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PUBLIC PURPOSE INVESTMENT – CHALLENGES, TREATS AND OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT

Inwestycje celu publicznego – wyzwania, zagrożenia i szanse dla zrównoważonego rozwoju

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Abstract

Public investment management is becoming a prerequisite and the general goal of socio-economic development. That is, structural changes supported by public investment management institutions ensure economic growth, and their implementation is regulated by the criteria for ensuring the economic security of the State. It is proved that public investment management is a multifaceted category which reflects a socio-economic phenomenon and is considered as a motive and purpose of functioning of macro-systems; the level of autonomy (independence) of the economy, which ensures the achievement of the aggregate vector of interests of the structural elements of the macro-system; a qualitative characteristic of the economic system, which allows assessing its viability in the context of transformational changes.

Key words: *public purpose investment; public investment management; institutional support, system, state*

Streszczenie

Zarządzanie inwestycjami celu publicznego jest warunkiem i ogólnym celem rozwoju społeczno-gospodarczego. Oznacza to, że zmiany strukturalne wspierane przez instytucje państwowe zapewniają wzrost gospodarczy, a ich realizacja jest regulowana kryteriami bezpieczeństwa ekonomicznego. W artykule udowodniono, że zarządzanie inwestycjami celu publicznego jest wieloaspektową kategorią, która odzwierciedla zjawisko społeczno-gospodarcze i jest uważana za motyw i cel funkcjonowania makrosystemów; poziom autonomii (niezależności) gospodarki, który zapewnia osiągnięcie zagregowanego wektora interesów makrosystemu; jakościową cechą systemu gospodarczego, która pozwala ocenić jego żywotność w kontekście zmian transformacyjnych.

Słowa kluczowe: inwestycje celu publicznego; zarządzanie inwestycjami publicznymi; wsparcie instytucjonalne, system, państwo

INTRODUCTION

Public purpose investment is an important means of ensuring sustainable development of the economy of each country. An important problem in this regard is the lack of control over the use of public financial resources that are directed as targeted investments in socio-economic development projects. The practical experience of public investment projects in Ukraine shows that their implementation is mainly directed to infrastructure improvement measures. Therefore, in the context of the growing need for post-war reconstruction in Ukraine, it is a well-thought-out system of public investment that can ensure not only the restoration of the destroyed infrastructure, but also stimulate the country's economic growth in general.

THE ESSENCE OF PUBLIC PURPOSE INVESTMENT

Public purpose investment has historically arisen from the need to finance the provision of certain goods, infrastructure, or services that are considered to be of vital national interest.

It is worth noting that public purpose investment is a key factor for the development of society, as it is aimed at supporting economic growth, infrastructure projects and improving the quality of life of citizens. These investments provide financial support for the implementation of various programs in education, healthcare, transportation, energy, social protection and other areas.

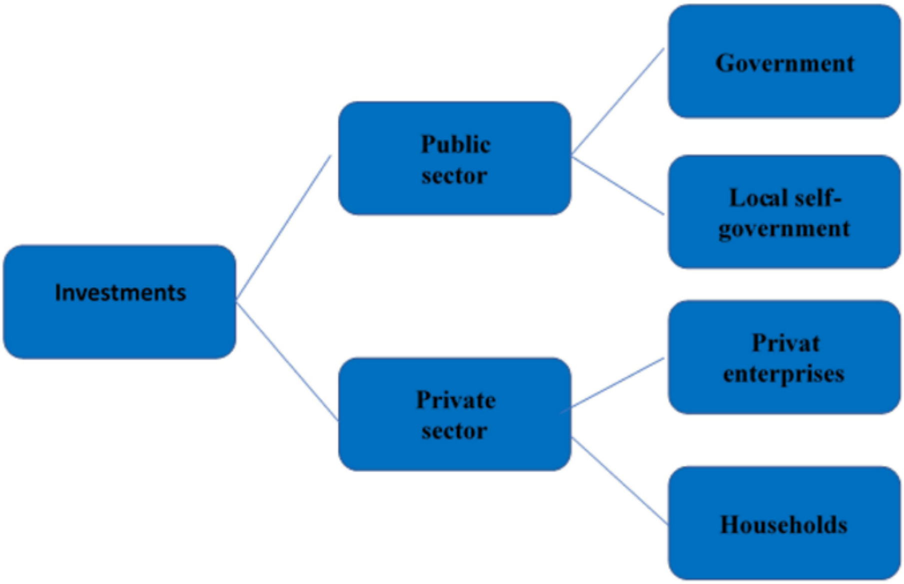

Fig. 1. Classification of investments
Source: created by the authors

There are various approaches to interpreting the concept of "public purpose investment". Let us consider some of them.

In general, public purpose investments are investments in hard and soft infrastructure made by executive authorities and local governments at the expense of public funds.

The definition of public investment is also provided on the website of the Polish State Statistics Service, namely: public purpose investment - an action of local, voivodship (regional) or national significance, constituting the implementation of public objectives/purposes. A precondition for the implementation of an investment is usually its incorporation into a local spatial management plan.

Public investment is spending for productive purposes by the state through the central government or local or regional authorities. This type of investing is mainly aimed at providing goods, services or infrastructure that are considered necessary or important1.

Howard Harding defines public investment as "capital expenditures on physical infrastructure owned and/or operated by one or more communities or small cities of regional significance". The expenditures, in his opinion, must meet the definition of "investment," while the financing of such expenditures can be provided by local governments, higher levels of government, donors, or even private sources[2].

[1] Stiglitz J.E., Economy of public sector, Warszawa 2004.

[2] Harding H., *Public investment needs at the local level in Ukraine. Decentralization*, https://decentralization.gov.ua/news/13743 [date of application: 06.07.2021].

Public investment is also treated as "an instrument of intervention within the framework of countercyclical state policy. This approach emphasizes the need to increase the dynamics of public investment under conditions of economic slowdown diagnosed by such parameters as the inflation rate, the unemployment rate, the dynamics of real GDP"[3].

At the same time, public investment is essentially the expenditure of the public sector (national and local authorities) on the creation of infrastructure that is state (or municipal) property with a term of use of more than one year. The sources of financing may include budgetary funds of the state or local budget, borrowed funds, funds of state or municipal enterprises, and fees from infrastructure users[4]. Public investment can also take the form of traditional infrastructure projects or public-private partnerships, which is most common in Ukrainian practice.

KEYS TO PUBLIC INVESTMENT

The key aspects of public investment are:

– It stands to reason that there are goods or services that the private party is unable to supply efficiently, that is, generating benefits. Therefore, when there is a lack of supply, the state must intervene.
– This is observed, for example, in some geographic areas with low population density. It is therefore not attractive for companies to invest in these regions.
– There are sectors where the cost of entry is very high, and this includes strategic goods or services. Therefore, the state chooses to invest in them. This is the case, for example, with water and electricity, which are considered natural monopolies.
– Investment should be distinguished from public spending. The latter do not have a productive purpose, but are necessary expenses for the maintenance of the state apparatus. We refer, for example, to the payment of public employees' salaries.
– Governments can increase public investment as a way to boost the economy. For example, building a new highway could increase the productivity of companies because it would reduce the time it takes to transport their goods.
– Public investments can be politically motivated in the sense that they can be used to achieve specific goals. These may include promoting certain economic activities, improving the quality of life in rural areas.

[3] Zioło M., *Makroekonomiczne zależności pomiędzy inwestycjami publicznymi a wzrostem gospodarczym, deficytem i długiem publicznym*. „Zarządzanie i Finanse", 2013, t. 11, nr 2.

[4] Aschauer D. A., Public investment and productivity growth in the Group of Seven, Economic perspectives, Vol. 13(5), 17–25.

CATEGORIES OF PUBLIC PURPOSE INVESTMENT

Public investment can be divided into the following categories:

- Tangible: Refers to physical assets and infrastructure, such as transportation routes, hospitals and educational centers.
- Intangible: Includes resources dedicated to the development of intangible assets. We refer, for example, to investments in education or innovation[5].

Another way to classify public investment can be:

- Direct physical: This is direct investment for the construction and maintenance of public works. Similarly, it includes the acquisition of fixed assets (machinery and equipment).
- Indirect physical: The state transfers resources to another entity that ultimately develops the public work. This happens, for example, in public-private partnerships, in which resources come from the government and the private sector, which may be responsible for the management and implementation of the project.
- Budgetary: Refers to the acquisition of financial assets, such as bonds, stocks, derivatives and others[6].

Another approach divides them into physical or tangible investments in infrastructure (e.g., transportation, telecommunications, buildings); human or intangible investments in education, skills, and knowledge; and current investments in the consumption of goods and services (e.g., social benefits, pensions).

The importance of public purpose investments are:

- Economic growth: public investment helps to stimulate the economy by creating new jobs, increasing production and developing entrepreneurship.
- Infrastructure projects: Such financial investments contribute to the improvement of infrastructure: construction of roads, bridges, energy networks, and transportation.
- Social welfare: investments in education, healthcare and social protection improve the living conditions of citizens and increase the level of access to basic services.

Public investment has been justified on the basis of both economic theory and political ideology[7].

In politics, public investment is justified as necessary to achieve various policy goals, including national security, protection of property rights, maintenance of the rule of law, national economic development and full employment, a clean environment, collective (social) ownership of the means of production, and greater equality in the distribution of income and wealth.

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[5] Glomm G., Ravikumar B., *Public investment in infrastructure in a simple growth model*, Journal of Economic Dynamics and Control, 1994, Vol. 18(6), 1173–1187.

[6] Stiglitz J.E., *Economy of public sector*, Warszawa 2004.

[7] Gryshkevych O., Ryzhakova G. (2020), *The modern paradigm of public investment as an instrument of state regulation of sustainable economic development*, Management of Development of Complex Systems, 44, 136–142.

The goals of public investment have changed depending on the processes that took place in national economies. In the nineteenth century, economists argued that public investment was crucial for any industrializing economy that sought to develop its national productive forces to the point of being able to compete with other developed economies. Public investment has been used not only as a vital source of economic development, but also as a tool to build the foundation of national independence, national unity and a sense of common purpose in the country concerned.

During the first half of the twentieth century, the role of public investment was expanded as a result of the military buildup by the participants in the two world wars and the social welfare programs implemented in the 1930s to mitigate the effects of the Great Depression. The latter form of public investment was justified by the ideas of the influential British economist John Maynard Keynes, who argued that after major economic downturns, wages, interest rates, and prices cannot spontaneously adjust to full employment. The amount of effective demand in the economy arising from investment and consumption may not be sufficient to maintain production levels and not enough to create jobs for all. By extending their traditional functions on a large scale, Keynes argued, governments, by financing public investment, can have a multiplier effect on private investment, demand, and confidence among firms and consumers interested in the results of these public investments.

Later in the 1970s, by promoting the privatization of major state assets, the anti-public investment movement hoped to achieve a number of key policy goals. First, investment would be depoliticized – in the sense that it would no longer be subject to democratic decision-making or public scrutiny – and new markets would be created for private capital. Second, investments would be allocated more efficiently and profitably, thereby contributing to corporate economic freedom, greater consumer choice, and improved national economic performance.

In addition, in developed countries in the 1990s, innovative use of private funds to finance public goods and services, the so-called public private partnership (PPP), was widely used to increase efficiency, equity, and accountability in the delivery of public services and to utilize private sector skills in the design and management of large infrastructure projects. PPPs have taken a number of forms, including the introduction of private ownership in public businesses; the purchase of public services from private sector partners, with the latter taking responsibility for investing in better services; and the sale of public services to broader markets to exploit the commercial potential of investing in public assets[8].

In practice, the expected benefits of PPPs – increased efficiency, greater value for money, and the transfer of risk from the taxpayer to the private sector – are limited. Although the private sector has assumed responsibility for major project risks (e.g., cost overruns and delays), the public sector and taxpayers remain the key risk takers in investment projects, with demand risk being the most significant. In addition, for

[8] Gryshkevych O., Ryzhakova G. (2020), *The modern paradigm of public investment as an instrument of state regulation of sustainable economic development*, Management of Development of Complex Systems, 44, 136–142.

the public partner, assessing the actual transfer of risk has proven problematic due to the many risks to which PPPs are exposed, as well as the sheer complexity of PPP agreements. To do so, the public partner's capacity to use risk management should be enhanced by hiring highly qualified private sector professionals or staff should be trained in the relevant skills.

From a historical perspective, public investments are essentially expenditures by the public sector (national and subnational authorities, state and municipal enterprises) to create infrastructure that is state (or municipal) property and with productive use of the infrastructure for more than one year.

The sources of funding may include state (or local) budget funds, borrowed funds, funds of a state (or municipal) enterprise, and fees from infrastructure users. It is in this generally accepted framework that the concept of public investment is most often used as the most comprehensive in its manifestations. Public investment can take the form of traditional infrastructure projects or public-private partnerships[9].

PUBLIC INVESTMENT SYSTEM

The public investment system is a relatively new area of activity for Ukraine. Only in 2018 did Ukraine join the OECD recommendation to introduce the principles of public investment into the activities of local governments. This demonstrated the readiness of our country to implement measures to reform the public investment management system. It should be noted that this step was an element of the overall administrative-territorial reform, which also resulted in budgetary decentralization, which provided the newly created united territorial communities with financial resources sufficient to meet the needs of regional socio-economic development. In turn, such development is ensured, first of all, by the creation of new or reconstruction of existing infrastructure facilities, which include not only bridges and roads, but also schools, hospitals, or intangible measures aimed at stimulating entrepreneurial activity of the population[10].

In the most generalized form, the public investment system is presented in Fig. 2.

[9] Gryshkevych O., Ryzhakova G. (2020), *The modern paradigm of public investment as an instrument of state regulation of sustainable economic development*, Management of Development of Complex Systems, 44, 136–142.

[10] Methodical recommendations for the preparation and evaluation of the state investment project approved by the order of the Ministry of Economy dated 22.12.2017 651865. https://zakon.rada.gov.ua/rada/show/v1865731- 17#Text

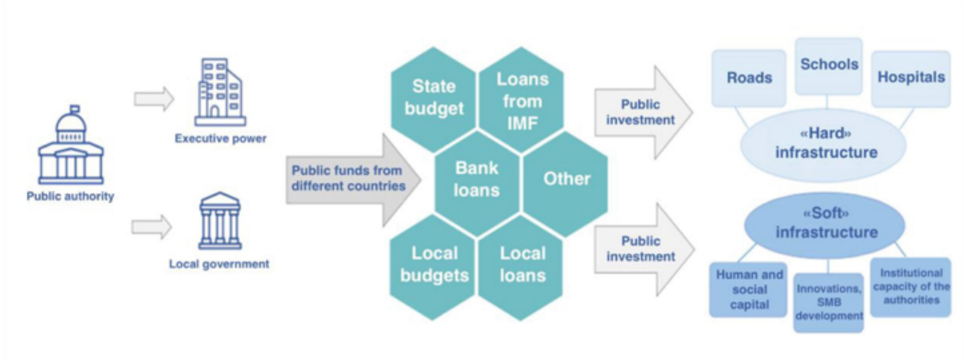

Fig. 2. The system of public investment
Source: created by the authors

Studies by international financial institutions have shown that countries that manage their public investments better tend to achieve higher efficiency. In other words, some potential benefits of public investment are lost in the process of planning, resource allocation, and implementation of public investment projects.

The specifics of the public investment system are characterized by significant problems in the area of efficiency and insufficient control over the use of public financial resources that are directed as targeted investments in socio-economic development projects. Insufficient control can lead to misuse of funds, which can negatively affect the development of the national economy and increase social tension in society.

PUBLIC INVESTMENT MANAGEMENT

Public investment management is a tool for achieving the goals of both economic, investment and budgetary policies, and at the same time is a tool for managing public finances. The impact of public investments on the country's economic development and the welfare of the population directly depends on the goals and expected results of these investments at the national and subnational levels. The quality and effectiveness of public investment management directly affects the achievement of sustainable development goals through the planning, allocation, and implementation of relevant infrastructure investment projects.

OECD GUIDELINES FOR EFFECTIVE PUBLIC INVESTMENT

The OECD Guidelines for Effective Public Investment envisage the introduction of 12 principles that form a holistic national approach to public investment and encourage the improvement of mechanisms for setting investment priorities at all levels of government.

The principles, which are based on three basic elements of public investment management at all levels of government, are:

– coordination of public investment at all levels of government and policy, strategic planning;
– strengthening public investment capacity and supporting learning from experience at all levels of government;
– ensuring appropriate framework conditions for public investment at all levels of government (adapted fiscal mechanisms, transparent medium-term budgeting, transparency of public procurement, quality and consistency of regulatory systems)[11].

Public investment has several characteristics that make it attractive for both cost-cutting and spending to support economic recovery. It is a largely discretionary, heterogeneous process, with much of the spending concentrated over several years, and public investment makes a significant contribution to economic activity, especially in low-income countries. Decisions to reduce, extend, or terminate public investment projects can also be driven by political economy. As the impact is long-term, projects do not necessarily benefit from strong and active support, and delays and cost overruns are not always visible. As a result, countries experiencing financial difficulties often reduce or postpone public investment. At the same time, increasing public investment is a common element of fiscal stimulus programs. They have the advantage of stimulating long-term economic growth in addition to supporting demand and employment in the short and medium term.

The paradigm of public investment differs significantly across economies. While in centrally planned economies, public expenditures were centrally allocated in accordance with five-year plans and then utilized by designated enterprises, in market economies, the principles of transparency, competition, efficiency and effectiveness of public investment at all levels of government come to the fore. In addition, in Ukraine, in order to move to a modern paradigm of public investment, the process of economic transformation must cover a wide range of sectors and areas of regulation: budget and construction legislation, land relations, public procurement, licensing, standardization of public services, tariff setting, corporate governance, banking supervision, labor and contractual relations.

It should be noted that the process of transition to a market economy is still ongoing in Ukraine and directly affects the quality of public investment management.

At the same time, Ukraine has officially supported a number of international decisions on sustainable development, namely: Agenda 21 (1992), the Millennium Declaration of the United Nations Conference on Sustainable Development (2000), the Johannesburg Declaration and Plan of Implementation of the UN World Summit on Sustainable Development (2002), the Future We Want (2012), and the Sustainable Development Goals approved at the UN Summit (2015). This laid the foundation for

[11] Recommendation on Effective Public Investment Across Levels of Government. Council of OECD 2014. http://www.oecd.org/effective-public-investment-toolkit/recommendation-effective-public-investment-across-levels-of- government.htm.

the country's strategic development goals. The localization process resulted in the National Report "Sustainable Development Goals: Ukraine", which was approved and publicly presented in September 2017. The provisions of the National Report define a list of targets and indicators of the national SDG system (86 targets and 172 national development indicators and targets by 2030).

According to the Decree of the President of Ukraine No. 722/2019 "On the Sustainable Development Goals of Ukraine for the period up to 2030" dated 30.09.2019 "On the Sustainable Development Goals of Ukraine", the government must ensure that the SDGs are taken into account when developing draft concepts for the implementation of state policy, as well as forecast, program, and strategic documents.

By joining the Sustainable Development Goals, Ukraine has identified the need to develop high-quality, reliable, sustainable, and affordable infrastructure and expand the forms of state participation in various infrastructure projects as one of its priorities. To this end, the system of public investment management in infrastructure needs to be improved, based on assessments of this area by international organizations[12, 13]. In fact, in 2015: the legislative framework for public investment management reform was created, the Verkhovna Rada of Ukraine adopted amendments to the Budget Code (in particular, Articles 32, 34, and 38) and the Government adopted the Procedure for selecting public investment projects, conducting an expert evaluation of public investment projects, and taking into account the results of project implementation monitoring[14]. The Ministry of Economy has approved the Methodological Recommendations for the Preparation and Evaluation of a State Investment Project (Order No. 1865 of 22.12.2017), which provide more detailed instructions for project preparation[15].

Since 2016, when drafting the State Budget of Ukraine, the government has been applying a unified system for evaluating, assessing, and transparently selecting public investment projects based on validity, efficiency, and publicity, and project monitoring has been introduced. These procedures cover only a part of public investment.

Thus, we conclude that for the effective implementation of public investment, as well as for stimulating private investment in infrastructure projects, state institutions that promote market competition in this area have an important impact. This means

[12] Recommendation on Effective Public Investment Across Levels of Government. Council of OECD 2014. http://www.oecd.org/effective-public-investment-toolkit/recommendation-effective-public-investment-across-levels-of- government.htm.

[13] Ukraine: assessment of public investment management. (2012). International Bank for Reconstruction and Development. The World Bank. URL: https://issuu.com/world.bank.europe.central.asia/docs/ukraine-pim-ukr [date of application: 06.12.2020].

[14] Public Investment Management Assessment – Review and Update, Policy Paper. IMF, 2018, https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/05/10/pp042518public-investment--management-assessment- review-and-update.

[15] Methodical recommendations for the preparation and evaluation of the state investment project approved by the order of the Ministry of Economy dated 22.12.2017 651865. https://zakon.rada.gov.ua/rada/show/v1865731- 17#Text

that even the implementation of infrastructure projects at public expense requires the involvement of private enterprises that will carry out work on the implementation of these projects at the expense of public investment. In this aspect, we conclude that the effective implementation of the public investment system is also impossible without protection.

Accordingly, the sequence of implementation of such projects may be as follows:

- Planning of regional development projects and budgetary coordination of their financing plans between different branches of government involved in the implementation of such investments.
- Coordination of the implementation of public projects between different state institutions to ensure an appropriate level of efficiency in managing the implementation of these projects.
- Financing of projects on the basis of stable sources of financial resources and involvement of public-private partnerships in the implementation of public projects.
- Formation of a proper system for monitoring the implementation of projects and their subsequent operation in accordance with the approved plans. Such monitoring should be carried out by specialized state bodies operating in the field of regional development.
- Ensuring the institutional capacity of public authorities to implement public investments under approved projects, which implies the functioning of an effective financial and administrative mechanism for managing the public investment process in general.

CONCLUSIONS

All of the above leads to the conclusion that public investment plays an important role in the development of society and the economy. It is important to ensure their efficiency and transparency to ensure sustainable development and support the needs of citizens.

The process of public investment management is an extremely important tool for achieving the goals of the state's economic, investment and budgetary policies, and at the same time is a tool for managing public finances. The impact of public investment on the economic development of the country and the welfare of the population directly depends on the goals and expected results to which these investments are directed at the national and subnational levels[16]. The quality and effectiveness of public investment management directly affects the achievement of sustainable development goals through the planning, allocation, and implementation of relevant infrastructure investment projects.

[16] Gryshkevych O., Ryzhakova G. (2020), The modern paradigm of public investment as an instrument of state regulation of sustainable economic development, Management of Development of Complex Systems, 44, 136–142.

The current challenges of public investment are:

- Efficient use of resources: it is important to ensure that public investments are spent efficiently and transparently, minimizing the possibility of corruption and waste.
- Resilience to change: planning for long-term investments should take into account changes in economic and social conditions to ensure the sustainability of projects.
- Public trust: a key component is an open dialog with the public, taking into account their needs and opinions on the spending of public funds.

REFERENCES

Aschauer D. A., *Public investment and productivity growth in the Group of Seven,* Economic perspectives, Vol. 13(5), 17–25.

Erden L., Holcombe R. G., The effects of public investment on private investment in developing economies.

Glomm G., Ravikumar B., *Public investment in infrastructure in a simple growth model*, Journal of Economic Dynamics and Control, 1994, Vol. 18(6), 1173–1187.

Gryshkevych O., Ryzhakova G. (2020), *The modern paradigm of public investment as an instrument of state regulation of sustainable economic development*, Management of Development of Complex Systems, 44, 136–142.

Harding H., *Public investment needs at the local level in Ukraine. Decentralization*. https://decentralization.gov.ua/news/13743 [date of application: 06.07.2021].

Kim J.-H., Fallov J.A., Groom S., *Public Investment Management Reference Guide*, February 2020. https://doi.org/10.1596/978-1-4648-1529-4.

Methodical recommendations for the preparation and evaluation of the state investment project approved by the order of the Ministry of Economy dated 22.12.2017 651865. https://zakon.rada.gov.ua/rada/show/v1865731- 17#Text

On Amendments to the Budget Code of Ukraine on State Investment Projects: Law of Ukraine of April 7. 2015 No 288- VIII. (2015). *Vidom. Verkhov. Council of Ukraine*, 24, 172.

Public Investment Management Assessment – Review and Update, Policy Paper. IMF, 2018, https://www.imf.org/en/Publications/Policy-Papers/Issues/2018/05/10/pp042518public-investment-management-assessment- review-and-update.

Recommendation on Effective Public Investment Across Levels of Government. *Council of OECD 2014.* http://www.oecd.org/effective-public-investment-toolkit/recommendation-effective-public-investment-across-levels-of- government.htm.

Stiglitz J.E., *Economy of public sector*, Warszawa 2004.

Ukraine: assessment of public investment management. (2012). International Bank for Reconstruction and Development. The World Bank. URL: https://issuu.com/world.bank.europe.central.asia/docs/ukraine-pim-ukr [date of application: 06.12.2020].

Zioło M., *Makroekonomiczne zależności pomiędzy inwestycjami publicznymi a wzrostem gospodarczym, deficytem i długiem publicznym*. „Zarządzanie i Finanse", 2013, t. 11, nr 2.