment. Both types of entities carry out investment projects in the city fulfilling their, without a doubt, different aims. Investment in the city development, regeneration investments, investments in the renewal of the city, investment in infrastructure, investments in real estate are not synonyms for public either private investment. Rather, these investments together, whether carried out by the public or private sector, or jointly, are types of investment realised in the city. Thus, one of the most important issues is the question of making effective decisions in the management of these investments. At the same time, we have to accept that investing is not an aim itself. The importance of investment comes from the fact that they serve public tasks. Therefore, the focus should be put on the criterion of rationality. It should be understood as making decisions that will be based on a system approach to investment management and effective action leading to use of (most often limited) resources (assets) to obtain the maximum satisfaction of the goal. [A2]

Decision-making process in the investments management in the city (1.1)³ is determined by many factors, which include, among others, a different motivation and, consequently, the decision-making criteria. The effectiveness, understood widely, of decisions taken by local government and companies, concerning the investment processes in the city affects the economic and social well-being in cities. At the same time, many of these stakeholders, taking investment decisions, struggle with financial difficulties, which put pressure on the efficiency of their activities. Policymakers must take decisions justified by the needs and expectations of stakeholders, therefore, both the local governments and companies look for new tools to manage their resources (assets) effectively. Asset management includes not only managing the existing resource (real estate, infrastructure) but also investment management (creating a new resource). Asset management is a difficult and of many directions, because both local governments and business manage a diverse (in terms of rights, physical and economic characteristics) and significant (in terms of quantity and value) assets, comprising not only of land, buildings and infrastructure used for statutory objectives but also instrumental and income property. The principal purpose of investment management in the city refers to meeting the collective needs of inhabitants, creating the best environmental conditions of life

³ The numbering concerns the table of contents of the publication cycle ordered in 4 chapters (Table 1). The rule is applied further on in the text.

(living conditions). However, only when the needs of individual stakeholders are taken under consideration, it respects the concept of management of a city, as *the common good*. The author's concept presents asset management using a system approach as a structured formal decision-making process in local government and business, entities making investment decisions in the cities (figure 1). The concept is based on the input-output a model (according to which the public sector can be perceived as a system (Easton, 1965; Vedung, 2000; Kautto i Jukka, 2005)), integrated with a concept of *asset management*. [A1]

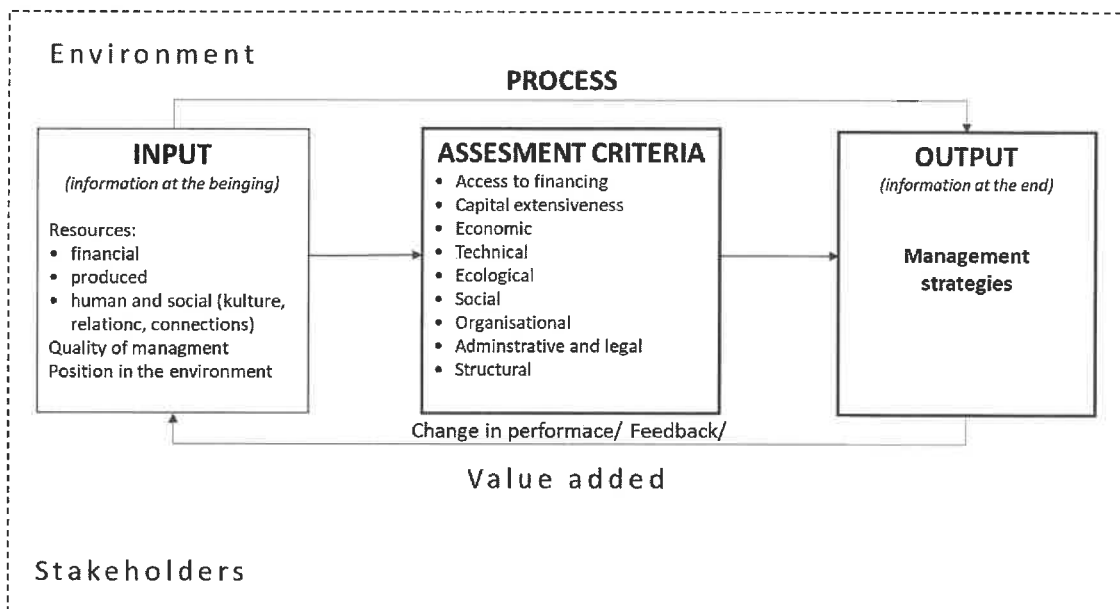


Figure 1. *Asset management* in local government and company, based on [A1]

Decisions are influenced by many different determinants (1.2). For both local government and business, the same factors may be for beneficial in making one decision, and not beneficial in the other. In addition, not every factor influence both entities in the same, and may have a different impact on the entities functioning even in the same sector. The direction and strength of the impact of the factor depending on the individual circumstances of the relevant entity making a specific decision at the specified time. The determinants include macro-economic factors (government policy, financial system, tax system, the level of and changes in inflation, legal, sociological change, cultural change, technological progress, environmental factors – distant environment), micro-economic factors (the specificities of the sector, the level of competition on the market – close environment) and internal factors (resources of the entity, the position of the entity, the quality of the widely understood management processes – so-called *input*). Making rational decisions is therefore difficult and a subject of dynamic changes in the environment and in a consequence risky. It is associated with the necessity of analyzing and resolving many issues. The type and range of actions undertaken

by both local government and enterprise will depend on the criteria of decision making. The evaluation criteria should include externalities, that is, the impact the decision will have on economic growth and its dynamics, synergic connections with other decisions, the creation of development opportunities in the long term, the distribution of income between stakeholders. For the rationalisation of decisions in the enterprise, the criterion of profitability appeals above all (but not only). The market factors (availability and cost of financing, capital-intensiveness) and economic issues (the implementation of development strategies, economic development, increase in value, profit/costs, warranties, service, etc.) are leading and the return (however defined by the company) and risk are a key criterion in the decision-making process. However, the evaluation of the benefits from the perspective of the public sector entity is not explicit and the basic criterion of evaluation is the belief of widely understood effectiveness of investment. The effectiveness includes social and ecological benefits and social and ecological costs. At the same time, the modern economy requires from all the investors to look for optimal ways to use resources, therefore, the local government must take into account financial criteria, which in this respect, make that the local government reminds the company. In another case, any action aiming to improve the quality of life should be accepted. Finally, the strategy accepted by the entity (*the output*) will result from resources, quality management and position in the surroundings (*input*) and adopted evaluation criteria. The benefits form the feedback and change in the performance are elements of added value created. [A1, A2]

The knowledge about the determinants of decision making allows making rational decisions, which justifies the implementation of the formal decision-making process (see image above), as a tool for structured problem solving and verification of the factors which should be included in the decision-making process. Implementation of one conceptual model for the public and private sector, which takes the point of view of the city, as a *common good*, can improve also communication between sectors (entities representing public and private sector) and eventually support making rational investment decisions. Implementation of the criterion of rationality in decision-making process means system approach to management (planning) of investment and effective investment meaning that at the specific (often limited) resources maximum degree of satisfaction is achieved. Investment planning is not a single task but continuous process consisting of actions relating to legal actions and real (physical) activities. The investment process is influenced by determinants which that can be grouped according to the categories of sustainable development into social, economic and environmental factors (table 3). At the same time, it can be indicated, that in the case of regeneration investment, a special type of investment in the city, the categories determinants grouped along with

sustainable development into social, economic, environmental factors are consistent with the areas of impact of these investments. [A2]

Table 3. Investment management determinants [A2]

Social (civilizational and cultural)	Economic (economic and legal)	Environmental (natural and technological)
Local communities' needs Substantial labour resources Science and culture level Local patriotism Tourist attractiveness Demographic phenomena Entrepreneurial predisposition Material condition of households Social communication Social awareness, active civic attitude Cultural values Social infrastructure (availability) Unemployment, social pathologies "Demand" for district Trends and fashion, foreign	Communication infrastructure (availability) Economic potential, investment, experience Local market Income Capital resources Creditworthiness Financial effectiveness of the operation Demand in the area Activation of local capital Credit policy of banks External competition External venture capital External market Quality of authorities Professionalism in city management The organizational and legal system of municipal services provision Real estate ownership structure Offers of cooperation, partnership Local regeneration program, development concept Tender procedures State support at the local level	Area and benefits of a place Spatial development plans Incomplete data on building and infrastructural development Level of technology Availability of land for development Spatial structure Post-industrial remains Aesthetics of the surrounding Technical condition and technological level of infrastructure Resources and values of natural environment State of the environment

Taking into account the above-identified determinants supports economic development, the improvement of environmental quality and amenities of the city, quest for social equality, especially because of the available housing and the construction of social relations. At the same time, the research results confirm that the same factors of sustainable development and simultaneously investment determinants are also criteria for the effectiveness evaluation of investment. However, their validity might be different for different types of investment in the development of the city. What's more, the lack of experience, good practices or guidelines (procedures), reveals a significant behavioural influence on decision making. The research results confirm also that the need to improve the management and implementation of legislative and organizational solutions that will allow the investment management in the city with maintaining a balance between the financial and social aspects. [A2]

Investment management in city is related to the process of space management, in which residents and users (stakeholders) of the space participate, so the quality of the space depends, in varying level, on everyone. However, from a legal point of view, the management of space relates primarily to spatial policy developed by the local government and also national government authorities (Wańkiewicz, 2011). In modern economies, public administrations have

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undergone profound changes in recent years. Units of local government, in order to fulfil their statutory tasks better, have been granted broad powers, including, in particular, the ownership right to property and/or control of assets, which are the subject of management and, in particular, the subject of investment. Also, the way that the assets and the investment had been perceived – changed. They are not only the source of costs but also as a source of revenue. In the context of investment decisions, the complex nature of the assets (property and facilities), requires proper management on both the operational and strategic level. Conducted research [A3] indicates that the strategic classification of various types of infrastructure and real estate is a prerequisite for the rational management of investments. This approach makes differences between public governance and enterprise practice smaller. The search for good practice and benchmarking are then hampered by the classification based on the law (according to local government in Poland) or by the diversity of classification (comparing selected countries and cities in Europe). For the purpose of investment management, the classification recommended by corporate real estate management is recommended (Dent, 1997; Fernholz i Fernholz Rosemary, 2007; Brzeski, Jurek i Szczawińska, 2005; Rymarzak i Trojanowski, 2013; Marona i Głuszak, 2011). According to the strategic classification of the real estate identifying functional real estate (related to the basic tasks to which local government is obliged by law), instrumental real estate (used to support socio-economic initiatives) and income (vacant) real estate. These identified groups require different management and, consequently, the appropriate decision-making approach on an operational level. This classification can be successfully used in the management of investments in the public sector and businesses. Secondly, by observing the experience of more experienced countries (Treasury HM, 2011), it is necessary to develop a system of standards, together with the relevant measures, allowing the comparative analysis, which seems to be one of the biggest challenges associated with the improvement of investment management, in particular in local governments.

Finally, using the achievements of science and the experience of the private sector in the management of investments and real estate, **the key areas of investment management (1.3)** can be identified. The key areas are important for public and private sector entities and include strategy, portfolio, organisation and financing. The formulation of strategies of management of investment, grouped according to the above strategic classification into functional, instrumental and income investment, sets objectives and criteria for making decisions relating to investment management. The sound management on the operational level requires verification and updating information regarding social, economic and environmental aspects regularly. This information is necessary for the management at the operational level and

shall designate also the classification of the investment to the proper group at the strategic level. Strategy and portfolio are then related areas. Portfolio and strategy are directly connected with the topic of organisation which relates to the question of organising the management of a diverse and expensive portfolio. Investment management organization, shared among the different decision-making bodies of the entity, is not advantageous for effective management and causes the dispersion of information which is necessary for decision making at the strategic level. The research confirms higher efficiency of the organisation of the management when the investment management is spread between relevant decision-making centres along with strategic investment groups. The managing entities may include different organizational forms and special purpose vehicle companies, also in the form of public-private partnership. The area gathering all the key issues together is financing, which is often called „bloodstream” of the economy of each entity. Financing, determined by revenue and credit policy led by all entities pursuing investment decisions, sets the possibilities of realisation and also maintenance of the investment done in the city. [A3]

Above mentioned areas of investment management which include strategy, portfolio, organisation and financing of the investment are crucial in the system approach to investment management and effective action leading to such use of the specific (and often limited) resources (assets), that identified objectives, related to the implementation of certain investments, are maximised. Thus, the conclusions of the research carried out in the framework for the purpose of first research objective [A1, A2, A3], allow to confirm the first research assumption (RA1).

***5.6.2. Specification of the methods and sources of investment financing
(research objective RO2)***

[A4, A5, A6, A7]

Implementation and maintenance of investments are connected with the significant expenditure, a long period of return and a long period of use, especially in the case of regeneration investments being one of the most complex investment projects, which justifies the selection of this type of investment in this part of the research relating to the investment financing. Regeneration is a multi-dimensional process, distributed in time, determined by factors which are difficult to predict. Regeneration investments should not be concerned as municipal (public) investments, infrastructure investment or real estate investment. These are all different types of investment, carried out both by the public sector, as well as companies. Regeneration investment is also characterized by high capital expenditures and a long period

of realisation. These investments are cannot be divider or relocated, and, at the same time, are individual and unique. Created and upgraded properties influence the development of the city in the long term, but at the same time, the possibility of the recovery effort in the event of resignation or change is limited. Errors in the process of planning and implementation are felt long and their possible correction is complex and expensive. The investment processes, including regeneration, are complicated because they include organizational, legal, financing, administration related activities. The need for a total treatment of the spatial, social and economic spheres together makes investment management in the city, that is, space management, including activities of regeneration, for years was assigned to the public authorities. As time goes by, in countries with a mature regeneration policy, **the models and principles of investments financing (2.1)** redevelop. Traditional financing, understood in this context as the financing by the public sector, is based on three principles. Financial accountability, decentralization and microeconomic optimization, which indicate the distribution of responsibility between the government, other institutions and users. For the private investor, such factors as total cost, size, availability, time and period of acquisition of capital while selecting sources of financing are important. Depending on the leading participants of the investment (represented by the public or private sector), the policies of the selection of sources of investment financing might be different. The public sector and the private sector have different motivations and will follow different rules for the selection of sources of financing in the consequence. Knowledge of the basic principles of the financing and the knowledge of selection criteria for financing sources is necessary for the creation of the optimal structure of financing, balancing all stakeholders of the investment and allowing smooth cooperation, especially in the form of public-private partnership. [A4]

Partnership, along with financing, organisation and planning (Peški, 1999), is one of the tools used in the process of investment management. Financing is essential because it determines the start of the investment phase and affects the financial efficiency of the investments. However, in certain circumstances, in particular, in terms of social support, it is possible to take action, without significant financial resources, without the need to develop a precise plan and without access to detailed information. Public-private partnership (PPP) helps to avoid problems relating to organizational, financial and information aspects. **Public-private partnership (2.2)**, understood widely through the prism of common cooperation on the level of the organization, planning, financing and information, is, therefore, a condition for the success of the investment. Partnership for investment, it is not only the common financing but the overall relationship between the public authorities, non-governmental organisations,

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economic operators and the business environment. In this context, the partnership can be considered in terms of the so-called social partnerships, related to social participation, and public-private partnership, whose principal aim is the acquisition of financing and the allocation of benefits generated by investments according to risk shared. [A5]

Perception of investment in cities, as the exclusive domain of the public sector, is impractical due to the budgetary restrictions. A key problem in the implementation of investment projects is the right choice relating the financing. On the one hand, funding is constrained by the financial investor's resources, on the other hand, the financial markets offer potential sources of investment financing (grants, debt instruments, equity instruments). The inclusion of private sector financing is then the desired phenomenon, as it allows access to capital resources, and this will speed up the taking of important investments. In particular, in the case of investment in infrastructure, from the point of view of the public sector, the broad public-private partnership is desirable because it allows overcoming the financial barriers and optimization of financing structure. From the perspectives of the private sector, key arguments are access to relatively long-term contracts that generate stable income and the ability to realise own business goals. In theory, therefore, cooperation between the public and private sector within the framework of the partnership benefits both parties in proportion to the financial contribution and involvement in the project. Analysis of the long-term experience of different countries, in particular, Germany and the UK, indicate that the public sector in Poland, leading inflexible cooperation policy, does not use the potential of partnerships, related to the common investment organisation and financing. In developed countries, the models related to the implementation of investments evolved in the direction of the partnership. However, users are willing to pay and they have the resources to pay for the service or goods. In the Polish conditions, investments of local governments are however still carried out in the traditional method or using the proven procurement mode. This is the consequence of, among others, concerns of the application of the general provisions relating to the concepts which are undefined in the legislation governing the partnership public-private. However, a special purpose vehicle as part of the collaboration can be developed base on known rules relating to the municipal economy, the civil code, and the commercial code. Political considerations, related to the tenure character of public authorities of the local government units might be a problem in the cooperation as preparation of public-private partnership project according to the law of PPP or other law, last long. One term may be too short to prepare and complete the project which is the disadvantage. At the same time, according to the conclusions from the research, since the implementation of a project in a public-private partnership is one of the

available methods, complete financial-economic analysis, confirming that the choice of project organisation, and consequently, the way it's financing, is optimal. [A6]

Although the development of the city is determined by development strategy and investment strategy of the city, and space management belongs to the responsibilities of the public sector, the implementation of the aforementioned strategy “converge” strategies set by local government and strategies adopted by the company. Investments will be only realised if there is a coherence between public and private investment strategies. Investment policy (strategy) formulated both by the public sector and companies is a conscious and deliberate choice of investment projects according to the established criteria and the selected sources of financing, which is reflected in the strategic planning. The investment policy is associated with the revenue, that determines the possible use of its own resources for the implementation of investment and debt policy. In the context of corporate finance, **the impact of financial strategy on investment efficiency (2.3)** is the subject of research and analysis, this is not particularly investigated in public investment, even though the local government perform, as the company, in a variable and turbulent environment, while planning and implementing the diverse investments. Actually, the act of public finance (pl: [Ustawa z dnia 27 sierpnia 2009]) indirectly refers to financing optimisation by pointing out diversified sources of revenues (Art. 5) as a primary source of capital and thus the source of funding for local governments. The Act has also identified a closed list of situations allowing using the repayable financing by local government (Art. 89). Moreover, local governments should reduce the risks associated with the effects of their debt (Art. 91, Art. 92). The act refers directly to limit the risk of increasing debt service costs. In addition, the Act excludes the possibility of using repayable instruments (Art. 92). Despite these regulations, from financial and economic point of view, municipal investments should be financed with debt instruments due to: the possibility of moving financial burden on future generations, especially in the context of intergenerational projects, a higher level of efficiency, and the Laffer curve, according to which increase in the value of taxes may cause the migration of residents to units with lower local taxes. The choice of financing sources is then influenced by external, internal factors and factors arising from the same source of funding.

The ability to acquire the financial resources, both by the local government and the private sector, significantly affect the ability to carry out investments in the city. In particular, from the point of view of the local government, the level of resources of the grants depends on the skills and opportunities to mobilize the appropriate own contribution of the current income or with a loan. Hence, the reacher the local government, the greater the ability to mobilize its

own resources for investment. The return instruments increase the ability of municipalities to invest and thus have a positive impact on the dynamics of their investment expenditure. However, in view of the adverse effects associated with excessive debt, use of external, foreign sources of funding by the municipality should be preceded by the analysis to confirm their choice. Ability to prepare a proposal and cost-benefit analysis not only in the context of projects financed by the European Union or the World Bank is of the key importance to prove the economic-social impact of the investment. It's also worth to cooperate with master units in the region so that the investment will be included in the strategy development of the region. Investment needs and the lack of financial resources for their implementation should encourage municipalities to seek new solutions, for instance in the field of above mentioned public-private partnerships. The role of investment policy is influencing the environment and increasing the investment attractiveness. The authorities may encourage cooperation using special investment development programs, reductions in taxes and fees, leasing land to an investor for the development. The quality of administrative services related to the implementation of the investment may also be a factor supporting investments in the city. Finally, investment financing strategies must be flexible and/but subordinated to financial strategies of investors. Also, in the current financial conditions, the new models of financing investment should be the subject of the research.

In the part of the research relating to the impact of the financing strategy on the profitability of investment, the financial evaluation model of investment for the three strategies for investment financing was developed. The investment, from a strategic point of view, can be qualified for the instrumental investment, which aim is connected with supporting the initiative relating to socio-economic development. Financial strategies for the analysed investments assumed the form of special-purpose companies, financed with 100% equity in the first variant, equity and long-term debt, in the second version, and with the use of short-term debt to cover the pre-financing requirement connected with funds from EU funds – in the third variant. The developed financial model for the investment is a tool for the assessment of investment financing strategy impact the project profitability. [A7]

In conclusion, the consequence of the financial situation of the entities investing in the cities and the scale of investment needs is the necessity to strengthen the partnership mechanisms (including a public-private partnership) and co-governance. Thus, the conclusions of the research carried out in the framework for the purpose of the second research objective [A4, A5, A6, A7], allow to confirm the second research assumption (RA2).

Answer

5.6.3. Identification and analysis of the criteria for the investment effectiveness evaluation
(research objective RO3)
[A8, A9, A10]

Investments carried out in the city are a tool to solve many of the problems, for example, related to housing, unemployment, communication, protection of the environment. Investments are a means to the development of all areas of socio-economic growth. The specifics of the evaluation of urban investment stems from the nature of the investment. First, since stakeholders investments in the city are public and private sector entities, the evaluation of the effectiveness of investments should take into account their individual, essentially social and business purposes. Secondly, since the objectives of the investments made in city affect socio-economic, ecological and spatial (as exemplified by regeneration investment), and activities include the investments of a space, that is, objects infrastructure and investments in real estate, but also „soft” infrastructure investments, the performance evaluation should take into account all expenditure and all effects – these „hard” and „soft”. Therefore the evaluation of an investment in the city seems to have two „threads”. On the one hand, there is an assessment from the point of view of the investor, the main and direct stakeholder of the investment. On the other hand, due to the participation of many entities in the decision making process of investment in the city, the need of integration of the activities of the public sector and market requirements, the approach integrating the interests of all stakeholders and the adoption of the perspective of the city, as the *common good* is necessary. [A8]

The rationalisation of investment decisions in the company is determined by the criterion of **financial effectiveness (3.1)** undoubtedly, where market factors are leading. From the point of view of the public sector, the determining factor for investment will be based on the wider **economic efficiency (3.1)** of the investments taking into account apart from social and environmental benefits, also financial, because local government is also obliged to rationalize their investment decisions, or to achieve certain effects at low costs, which in this context is similar to the enterprise. On the micro level, the companies undertaking investments take mainly financial criteria in the account. At the macroeconomic level, investigating the impact on the economy as a whole and the effects (positive and negative) derived by the public, economic and social criteria are used. Therefore, the comprehensive assessment of the investment needs to go so beyond the microeconomic assessment and macroeconomic efficiency must be taken into account. The comprehensive performance assessment carried out for investments, take into account public and private investor perspective. Even if the

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investment is carried out exclusively by the private sector, somehow it is „common”, though not in the literal sense, investment project. Although it is the public sector who designate legal and administrative conditions for the investment implementation, it is mainly the private sector entities who make investments in the city. The responsibility of the municipality is the creation and determination of the direction of city socio-economic development, but the company is an essential participant and beneficiary of this process. Finally, the investment efficiency analysis should answer investors to question whether the implementation of the project is justified and that its design is characterised by its highest effectiveness. From the point of view of the usefulness in the decision-making process, in terms of selection of analysis tools, the analysis of cost-benefit analysis and multicriteria analysis, taking into account the interests of all stakeholders investments in the city might be implemented. [A8]

The impact of investment on the economy and society, as a whole, taking into account the effects of positive and negative, can be considered from the point of view of the **economic and social consequences of urbanization (3.2, 3.3)**. Urbanization is a process relating to the places, and people. It is associated with the implementation of the investment in real estate, infrastructure, regeneration. It is a multi-faceted and extremely complex process which should be considered in several dimensions, including demographic, social, economic, spatial, and functional scopes and the effects of the investment can be identified in these areas. The urbanization process in Poland is legally and formally controlled, however, the problem is that not all the participating entities want to use control tools, which results in the negative effects of urbanization and eventually causes that urbanisation is uncontrolled. The most important negative effect of uncontrolled urbanization is spatial chaos which results from conflicts such as between the public and private sector interest. It relates to inadequate social participation in the planning process, as well as the mismanagement of a public-private partnership. Negative effects of urbanisation, from the practical point of view uncontrolled urbanisation, includes spatial chaos, contributing to pathologies and social conflicts. The spatial chaos is directly related to the accidental relationship between housing and infrastructure. This causes difficulties in everyday life by restricting access to means of transport and isolation from social infrastructure services, which are generally located in city centres, or on the outskirts of the metropolis. It may contribute to the exclusions of less well-off inhabitants. It also means extra time getting to work – from housing developments outside the cities to the business centres, which significantly increases previously reduced costs of living. An important consequence of uncontrolled urbanization is then increasing in time and cost of commuting. The consequence of ineffective space management are economic loses. Inefficient master planning relates to the

development of the residential area which generates huge and constantly growing costs. It is a threat as the human, finance and natural resources are wasted. Many municipalities bear (or will bear in the future) huge costs for land re-purchase for roads and technical infrastructure in areas that have been significantly overestimated in the relation to needs of the housing area. The revenues from fees planning are often lost as well. The revenues from the planning fees and taxes as a result of speculation goes to the owners of the land, instead of the local government. This phenomenon does not occur in developed countries, where most of the revenue generated in according to land rent goes to the budgets of the municipalities and is used to adapting the construction sites and the financing of local development. The costs of destruction of housing and infrastructure costs can be also included in negative effects of uncontrolled urbanisation. This applies particularly to areas at risk of flooding and landslides, where an investment is a result of incorrect location decisions, sometimes in violation of applicable law. Proper planning should limit construction and maintenance costs of the technical infrastructure, while chaotic and scattered layout increases the cost of sewerage systems, water supply, gas, heating, telecommunications, energy, traffic, and lighting. The increase in costs is also generated by an excessive amount of small schools, kindergartens, hospitals, where costs are significantly higher than in large institutions, and therefore the human resources are inefficiently used. The instability of planning, function, and potential localization difficulties increase investment risk and discourage foreign investors. Uncontrolled urbanization creates 'speculative bubble' where prices of land are not linked with good location or infrastructure, but connected with the conviction that eventually all agricultural land is converted into development land of higher value and price. The final effect is that the municipality has to purchase agricultural land for the public investment at market prices, which is significantly overvalued. Finally, the effect of uncontrolled urbanisation is the low level of city attractiveness. [A9]

Within the research relating the effects of investment, financial-economic assessment model was built for the three variants of the investment in land. The investment, from a strategic point of view, can be classified as instrumental since its purpose was to support socio-economic local initiatives and stimulate further investment. The first variant of the investment was connected with residential investment development; the second option was to invest in service functions; the third option includes both functions: housing and services. The model includes the externalities associated with the creation of new jobs (unemployment), the increase in the income of the municipality in connection with the income tax, the income for the national budget relating to value-added tax, the increase in the value of the real estate, the increase in income from tourism, raise the standard of living and the residual value of the benefits. This

model can be an example of how to evaluate the results of the local economic and social planning and can be used as a tool to maximize effectiveness in the macroeconomic perspective of the city, as the *common good*. [A9]

In summary, the allocation of scarce resources in a manner that optimizes the benefits requires continuous improvement of multicriteria analysis in the evaluation of the effectiveness of investment in the city. Thus, the conclusions of the research carried out in the framework for the purpose of this research objective [A8, A9] allow to confirm the third research assumption (RA3).

5.6.4. Presentation and synthesis of selected concepts to develop the author's concept of investment management in the city (research objective RO4) [A10, A11]

Public-private partnership (PPP) is one of the ways of implementing the investment in the city, notably in terms of infrastructure, but also real estate and regeneration investment. The perspective of PPP was chosen deliberately as the projects implemented in this way illustrate clearly the need for joint decision making, which refers explicitly to the perspective of the city, as the *common good*. However, one of the main reasons impeding the implementation of the PPP is the complex nature of cooperation undertaken in this framework of cooperation. The number and diverse nature of the participants in the PPP is a serious challenge in the process of management of the investment. The problem analyzed in the context of stakeholder theory has made it possible to determine how the stakeholders in PPP, being the policymakers in the investment process, see the **success of the investment (4.1)**. However, rational investment management is more than maximizing the effects, even taking into account financial, social and ecological criteria. The contemporary processes of transformation and socio-demographic phenomenon means change, and even expansion, of the well established and known model of sustainable development, which is supposed to be a compromise of different objectives and needs of stakeholders. However, if the idea of sustainable urban development can be implemented in business practice, the rational use of resources is not enough. It is necessary the stakeholders cooperate, and for this, it is necessary to understand how stakeholders investment see success, as it is a success, even if at the moment „only” expected, determines the involvement in the investment process. [A10]

The success must be related to the purpose. A private sector entity generally strives to maximize the benefits for its owners. The basic evaluation criterion is then the present value of

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the investment or the rate of return. In the case of projects implemented by public sector entities, the aim of maximizing the benefits is considerably different. The public sector entities function in a kind of dependency. It means that public sector objectives are not self-contained and the public sector entities act in association with the society and “collective interest, of which public authority is the carrier”. Therefore, conditions of public sector functioning are not just economic and the activities of the public sector should also be assessed on social and natural grounds. As a result, the basic criterion for decision-making is “the public value”. It should maximize the benefits for citizens in the interest of which the public sector operates. In other words, it is the value added for society, that is, the extent to which the effects of the investment (the outputs, results and impacts of the project) are related to the investment decision. [A10]

In such conditions, project success verification is difficult as it goes beyond the functional evaluation of the project itself. Assuming, the understanding of stakeholders is a condition of PPP success, the research develops a conceptual framework for stakeholder analysis.

First of all, the framework is based on sustainable development, because the balance of resources, also applies to human nature and social resources. Balance requires cooperation (for instance in a form of PPP), which contributes to sustainable development. Secondly, the concept is based on the theory of stakeholders, taking into account the expectations of different stakeholders. The developed concept assumes that there are three key attributes which make up the framework for stakeholder analysis: *benefits*, namely *interest*, *power* and *urgency*. At the same time, because *urgency* means demand for immediate attention, which in practice will be reflected in the power of enforcement requests, both of these attributes are aggregated to a single attribute *engagement*. The concept also takes into account the perspective of time and level of engagement (internal or external), which allowed the identification of the four groups of potential stakeholders, together with the evaluation criteria of success (Figure 2).

		Preferred benefits (interest)	
		Financial (short-term perspective, direct effects - products)	Non-financial (long-term perspective, indirect effects – results, impact)
Engagement	Direct (internal focus)	Type I (strategic sponsor, construction company, sponsor) <u>Project management success</u> (internal measures for efficiency and performance criteria relating budget, schedule, specification)	Type II (grantor – local government) <u>Business/organisation success</u> (creation of value for citizens due to delivered products and services, relevance, utility and effectiveness, criteria)
	Indirect (external focus)	Type III (investment funds, institutional investors, public agencies, multilateral institutions, subcontractors, operators, suppliers, off-takers, advisors) <u>Environment (external entities) success</u> (quality and acceptability of benefits for stakeholders, efficiency)	Type IV (media, ecologists, unions, governmental supervisors and regulators) <u>Future potential success</u> (future opportunities, wider implications for stakeholders, social-economic impact, durability criterion)

Figure 2. The conceptual model for stakeholders of investment in the city analysis [A10]

Finally, the evaluation of the effects of the project depends on the evaluation of the project by the respective stakeholders, and therefore, what is the nature and direction of project-generated benefits. The developed approach to identification and classification of stakeholders in PPP projects provides knowledge about the dimensions in which the evaluation is made in the respect to the success of the investment in the city. The application value of the conceptual model of stakeholder analysis concerns the increasing understanding of the motivation of the individual partners, which ultimately can foster building sustainable partnerships, and determines the success of a realized investment. In conditions of financial constraints, growing needs, growing social awareness and expectations relating participation, citizenship, and public accountability the management of dynamic and complex urban systems can no longer be driven by the sustainability aim alone. What's more, the development of the idea of sustainable development, requires not only the search for compromise in terms of the different objectives and needs of stakeholders. The implementation of social responsibility attitudes (ethics) is required. The **new paradigm of rational management of investments in (4.2)** is the determined by modern concepts: already established idea of sustainable development, the developing concept of smart city, the triad of creativity-circularisation- synergy, the stakeholder theory and social responsibility. [A11]

Investment management process should be organized and planned in the wider, than just the legal context, taking into account the principles of sustainable development, as the city develops from the quantitative and qualitative point of view. The quantitative development means spatial expansion and change of functions of specified areas. Qualitative development

means optimal use of space by selecting the most effective use of limited resources which will provide the best level of support for residents and maintain high environmental values. At the same time, limited resources and, in particular, social capital and human, connect the concept of sustainable development and smart growth. The city, thanks to the social capital and human, must act smarter in the process of sustainable development. So „sustainable smart development” should be interpreted in terms of „integrated order” relating eco-governance, social, economic, and institutional aspects, where policymakers use the latest technology, managing limited resources in a „smart” way. The inclusion of such a model should foster improving the amenities and the quality of the environment of the city, quest for social equality, especially because of the available housing and the construction of social ties. [A11]

With regard to sustainable development, in terms of resources, social capital and human resource must be balanced. With regard to the smart city – human and social capital are “parts of” smart city and a source of creativity. Social capital and the human is thus an important combination of the concept of sustainable development and creativity in the concept of synergy-creativity-circulation, presented by L. F. Girard (2011). Creativity is non-material capital, enabling cities to tackle economic challenges, environmental crisis, marginalisation and poverty, the growth of inequality. Creative capital reflects the lifestyle of the citizens, their relationships, and economic performance. It may take the form of new financial systems and institutional, planning and architectural redesign, new technologies and innovative network between public, private and civil society. Creativity means integration of the old values with a modern vision. This means, in accordance with sustainable development, the integration of economic, social and environmental objectives, which allows achieving solutions for the benefit of all stakeholders. Creativity also allows the ability to self-organization and thus creates conditions for the development of a resilient *city*. The chances of development for a number of cities are associated with creativity and circulation, as the important regeneration investment requires the reuse and recycling of resources, which is, by the way, compatible in particular with environmental sustainability. Finally, the principle of synergy relates to the interconnection between urban (economic, social, cultural, political, ecological) systems. The systems are interconnected, providing synergies in the form of external effects of the investment. In accordance with the principle of synergy, the investment management process in the city and ultimately the quality of the space also depends on the synergies between the different actors (stakeholders). [A11]

According to well-established in the literature statement, good investment decisions should focus on the criterion which is the increase in the value of the (benefits). “Value added”

(benefits), however, is the notion of a heterogeneous meaning and may pose a problem in the decision-making process. This heterogeneity is especially apparent from the stakeholder perspectives, for whom a benefit is available. In broad terms, the added value should take into account externalities, that is, the impact the decision will have on the subject, get synergistic ties with other decisions, the creation of development opportunities in the long term, the distribution of income between stakeholders. So stakeholders must be components of the triad. Inhabitants are no longer simply voters or clients, but are also co-decision-makers, contributing to the creation of commonwealth. Therefore, effective urban development policy is a result of decisions made by specialists, with due attention paid to a wide range of social groups, their participation and engagement. The stakeholder theory emerged in this context. A stakeholder is anyone who significantly influences decision-making or is affected by the decisions made. A stakeholder is then a special entity participating in resolving problems, with the widest possible participation of all interested entities who are in the area of the impact of the decision. The degree of identification of stakeholder environments will determine the ability to name the social affairs as problems to the discretion of the public authorities, or will allow to give them the nature of the community and will create conditions for effective cooperation. [A11]

In this way, the stakeholder theory connects with the concept of corporate social responsibility, according to which the social and environmental criteria are taken into account in the activities and in their relations with stakeholders on a voluntary basis. There are three aspects within the responsibility concept that should be distinguished. They form a bridge between the public sector and business. The first aspect relates to the promotion of ethics in business. Decision-making should regard the needs of future generations (the sustainable development aspect). It imposes a moral obligation on business to operate ethically. The second aspect states that business and public sector both represent the same interests, differing only in their organisation. According to the third aspect, the public entity is obliged to take into account the expectations of all the stakeholders. One of the ways of the implementation of corporate social responsibility is a socially responsible investing that refers to achieving financial and social objectives. The sources of the creation of the modern idea of social responsibility can be found in the principles of sustainable development, though these two concepts do not equal. [A11]

The new approach to the rationalisation of investment decision making in the investment management requires acceptance of a new paradigm combining ideas of sustainable development and smart city, the triad of creativity – circularisation – synergy, stakeholder

theory, and social responsibility. The above-mentioned concepts create the investment decision-making model at the strategic level (figure 3). [A11]

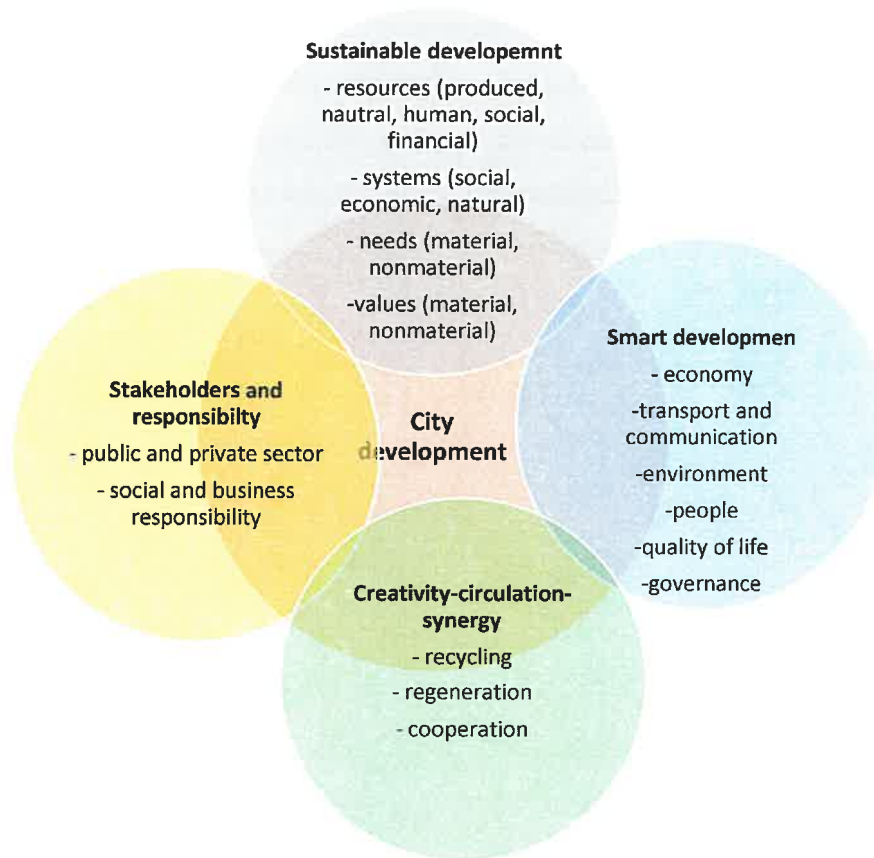


Figure 3. The new paradigm of the investment decision making rationality – strategic level, based on [A11]

Once the new author paradigm of the investment decision making rationality in urban development on the strategic level has been formulated, the strategy must be operationalised on the lower level of management (operational level) by the planned and evaluated project (Figure 4). The rationalisation requires also application of multicriteria analysis (Figure 2) which takes into account hybrid nature of investment in urban development. [A11]

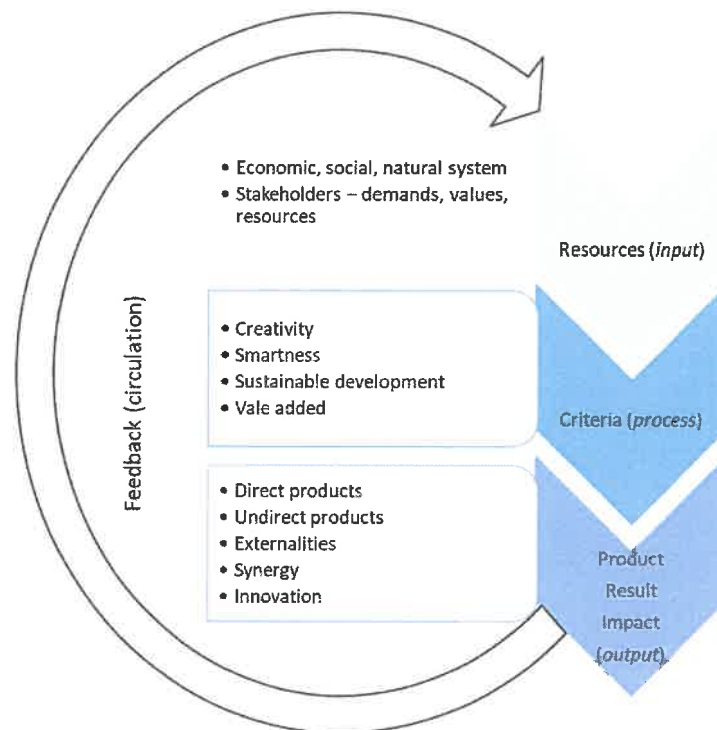


Figure 4. The new paradigm of the investment decision making rationality – strategic level, based on [A11]

In summary, discussion and synthesis of the selected concept made it possible to design the author approach to investment management. It fills the gap research concerning the use and integration of various concepts in the process of individual and collective decision-making of investment by the public sector and the private sector, respecting the differences of both sectors and the vision of the development of the city, taking into account the principles of sustainable development. Finally, the approach to investment management on the strategic and operational level was developed scientifically. The proposed approach may be a theoretical reference for the subsequent methodological research and also managerial applications relating urban development projects. It can be then useful for public and private managers and provide support for decision making. The innovative approach of the research is not based on inventing new ideas from scratch. It concerns the application of already known concepts and theories which are necessary to create a new paradigm consistent with the known facts.

Thus, the conclusions of the research carried out in the framework for the purpose of first research objective [A10, A11], allow confirm the fourth research assumption (RA4). The new conditions of management make it necessary to deploy new concepts in investment management, both at the strategic and the operational level because the management of city on the basis of single concepts does not meet expectations all social groups.

5.7. The contribution of the research results in the development of the discipline of management science

In the course of the research which I presented in this series of articles, I was seeking for a solution to the problem of the research involving development of the concept supporting the process of individual and collective investment decision-making relating of public sector and the private sector, at the strategic and the operational level, respecting the differences of both sectors and the implementation of the vision of the city development, taking into account the principles of sustainable development. Due to the qualitative nature of the scientific achievements (series of articles), the problem formulated above, indicates the field, the direction of the research, exploration and changes in the paradigms and methodological approaches/methodological. The presented series of publications and way of thinking, contribute to the problem-solving.

In the course of the research, there have been detailed issues (questions) formulated:

- Whether is it possible, a result of changes in Poland and changes of the market economy as a whole, new determinants of an economic and social nature influencing the investment decisions in cities, identify the key areas of investment management?
- What are the consequences of the financial situation of the entities investing in the cities and the scale of investment needs?
- How to evaluate the effectiveness of the allocation of scarce resources?
- How to manage investments in the city, understood as a *common good*?

First, the study [A1, A2, A3], carrying out, among others, the extensive literature study, using analysis of selected cases, and comparative analysis, it was indicated that the areas of investment management can be identified; the areas, which are key in the system approach to investment management and effective action leading to use of (most often limited) resources (assets) to obtain the maximum satisfaction of the goal, related to the implementation of specific the investment. These areas are strategy, portfolio, organisation and financing.

Secondly, studies [A4, A5, A6], using, inter alia, the study of literature, case studies and computer simulation, allow to conclude that the strengthening of partnership mechanisms (including public-private partnership) and representation (governance), which are a sign of our times, it is necessary for a situation of difficult financial situation (concerning in particular local government) and in the conditions of the infrastructure gap, both quantitative and qualitative.

Thirdly, on the basis of studies [A8, A9], including, as above, the literature, the case study and computer simulation, the optimal allocation of scarce resources requires

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improvement multicriteria analysis, which takes into account the interests of all stakeholders, in the evaluation of the effectiveness of investments in the city.

Fourthly, closing the series of the publication [A10, A11], using description, logical analysis and design method made it possible to build an author concept of investment management in the city, as *a common good*.

Thus, the carried out research, allow the confirm the main assumption, that investment management in the city requires acceptance of a new approach embracing, in particular, the principle of sustainable development, of smart city, *resilient city*, stakeholder theory and social responsibility.

Studies contribute to the clarification of specific issues and questions of research, contributing to the development of the science of management. To paraphrase A. Frączkewicz-Wronka, introduced the concept is „the best in the circumstances” (2008, str. 25). Components of the author concept model of investment management at the strategic level (figure 3) and the operational level (figure 4) can be presented through four components synthetically. The model is supported by the framework of stakeholder of investment in the city analysis, which includes criteria for success evaluation (table 2). The concept allows to manage investments in the city, and enables to distinguish the **co-city** (figure 5).

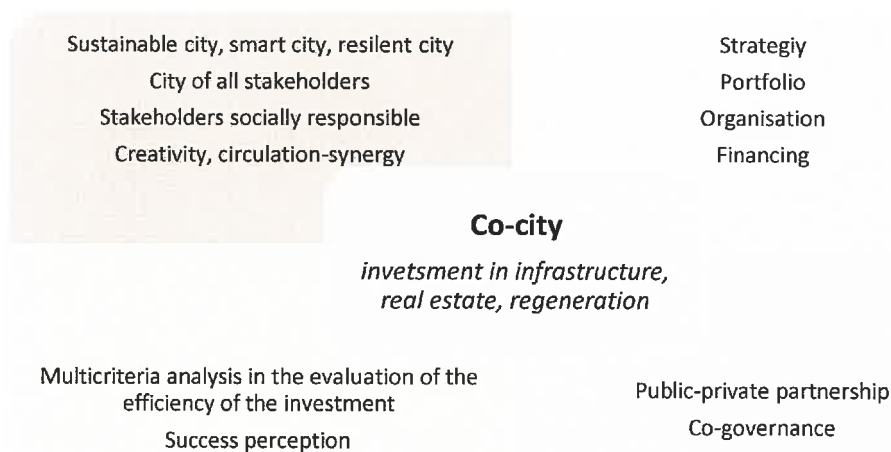


Figure 5. The components of the author concept model of investment management in the city, own elaboration

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The contribution of the results of research related to the development of economic sciences, in particular within the discipline of management science, can be assessed in terms of the theoretical, cognitive and applicative contribution. The study complements an existing gap in the scientific work in the field of **investment management from the perspective of the Co-City, created by the community, its inhabitants and users which are involved in city management**. Studies are taken from the perspective of management, with respect of the determinants, the organisation, financing and evaluation of the effectiveness of investments in the city which embrace investment in infrastructure, real estate, regeneration. The research adopts the innovative notion of the city, as the *common good*. The cognitive value is associated with increased and systematised knowledge concerning investments in the city: determinants of the decision making process of investment undertaken by both the public and private sector, methods and sources of investment financing and evaluation of investment effectiveness. The cognitive value comes from identification and systematisation of the relationships between the essential concepts of sustainable development, smart city, triad creativity-circulation-synergy, stakeholder theory and social responsibility, creating the foundation for the management of the cities and investment management in the city. Finally, the value of the application relates to the author's concept, an “innovative method of management”, the purpose of which is to support the process of individual and collective investment decision-making relating of public sector and the private sector, respecting the differences of both sectors and the implementation of the vision of the city development, as the common good. The practical aim of the proposed concept is to rationalize and improve the effectiveness of the investment management in relation to the public and private investment in the city; investments, regardless of the decision maker, including investment in infrastructure, real estate and regeneration, which are complementary and permeating.

Based on the issues related to management directly – the theory of decision making, management of municipal investments and business investment management, research at the same time touches the problems of economics of the public sector, spatial management, as well as due to the nature of the public sector, take into account the social and ethical aspects. The proposed concept is a synthesis of classical, market and learning approach. The added value of the research does not result from the creation of a completely new concept from scratch, but it points out the possibility of learning, the possibility of the synthesis of approaches which are known and verified in practice. The added value of the project for the science also results from empirical studies, with a special analysis of the experience of more developed countries in the area of the research than Poland. This promotes the exchange of experience and strengthening

scientific relations between the different scientific centres in the country and abroad. So this is also a contribution to the theoretical layer associated with the enrichment of the existing state of knowledge; and the application layer, which is to create the set of good practices. The results, in addition to the basic, scientific nature and advantage of the application, have also an important social dimension. The developed author concept, that is used to support an individual and common decisions making by the public sector and the private sector, is a tool to increase the competitiveness of cities by strengthening the co-governance and partnerships. This should contribute to raising the socio-economic standard of living. The development and maintenance of infrastructure in the cities have been a public sector investment, largely co-financed by the structural funds of the European Union for many recent years. Macroeconomic forecasts for the medium-term horizon provide information about the significant decrease in these investments. The research takes part in the discussions on this topic, too.

5.8. Further research plans

The research conclusions, after the confrontation with the world literature, allowed to formulate a proposal of a new approach to the management of the investments in the development of the city, which will be the subject of research in the hypothetical-deductive model (Czakon, 2006). In further research, I plan to use developed the concept to identify the „fundamental power of city”. The reference of the concept to the term „fundamental” is deliberate and is related to the idea of fundamental analysis on the capital market and estimating its so-called internal value, which applies not only to companies but also the city. Assuming that the management of city on the basis of individual concepts does not meet the expectations of all groups of society and that cities do not use available strategic assessment tools sufficiently, the further research will develop the indicator of “the fundamental strength of the city”. It will be a strategic tool for the diagnosis and monitoring of cities. The application of “fundamental power of city” can support strategic diagnosis and monitoring of the city, eventually also supporting investment decisions.

6. An overview of the other achievements of the scientific-research

In addition to publications of the mainstream of the research, my other achievements relate to the three research areas, which are: regeneration investment and sustainable development, investing on real estate market and real estate management, investment effectiveness evaluation and financing. These research areas are in connection with the mainstream research, concerning the issue of investment management in the city. Selected publications are presented below.

6.1. Regeneration investment and sustainable development

Wojewnik-Filipkowska A., Górczyńska A. (2010), Internal and external determinants of the regeneration of the district of Gdansk – Letnica, The problems of urban development 3/2010, Kraków 2010, pp. 103-112 (my contribution is 80%)

The aim of the article is to carry out the analysis of strengths, weaknesses, opportunities and threats for Letnica, as an area subjected to the process of regeneration. Analysis carried out allows specifying both the potential and the problems associated with the area. On the other hand, the analysis identifies potential opportunities for the selected area and issues that may limit its development. Regeneration is a multi-dimensional, distributed in time, dependent also on the hard-to-predict factors. Analysis of the internal and external conditions should be a systematic process, accompanying the investment process at every stage. In this way, the results of such analysis should support actions in the field of strategy, planning and design tasks during investment preparation. Identification of the strengths and opportunities and threats can be carried out using the universal SWOT method (*Strengths, Weaknesses, Opportunities, Threats*). The purpose of the SWOT is to identify the current and future position of the subject of the analysis and forecast strategy. The scope of the factors that have an impact on the subject of SWOT analysis is very wide. On the one hand, these are internal factors (considerations directly regeneration area) and external (more of a global nature) and, on the other hand, positive and negative.

Wojewnik-Filipkowska A. (2012), *Public-private cooperation in sustainable city development – the case study of public-private partnership in railway station area regeneration project*, [w:] Friis-Hansen (ed.), *Knowing to manage the territory, protect the environment, evaluate the cultural heritage*, FIG Working Week 2012, L. International Federation of Surveyors/Federation Internationale des Geometres (FIG), s. 1–15, ISBN 97887-90907-98-3

The article includes characteristics and analysis of investments in public-private partnership mode and shows PPP application in the process of urban regeneration on the example of two projects on railway area regeneration in Poland and Australia. The financing of investment and operational railway stations due to their travel-related functions should be diversified. In the current economic situation of the Member States and railway undertakings, it is not possible to identify a single, primary source of funds. It is unlikely that the whole of the investment and the costs of the operation of the passenger station will be financed exclusively from the national budget, the charge carriers or own resources. Several sources of financing, including own resources, budgetary measures (ultimately deriving from a contract for the maintenance of the railway infrastructure), generated from commercial stations, charges, must be taken into account.

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Wojewnik–Filipkowska A. (2014), *Development of infrastructure and social services market and sustainable development*, Management and Finance, 4, pp. 43–52.

Investment in infrastructure have been just recently considered as a new asset class. Determinants of the profitability of investments in the infrastructure sector depends primarily of stable demand, limited financial capacity of the public sector and the existing infrastructure gap, both quantitative and qualitative. Growing needs of modern living generations in the field of social welfare, unfavourable demographic changes and sustainable development justify this study. The study includes identification of specific factors which affect decisions relating investment in infrastructure and presents analysis of social care homes. Sustainable development, which includes maintaining balance between economic and social objectives, is a very important context for social care homes market development.

6.2. Investing in the real estate market and real estate management

Wojewnik–Filipkowska A., Łukaszewska K. (2011), *The market of self-storage in selected*, Works and Materials of Management Faculty of Gdań University, 4(7), pp. 59–170 (my contribution is 80%).

Self-storage is a concept that in the context of urban development and planning the space development, seems to be one of the ventures of growing. Based on the experience of selected countries, including in particular, the American market, where the services sector is the most developed and has the longest history, the authors attempt to answer the question about the possibility of the development of such projects in Poland. Studies include the identification of self-storage issues on the real estate market, an overview of the essence of such venture, a market analysis of self-storage in selected countries. On the basis of the studies carried out and the available data, it is difficult to clearly answer the question about the chance of success of self-storage in Poland, while certainly urban development is determined by the decisions of the private investors, who will look for profitable ventures in the real estate market.

Wojewnik–Filipkowska A., Zięcina A. (2011), *Socially Responsible Investing as a new investment trend*, Works and Materials of Management Faculty of Gdań University, 4(7), pp. 19–28 (my contribution is 60%).

Socially Responsible Investing, or SRI, is a concept relating to the investment. Socially responsible investing is also means ethical investment, and it is an investment strategy, which enables to achieve specific financial returns and social objectives at the same time. The specific objective of the work is to show the concept of SRI as a new investment concept, whose importance in the world in recent years is growing. Investors in their investment decisions are guided not only by profits but increasingly, they take into account the ethical aspect of the investment. Based on the research, we claim that the idea that socially responsible investing is a new concept in investing. The research indicates the scale of investments undertaken based on the strategies of SRI and changing social expectations. The introduction of ethical investment funds, pensions and indexes of companies socially (ethically) responsible confirms the development of the concept of SRI in the world and Poland. The author assumes that issues of SRI in urban development, in particular in terms of investment projects carried out in the cities should include the idea of SRI.

Wojewnik–Filipkowska A., Rymarzak M., Trojanowski D. (2012), *Real estate function impact on its value exemplified by the city of Gdańsk*, *Aestimum*, 61, pp. 167–183, DOI: <http://dx.doi.org/10.13128/> (my contribution is 45%).

Over the past years, there have been significant changes in the way land use in urban areas. Transformation processes relate to, inter alia, farm land, land for residential, industrial, service function. The highest intensity is in the areas located in the city centre, and the next, the intensity of use is getting lower, until the level applicable to the suburban areas. To be able to assess the chances of success of investment projects undertaken on the real estate market, as well as estimate the value of the real estate, it is important to specify the changes that took place in the past and exist currently in the development and dissemination of to urban areas to suburban areas. Do the changes occur according to some schema, and how to predict it? The aim of the article is to examine the differences between the values of the property for various functions (types) exemplified by the city of Gdańsk.

Wojewnik–Filipkowska A., Rymarzak M., Lausberg C. (2015), *Current Managerial Topics in Public Real Estate Asset Management*, *World of Real Estate Journal Świat Nieruchomości*, 4 (94), s. 5–10 (my contribution is 50%).

Based on the study of literature and authors observation, the conducted research on current issues related to public real estate asset management (PREAM), in particular in the local municipalities, refer to the effectiveness and efficiency of PREAM. A key proposal of the research assumes that the asset management policy in modern democratic societies are to some extent universal.

Wojewnik–Filipkowska A., Lausberg C., (2017), *Decision–making in the European Municipal Real Estate Management – A Case Study Approach*, *World of Real Estate Journal, Świat Nieruchomości*, 4(102), s. 23–30, DOI: 10.14659/worej.2017.102.03 (my contribution is 50%).

Looking for the answers of the question whether the property management in the public service is as effective and efficient as private institutions, the study conducts an analysis of the process of decision-making in the management of real estate in Europe in selected cities – Gdańsk and Jena (Germany). The article, for each of the city, describes the current situation, strategy, organisation and the decision-making process in urban real estate. The article ends with conclusions from the case studies and suggestions for other cities to improve property management by improving the decision-making process.

6.3. Investment effectiveness evaluation and financing

Wojewnik–Filipkowska A. (2010), *The principles and sources of financing mega projects the urban-architectural development* [in:] P. Lorens, J. Martyniuk-Pączek (ed.), *Management of spatial development of cities, Gdańsk University of Technology, A series of City-Metropolis-Region, Gdańsk*, pp. 76–85, ISBN 978–83–89649–30–0.

A key problem for implementing new investment projects in the sphere of infrastructure is appropriate, from the point of view of the interests of the investor (investors), the choice of financing. On the one hand, there is limited financial capacity of the public and private investors, on the other hand, there are numerous potential sources of investment financing offered by the financial markets. The aim of the article is the characteristics of mega investment projects through the prism of the specifics of their financing. Knowledge of the basic principles of finance, selection criteria for sources of financing and sources of funding is necessary for the creation of the optimal structure of financing the balance interests of all participants of the project.

Wojewnik-Filipkowska A., Dziedzic M. (2013), *Public-private partnership as an opportunity for effective implementation of community investment*, [w:] Bryx M. (red.), Real estate market. City development financing, CeDeWu Warszawa, s. 233-246 (my contribution is 80%).

The task of the municipality is to meeting the collective needs of the community, which are implemented through the investments. From the point of view of local development, infrastructure projects are the most important. They satisfy the collective needs of the population, and form the basis for further development. However, community is not able to pursue all of these needed investments with its own funds not. That is why more and more popular is to engage resources from private partners. These resources are financial and human capital. The private partner supports public investor with their knowledge and experience. The purpose of this paper is therefore to present the benefits of public-private for Sopot. Such a goal set the hypothesis that the public-private partnership is an opportunity for effective implementation of community investment and therefore opportunity to meet the community's needs. The paper was based on hypothetical-deductive model of research, analysis and logical elements of statistical analysis.

Wojewnik-Filipkowska A., Krekora Ź. (2014), *Dilemmas of privatization of infrastructure and social services exemplified by a social care home in the context of sustainable development*, Management and Finance, 4, pp. 151-163 (my contribution is 80%).

The starting point for the concept of participation of the private sector in the provision of infrastructure and public services is the emergence of the new public management initiative, which is a response to traditional management. In accordance with the principle, the management of municipal and private unit can take place based on the same rules. The main objective of this paper is the identification of determinants and evaluation of the efficiency of privatisation of social care home in the context of sustainable development. The paper includes literature review, the depiction of municipal services in local government, discussion on efficiency in the public sector, presentation of main issues relating social care home privatization and finally the analysis of efficiency of social care home privatization. The results of the research confirm the necessity of improving the idea of new public management. It is also necessary to introduce legislative and organizational solutions which would enable finding news sources of finance and financial efficiency while ensuring the fulfilment of social care homes' mission. Privatisation changes model of infrastructure and social services. It generates positive changes on the financial level but negative on social level, while only the balance between financial and social aspects can provide development of civilization.

Wojewnik-Filipkowska A., Kowalski R., 2015, *Investing in Industrial-Technology Parks in City Development – a Cost – Benefit Analysis*, Real Estate Management and Valuation, Vol. 23, No. 1, pp. 24- 41. DOI: 10.1515/remav-2015-0003 (my contribution is 80%)

Domestic and foreign literature was reviewed in terms of the definitions, classifications and characteristics of industrial – technological parks, are an example of investment in the process of urban development. The identification and quantification of selected cost and benefits were done. The effectiveness of selected industrial parks-technology from the point of view of the local government unit was evaluated. Despite the diversity and dynamics of structural features of parks, the study confirms that the investing public funds in industrial– technology parks are generally effective in terms of socio-economic.

6.4. Participation and organisational engagement in the conferences

The research was the subject of presentation on the 15 conferences (8 international and 7 national), giving a total of 20 papers (16 in English and 4 in Polish) (table 4). All the papers I presented by myself.

Table 4. Participation in the conference

No.	Year	Title of the presentation	Conference
INTERNATIONAL CONFERENCES			
1.	2008	Project Finance on real estate market – case study	European Real Estate Society (ERES) 15rd Annual Conference, Kraków
2.	2012	Public private cooperation in sustainable city development - the case study of public-private partnership in railway station area regeneration project	FIG Working Week, Knowing to manage the territory, protect the environment, evaluate the cultural heritage, Rome
3.	2012	Decision-making in corporate and municipal asset management (literature review) (co-author: Rymarzak M.)	UTM-IBIMA (University Teknologi Malaysia- International Business Information Management Association) International Real Estate Conference (INTEREC), Kuala Lumpur
4.	2012	Principles of public private partnership financing – Polish experience (co-author: Trojanowski D.)	European Real Estate Society (ERES) 19rd Annual Conference, Edinburg
5.	2012	Municipal real estate management in Polish city of Gdansk compared with selected European cities (co-author: Rymarzak M.)	European Real Estate Society (ERES) 19rd Annual Conference, Edinburg
6.	2013	Investment in city development: planning and evaluation criteria	European Real Estate Society (ERES) 20rd Annual Conference, Wiedeń
7.	2013	Capital expenditures for fixed asset in private and public sector: Polish experience, Book of abstracts (co-author: Szczepaniak K.)	European Real Estate Society (ERES) 20rd Annual Conference, Wiedeń
8.	2013	Real estate-related decisions in European cities (co-author: Lausberg C., Rymarzak M.),	European Real Estate Society (ERES) 20rd Annual Conference, Wiedeń
9.	2014	Decision making in local governments - a comparative analysis of investment strategy (co-author: Elliot C.)	European Real Estate Society (ERES) 21rd Annual Conference, Bucharest
10.	2014	Public-private partnership in transportation infrastructure – comparative analysis of selected case study in United Kingdom and Poland (co-author: Alasad R.)	European Real Estate Society (ERES) 21rd Annual Conference, Bucharest
11.	2015	Economic and Social Effects of Urbanization - Case Study Analysis	First EAI International Summit, SmartCity 360, Bratysława
12.	2016	Stakeholder Engagement to Identify Priorities for Improving the Quality and Value of Infrastructural Project - Case Study (co-author: Dziadkiewicz A., Dryl W., Dryl T., Bęben R.)	European Real Estate Society (ERES) 23rd Annual Conference, Regensburg
13.	2016	Social-economic impact of an innovation centre development in local context: an empirical analysis for Poland (co-author: Szczepaniak K., Bęben R.)	European Real Estate Society (ERES) 23rd Annual Conference, Regensburg

NATIONAL CONFERENCES			
14.	2011	The importance and dissimilarity of partnership in revitalisation investment on the example of chosen project in Gdańsk and Sopot	12th International Conference „Management of Finance”, Kołobrzeg.
15.	2012	Investment in the process of urban regeneration – concept of investment economic evaluation	Conference of Polish Real Estate Society, Toruń
16.	2013	Identification and systematization of regeneration investment projects management determinants	Conference of Polish Real Estate Society, Wrocław
17.	2014	Investing in Industrial–Technology Parks in City Development – a Cost – Benefit Analysis (co-author: Kowalski R.)	Conference of Polish Real Estate Society, Olsztyn
18.	2015	The impact of financing strategies on efficiency of a municipal development project	Wrocław Conference in Finance. Contemporary Trends and Challenges, Wrocław
19.	2017	Improving spatial smartness - financial and economic theoretical perspective	Smart City-Regional Governance for Sustainability University of Gdansk, RSA- Regional Studies Association Newtork, Gdańsk
20.	2018	Innovation System in a Global Context: a structural study for Poland (co-author: Zamojska A., Szczepaniak K.).	Wrocław Conference in Finance. Contemporary Trends and Challenges, Wrocław

In addition, I was a member of the organizational or scientific committees, I assist in the organisation or I led a session the following conferences and workshops:

- 2008 – Urban renewal project in city Sopot - financing, PPP, realization, international scientific seminar for students of Slovak University of Technology in Bratislava, Faculty of Management, University of Gdańsk (organisation and chairing),
- 2011 – I International Scientific Seminar of the RICS, Faculty of Management University of Gdańsk, Gdańsk (co-organisation),
- 2012 – II International Scientific Seminar of the RICS, Faculty of Management University of Gdańsk, Gdańsk (co-organisation),
- 2012 – UTM-IBIMA (University Teknologu Malaysia- International Business Information Management Association) International Real Estate Conference (INTEREC), Kuala Lumpur, Malezja (organisation and chairing of a conference session),
- 2014 – Jubilee Scientific Conference on the 20th anniversary of the Investments and Real Estate Department at the University of Gdańsk titled *Investments and real estate in the conditions of sustainable development*, Gdańsk (the chair of organisation committee, co-editor of a book)
- 2016 – 26th Baltic Valuation Conference, Gdańsk (co-organisation),
- 2016 – European Real Estate Society (ERES) 23rd Annual Conference, Regensburg (organisation and chairing of a conference session),

- 2019 – Jubilee Scientific Conference on the 20th anniversary of the Investments and Real Estate Department at the University of Gdańsk, titled *Investments and real estate – current challenges* (the chair of organisation committee, editor of a book).

6.5. International experience

I participated in Erasmus + Programme (2016) which I also used also to develop science cooperation – prof. C. Lausberg from Hochschule für Wirtschaft und Umwelt Nürtingen–Geislingen, is co-author of 1 presentation (*Real estate–related decisions in European cities, European Real Estate Society Conference, 2013, Wiedeń*) and 2 publications (Wojewnik–Filipkowska A., Rymarzak M., Lausberg C. (2015), *Current Managerial Topics in Public Real Estate Asset Management*, World of Real Estate Journal, 4 (94), s. 5–10, DOI: 10.14659/worej.2015.94.01; Wojewnik–Filipkowska A., Lausberg C., (2017), *Decision–making in the European Municipal Real Estate Management – A Case Study Approach*, World of Real Estate Journal, 4(102), s. 23–30, DOI: 10.14659/worej.2017.102.03). The cooperation continues. Research topic: *Public real estate management*.

For 2019, 1-week stay has been already scheduled under Erasmus+ Programme at **RhineMaine University Wiesbaden**, Germany (2019.06), where apart for the obligatory teaching activities (8h of lectures) I will continue my research (*Investment in city development*) and meet with prof. B. Funk to discuss our research (*Municipal real estate development*).

Within the research and acquired its own resources (research for young researchers carried out at the University of Gdańsk) I had a weekly scientific internship in **Herriot Watt University, School of Build Environment, Edinburg, Great Britain**. I conducted a research within two topics: *Decision making in local governments* (with z dr Colin Eliot; the results were presented on *European Real Estate Society Conference* in Bucharest, 2014, presentation titled *Decision making in local governments – a comparative analysis of investment strategy*) and *Public–private partnership in transportation infrastructure* (with z dr R. Alasad; the results were presented on *European Real Estate Society Conference* in Bucharest, 2014, presentation titled *Public–private partnership in transportation infrastructure – comparative analysis of selected case study in United Kingdom and Poland*)

An important scientific and teaching experience was participation in the bilateral exchange of academics at the University of Gdańsk with selected universities in China, in which I took **2-month internship in the CYUPS – China Youth University for Political Sciences in Beijing**, where I did research in the field of investment management in cities and run teaching courses, titled *Investment project evaluation* (48h) and guest lectures pt. *Economic and social*

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effects of urbanisation (4h) and *Public Private Partnership in Poland and worldwide* (4h), showing the selected results of the research, also including studies carried out in Beijing.

7. Summary of the scientific accomplishments - statistics

A summary of my scientific accomplishment is presented below (table 5, table 6, table 7). IF values are given for the year of publication.

Table 5. Scientific accomplishment metrics

Index	Value
Total Impact Factor	3.034
Citation number (Web of Science)	7
Citation number (SCOPUS)	8
Citation number (Google Scholar)	115
Hirsch Index (Web of Science)	–
Hirsch Index (SCOPUS)	2
Hirsch Index (Google Scholar)	5
Hirsch 10–Index (Google Scholar)	2

Table 6. Summary of scientific accomplishment after obtaining the PhD degree

Type	Total	Individual	Co-authorship	In foreign language	MNISW points
Monographs*	1	1	0	0	(25)
Chapters in monographs	6	4	2	0	17
JCR publication	2	1	1	2	40
Publications in journals indexed on WoS (without IF) and/or SCOPUS	7	2	5	7	58
Publications in other international journals	1	1	0	1	5
Publications in national journals	6	2	4	3	56
Publications in Works and Materials	5	3	2	1	32
Editing or co-editing of the monograph	3	1	2	0	10
Total	31	15	16	14	218
Expert opinion /reports	22	18	4		

* The monograph, published after doctoral thesis, is the result of a doctorate, therefore, although mentioned in the list, points were not added to the sum. The list does not include eight articles published after obtaining the doctoral degree, and also being the result of a doctorate.

Table 7. Detailed summary of scientific accomplishment after obtaining the PhD degree

Rodzaj osiągnięcia	Łącznie	Indywidualnie	Współautorstwo	W j. obcym	Punkty MNiSW
Monographs *	1	1	0	0	(25)
	II.B.1	1			25
Chapters in monographs	6	4	2	0	17
	I.B.4	1			4
	II.B.2	1			4
	II.B.3	1			-
	II.B.4	1			4
	II.B.6		1		5
	II.B.7		1		In print
JCR publication	2	1	1	2	40
	I.B.10		1	1	20
	I.B.11	1		1	20
Publications in journals indexed on WoS (without IF) and/or SCOPUS	7	2	5	7	58
	I.B.1		1	1	15
	I.B.2	1		1	12
	I.B.5		1	1	5
	I.B.9	1		1	5
	II.B.11		1	1	4
	II.B.14		1	1	12
	II.B.17		1	1	5
Publications in other international journals	1	1	0	1	5
	II.B.5	1		1	5
Publications in national journals	6	2	4	3	56
	I.B.3	1		1	10
	II.B.8		1		6
	II.B.12		1		10
	II.B.13	1			10
	II.B.15		1	1	10
	II.B.16		1	1	10
Publications in Works and Materials	5	3	2	1	32
	I.B.6	1			5
	I.B.7	1		1	10
	I.B.8	1			7
	II.B.9		1		5
	II.B.10		1		5
Editing or co-editing of the monograph	3	1	2	0	10
	II.B.18	1			5
	II.B.19		1		5
	II.B.20		1		In print
Total	31	15	16	14	218
Expert opinion /reports	22	18	4		

8. Literature used in the summary of scientific accomplishment

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