DOI 10.20544/HORIZONS.A.26.3.20.P18
UDC 330.322.02(497.7)
330.322.02(4-672EU)

THE INVESTMENTS SECTORAL STRUCTURE AS A FACTOR FOR DEVELOPMENT ACCELERATION

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ABSTRACT

Having in mind the close interactive connections between individual activities or sectors of each national economy, directing investments in certain sectors of the economy produces effects, rarely multiplicative on other activities. In this sense, the sectoral structure of investments can be an important factor in development acceleration. The analysis of the structure of the economy through the answer to one of the basic questions in the economy (what, how much and how, where and for whom it is produced) determines the current aggregate supply, but at the same time gives predictions to overcome the weaknesses and disproportions in the current economic structure through sectoral direction of future investments. The economic structure policy and investment policy that is related to the previous one is an immanent need not only in planning oriented economies, but also in economies with significant market orientation. Proper investment policy creates preconditions for exploiting the comparative advantages of the economy, harmonizing the ratio of imports and exports, improving the country's balance of payments position, increasing employment and accelerating growth.

The paper will analyze the sectoral structure of investments in RN Macedonia, as well as a comparative analysis with some of the neighboring countries and EU countries, in order to propose conclusions for the sectors of the economy that should be emphasized in the forthcoming period.

KEY WORDS: investments, sectoral structure, development, investment policy

INTRODUCTION

The sectoral structure of the economy is one of the key indicators that show the level of economic development of the country.The study of economic structure shows the basic features and functioning of the economy as a whole, but also the structure and volume of production of goods and services, i.e. information about what, how and in which industries or sectors everything is produced.As a result of this analysis one very important problem in every economy is recognized, the interconnectedness and interdependence of activities and branches and disproportions in the economic structure as a limiting factor for development in order to propose directions to overcome discrepancies in the structure.

Specialy it is important to keep in mind that all ctivities and branches, economic orsectors are not isolated, but on the contrary, they can exist only in their mutualconnection and dependence. For example, almost any activity can no exist withouttraffic, and traffic is directly dependent on the industry of transport equipment, on theproduction of oil and oil derivatives, etc.Thus, defined economy or economics is not asimple set of activities and branches, but a whole composed of parts that are closelyconnected and dependent.Structure as the percentage composition of the economy can be analyzed by:theshare of individual sectors and activities in the creation of gross domestic product,percentage of employees or the active population in certain sectors, activities andbranches (which means, in which sectors and industries the population is employed),the percentage of allocation, distribution of fixedassets in different sectors andbranches (how and where, in which activities they are engaged).These indicators are crucial for determining the investment policy measures aimed at dynamizing the future development of the economy.Macroeconomic policy and especially the policy of the economic structure gives an answer and takes measures for the future development of the economic structure, primarily through the implementation of an appropriate investment policy.

SOME PRINCIPLES IN THEPOLICYOF ECONOMIC STRUCTURE IN DIRECTION OF DEVELOPMENT DYNAMIZATION

In conducting the policy of economic structure, i.e. in the effort to harmonize the aggregate supply and demand by volume and assortment, should be

taken care for some economic principles and laws, which have long been known in theory and applied in economic practice.[1]

One of those principles is the *principle of complementarity*, which points to the fact that some sectors and activities in the process of reproduction are directly related and interdependent and without each other cannot be developed, because they complement each other. From this arises the need for those activities and sectors to have harmonized and synchronized development. In general, all sectors, activities, branches and sub-branches are in some way connected and more or less dependent on each other. However, the principle of complementarity refers primarily to the direct, not to indirect connection and dependence, which in the last resort should also not be neglected in the reproductive system. In all these cases, a policy of synchronized, coordinated development is needed no matter how it is achieved.

The *accessibility* in the conduct of the economic structure policy indicates the auxiliary, additional role of certain activities, branches and productions that they have in the existence and development of other activities, branches or products that were considered as main. In fact, without the auxiliaries, the main activities or productions cannot function or be realized. The activities, branches or products that have an additional role are also called ancillary because their development goes with the development of the main ones. The principle of accessibility should be taken into account at the entrance, i.e. at the beginning of production and at the exit, i.e. at the end of a production. To respect the principle of accessibility at the exit means to strive in addition to the main products to receive by-products, ancillary products during the realization of theeconomic structure policy.

Diversification as a term literally means "scattering", but in economics it is used to express the principle of expansion, enrichment, emergence of new activities, new branches and especially new products and services in the structure of production and consumption. Individual enterprises specialize in individual products, but at the level of the whole economy, the emergence and existence of a large number of such specialized enterprises also means diversification, expansion of production with new products and services. So, although diversification is the opposite process of specialization, it does not negate this principle but simply requires that there be more and more diversified specialized production capacities.Through the process of

[1]Mojsoski V., Karadjova V., *Applied Economy*, pp. 291-295

modernization, the economic structure is expanded and the range of products is expanded. However it should not be lost in mind the fact that there are objective limits to diversification, such as natural conditions, alternative costs, comparative advantages and the like. In this, it is very important to find objective limits to where the diversification can go, i.e. to where and how far the production and services can be expanded, whether the country really needs to produce everything it needs or will meet some of the needs with imports from other countries.

Closely related to the previous principle is the idea of *forming reproductive units and complexes,* ifthere are conditions for it. This means that the production units that are reproductive connected to be institutionally connected in complete production systems, for example from raw material to final products, with respect to the economic principles and above all, by respecting the economic justification.

Achieving the goals of macroeconomic policy in forming the economic structure is an important principle, whether it would mean favoring certain sectors for which there is a comparative advantage with any direct or indirect instrument, or generally meeting the goals of macroeconomic policy regardless of the sector in which it is made. This means that according to the set priorities in development, those projects and programs that correspond to the basic goals and objectives defined by the macroeconomic policy, i.e. that meet some social criteria, should be accepted,supported and financed.Such macroeconomic goals can usually be employment growth, exports, small business development, technological development, etc. So, with the economic policy, the state does not decide to support and encourage certain sectors of the economy, but certain projects or programs in any sector, which satisfy certain long-term goals. Ultimately, these two concepts are still compatible, because projects that would show effectiveness and achieve macroeconomic goals in the long run are most often in sectors that have a comparative advantage in a particular region or country as a whole. One of those goals would be the *production-export orientation* of the economy, i.e. production of products and services that can be met in addition to domestic, but also the requirements of the world market in terms of quality, range and prices.

Besides compliance with these objective economic principles, the formation of the economic structure and the direction of investments in that direction takes place in complex conditions, through processes of structural adjustment, restructuring (production, technical-technological, ownership

and management), which makes this process very complex and requires a holistic approach to its monitoring and analysis.

DISPROPORTIONS IN STRUCTURE AND A NEED FOR STRUCTURE HARMONIZATION

Disproportions mean lag of individual sectors regarding to the offer beyond the needs and imposing the need for imports to the extent that they can hinder the development of other sectors or to be bottlenecks of development. Within individual sectors (*general disproportions*) or certain types of production (*special disproportions*) as most important can be mentioned:[2]

- *Lag of the Energy sector behind need*, as a general and most importantdisproportion;
- *Lag in the raw materials complex*;
- *Lag in food production*, especially livestock and production of animal feed;
- *Lag in traffic*, especially construction of roads and modernization of railways;
- *Lag in services sector*;
- *Forcing the manufacturing industry and finalization*, with existing and potential problems in their export.

Conditions of disproportions in the structure of the economy or noncompliance among the aggregate supply and demand have partly objective and partly subjective character.

In conditions of market economy, harmonization of the economy structure is conducted by market mechanism, while some indirect state influence is not excluded.*Measures to address* the mismatch of supply and demand of certain products andservices may be:[3]
(1) *Short-term and quick measures*, or problem to be addressed immediately in theshort term, for example, *import and export* of products and services that are surplus ormissing in the domestic market. However, this measure can be accepted as long-termsolution only for those products and

[2]Karadjova V., *Comparative analysis of the Economic Structure - Factors and Disproportions*, pp.142 - 143
[3] Karadjova V., *Comparative analysis of the Economic Structure - Factors and Disproportions*, pp.142-143

servicesthat the country has no comparative advantagesand has high alternative costs for theirs production.
(2) or *long-term measures*, that problem is solved in the long run if we estimate that thecountry has comparative advantages, i.e. if the alternative costs are small, so it will beworthwhile to encourage and support the increase of domestic production capacities forsome products and services which are lacking on domestic market or which can beeasily exported.

When an export or import is selected as a solution, then the basic problem is theopenness of the domestic market for import and export. When the "excess" on thesupply side consists of products and services with high quality and low costs that caneasily be exported and sold in other countries, and to import products and services forwhich the domestic market has a lower offer, then cannot talk about more or lessproduction, i.e. for mismatch in supply and demand and for disproportions in thestructure of the economy. In terms of high productivity of domestic manufacturing,goods and services good quality and assortment, the country don't meets the problemof mismatch between the aggregate supply and aggregate demand, but only the needfor harmonization of trade and payment balance.

INVESTMENT POLICY AS AN INSTRUMENT FOR DEVELOPMENT ACCELERATION

Investments are economic category that free and excess cash,savings of householdsand firms turninto tangible and intangible capital goods.That is,investments areconversionof savings into capital funds.Instead of savings to be spent on current needstoday,theyare intended for production consumption,for construction of new capital goods of which is expected to get bigger effectsin the futurethan it was invested in the past.So, the essence and meaningof investment is engagingthe savings and other free resources of householdsand businesses to create new or to renew and expand existing capacities and objects.The basic principle is that sacrificewhichis done todayby investing somefunds,in the future can not justbereturn the invested funds, but also to achieve earnings or profit.

When analyzing the distribution ofthe elements of gross domestic product (GDP) will see thatof all elementsonly savings notappearon the market, but are transformed into investments, and investments are converted into newcapitalfunds. The biggertheGDPis,thebiggerthesavingsare, thereby increasingtheinvestments or investments in capital funds, in tangible and

intangible goods. If that happens of course depends on the totality of the economic system and the overall economic relations, of the household's interest to convertsavings into investments and so on,which can positively affecttheeconomic development. If there is a lack of domestic accumulation for investments, the solution can be find in borrowing from other countries that have excessofsavings.[4]

Inconditionsofmarketeconomy, the role and the influence of state on the economy islimited.The statedoes not interfere directlyin the investments decisions of the managers, butseeks to influenceindirectly and intermediarythrough the instruments of other policies. The state creates conditions for discretiondecising and action of the economic entities, but by taking measures and instruments of economic policy seeks to indirectly influence thedirection of private investmentsto the goals and objectives or priorities for development forwhich the state is interested. In market conditions, when theeconomic entitiesthemselves make the decision where toinvest, they often require a persistent analysis projects with such a rate that the ROI will be higher than the interest ratewhich can get investing their funds in the bank or over interestrate they pay for if investing in this projectneed a bank loan. One of thebasicanalyzes that economists dealing with investmentmake is exactly theanalysis of the coefficient ofinvestment efficiency. Broadest understanding of the investmentsefficiency is based on theirgeneral effects. Investmentsencourage economic growth, employment, exports, consumption growth and so on. But efficiency is expressedspecificallyby specific ratios including:marginal ratio ofinvestmentefficiency and marginal capital coefficient.

In order to get a complete picture of investments and investment policy as an instrument through which development can be directed and accelerated, this analysis must be supplemented with the structure of investments. The structure of the investments by purpose of the investments is extremely important, i.e. the structure of the investments according to the sectors of the economy in which they are realized, which is subject of elaboration in continuation.

[4] Karadjova V., Dicevska S., *Investment function of the economic entities – Risks and opportunities*, pp. 346-347

INVESTMENTS SECTORAL STRUCTURE- GROSS FIXED CAPITAL FORMATION BY PURPOSE OF INVESTMENT

Investments directly affect the economic development and the growth of the gross domestic product, so it is important for investment policy to take care primarily of the efficiency, as well as the necessary volume and structure of investments, taking into account the "sacrifice" of the current consumption. One of the more important questions that investment policy should adequately answer is the sectoral structure of investments, i.e. investments according to their purpose. Basically, the allocation of funds can be done through two mechanisms: market and plan. The market mechanism provides efficiency in terms of appropriate location, innovation, technological progress, modernization, etc., i.e. profitability of investments, but of course due to the chaotic market effects and the resulting expost effects, a planned orientation in terms of investment funds sector orientation is needed.A particularly important point in that sense is directing the investment funds with certain mechanisms in order to be used the comparative advantages of the country. In market conditions, the influence of the state on the structural direction of investments is small, but state institutions can *indirectly* influence the structural direction of investments todifferent sectors and activities by using other policies such as: monetary, fiscal, regional policy, etc. In this sense, the principle of *allocative neutrality* of fiscal and other policies must be taken into account, i.e. the state should not directly support certain activities, but should encourage and support the solution of certain problems that are of wider social interest, such as increase of exports, increase of employment, development of small and medium enterprises, encouragement of innovation, protection of the environment, modernization, application of new technique and technology, etc.[5]

Analyzing the latest available data on Gross fixed capital formation by purpose of investment in RN Macedonia (for 2017) and the participation of individual sectors of the economy in the formation of GDP, some disproportions in the structure of the two indicators are noticeable. Namely, there are noticeable sectors of the economy that have a significant share in the formation of GDP, and a noticeably lower share of investments in them. This disproportion is even more visible in the percentage indicators.

[5]Mojsoski V., Karadjova V., *Applied Economy*, pp. 384-385

Table 1.Gross fixed capital formation by purpose of investment, 2017

in million denars

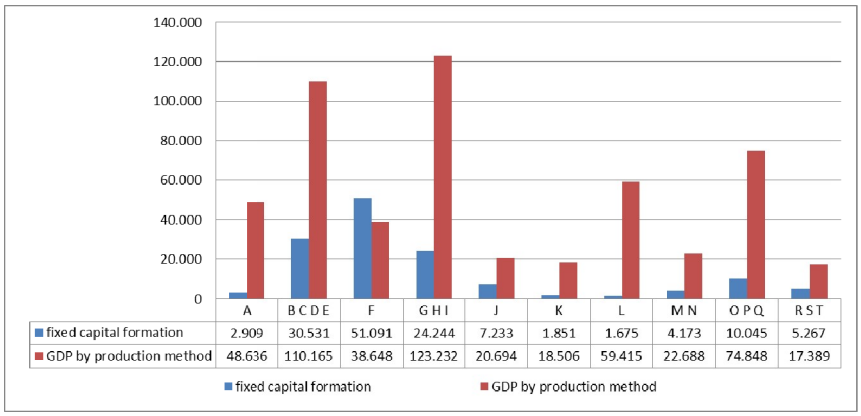
NKD Section	Description	fixed capital formation[6]		GDP by production method[7]	
		amount	%	amount	%
A	Agriculture, forestry and fishing	2.909	2,09	48.636	9,09
B C D E	Mining and quarrying Manufacturing Electricity, gas, steam and airconditioning supply Water supply; sewerage, wastemanagement andremediationactivities	30.531	21,96	110.165	20,62
F	Construction	51.091	36,75	38.648	7,23
G H I	Wholesale and retail trade;repair of motor vehicles andmotorcycles Transportation and storage Accommodation and foodservice activities	24.244	17,44	123.232	23,07
J	Information andcommunication	7.233	5,20	20.694	3,87
K	Financial and insuranceactivities	1.851	1,33	18.506	3,46
L	Real estate activities	1.675	1,20	59.415	11,12
M N	Professional, scientific andtechnical activities Administrative and support service activities	4.173	3,00	22.688	4,25
O P Q	Public administration and defence; compulsory socialSecurity Education Human health and social work activities	10.045	7,23	74.848	14,01
R S T	Arts, entertainment and recreation Other service activities Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	5.267	3,79	17.389	3,26
	Total	139.018	100	534.221	100

Source: own calculation based on the official data from State Statistical Office

[6] Adapted according to Statistical Yearbook of the Republic of North Macedonia, 2019, pp. 429

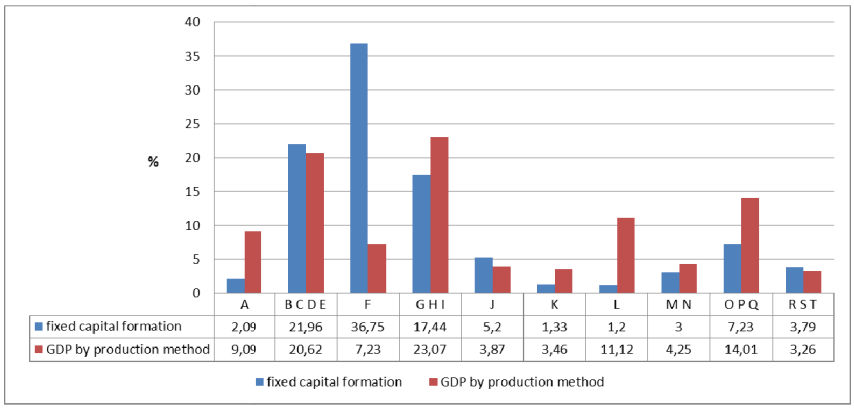
[7] Adapted by Gross fixed capital formation by purpose of investment and type of ownership, 2017 (current prices), State Statistical Office, Year LVI, No: 3.1.18.19, 28.09.2018, p. 3

Based on the data elaborated, the following is a parallel graphic presentation of the two indicators.



	A	B C D E	F	G H I	J	K	L	M N	O P Q	R S T
fixed capital formation	2.909	30.531	51.091	24.244	7.233	1.851	1.675	4.173	10.045	5.267
GDP by production method	48.636	110.165	38.648	123.232	20.694	18.506	59.415	22.688	74.848	17.389

Figure 1.Gross fixed capital formation by purpose of investment and GDP by production method, 2017 (in million denars)



	A	B C D E	F	G H I	J	K	L	M N	O P Q	R S T
fixed capital formation	2,09	21,96	36,75	17,44	5,2	1,33	1,2	3	7,23	3,79
GDP by production method	9,09	20,62	7,23	23,07	3,87	3,46	11,12	4,25	14,01	3,26

Figure 2.Gross fixed capital formation by purpose of investment and GDP by production method, 2017 (in %)

This analysis aims to serve as an indicator of investment policy directions at the macro level, and monitoring these structural indicators over a longer period of time provide clear indications of the effectiveness or insufficient effectiveness of investments in certain sectors of the economy. Investments take effect over a longer period of time, i.e. in the exploitation period of the investment, so in that sense, in order to reach final conclusions about the aforementioned disproportions, it is necessary to harmonize them in time.

This means that the data on investments by purpose in a certain period of time should be placed in relation to their effects (participation in the creation of GDP, participation of employees in that sector, participation of fixed assets in a certain sector, etc.) in another time period i.e. in the period of their exploitation. Of course, only this parallel analysis is not enough to draw appropriate conclusions, i.e. it is necessary to include other indicators that will show the specific "weight" of individual parts of the economy in the collage that makes up the whole and a very important problem in the economy such as is the interconnectedness and interdependence of the individual sectors.Namely, besides of the participation in the creation of GDP, the participation of the employees or the active population in certain sectors can and should be analyzed; the percentage of allocation, allocation of fixed assets in certain sectors; the share of the export and the foreign exchange inflow of the sectors; the share in the import (raw materials) of specific sectors; and other similar indicators are needed to formulate the country's strategic goals and overall macroeconomic policy. Monitoring the structural changes in the economy requires long time series and monitoring the interaction of the individual sectors in the country, but also beyond, comparison with the economies of the countries that have the largest share in the balance of payments. A very important issue in the structural analysis of investments is the existence of capacity or potential for further development of sectors that meet basic needs (food, housing, etc.), but such an analysis far exceeds the goals, framework and spatial possibilities of paper of this kind and serves only as an indication of guidelines for other research.

The indicator used in this paper to determine the volume of investments by sectors of the economy is *fixed capital formation*, and it is calculated at the aggregate level, and it is used to monitor investments in RN Macedonia, the EU and some of the countries in the environment in the last 30 years.This ratio is defined as gross fixed capital formation divided by gross value added, in other words the share of GFCF in gross product. It provides an indication of how much of the total factor income is reinvested in new fixed assets. Normally that ratio is about 20–23% of gross value-added.

Table 2.Gross fixed capital formation (% of GDP)

	1990	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
European Union	24.0	22.9	20.7	20.8	20.3	19.7	19.7	20.1	20.2	20.5	20.9	21.6
Albania	30.4	31.9	28.4	29.4	26.5	26.1	24.2	24.4	24.4	24.6	23.9	22.3
Croatia	..	20.0	21.2	20.2	19.6	19.7	19.3	19.5	20.1	20.0	20.0	20.7
Bulgaria	21.3	16.7	22.3	21.0	21.2	21.3	21.1	20.9	18.5	18.4	18.8	18.3

Greece	24.8	24.6	17.6	15.3	12.6	12.2	11.5	11.6	12.1	12.9	11.1	11.4
Montenegro	..	16.9	21.6	19.5	19.8	20.2	19.0	20.1	24.7	26.9	29.2	27.7
North Macedonia	17.1	20.4	23.1	23.6	23.4	23.8	23.5	23.9	24.4	22.6	19.9	21.2
Serbia	..	12.2	17.7	17.5	20.2	16.5	15.9	16.8	16.9	17.7	20.1	22.4

Created from: World Development Indicators
Series: Gross fixed capital formation (% of GDP)
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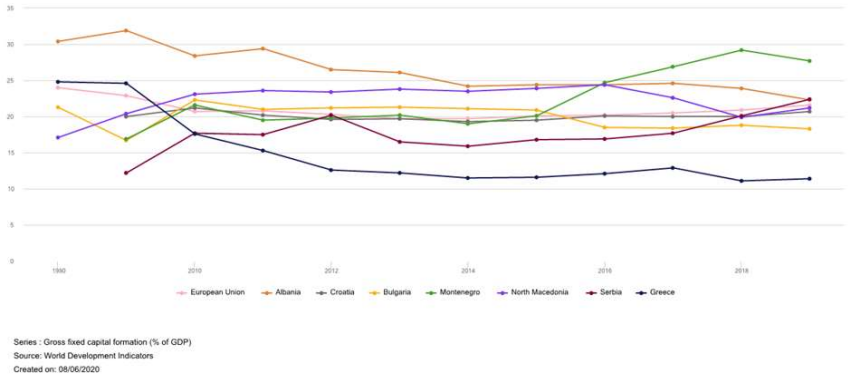

Figure 3.Gross fixed capital formation (% of GDP) 1990-2019

The review shows the deviations from the average (20-23%) in the analyzed countries by years, but the analysis of the reasons for the deviations and the structure of the indicator by sectors is a rather holistic study that cannot be placed in a paper of this scope.

CONCLUDING REMARKS

The realization of the economic development has a multidimensional character and multiplicative effects. Investments are the key category in direction of overcoming the stagnation indicators in certain economy areas. They represent an economic category that converts free funds and excess cash (savings of households and firms) into tangible and intangible capital assets that means investments are conversion of savings into equity funds. Regardless of the form of long-term investments, there is a need for their planning and evaluation of the effects. Having in mind different risk types

arising from the economic entities investment function, this paper elaborate the importance of investments sectoral structure, i.e. investing by purpose of investment. Investing is a risky venture which must have in mind the so called corporate risk, the risk of investing in real investment projects. This type of risk is the possibility or probability for any economic entity to suffer adverse material-financial effects due to depreciation on real projects that are invested. Usually risks that make direct connection with investment risk are credit risk, liquidity risk and interest rate risk. Investments directly affect economic growth,i.e.the growth of gross domestic product,so it is importantin the investment policy to be taken care primarily for performance,despite attempts to provide the necessary scope and structure of investment required when there is so much sacrifice of current consumption.The latest economic crisis that hit the world economy will left more or less repercussions on almost all national economies. Economic policies are now faced with developing strategies to overcome consequences and to intensify economic development. Within these strategies, a very important point is the need for structural adjustments in the economy. In an extremely serious crisis situation such as the current one, the additional question is which economic structure gives greater opportunities for survival, and which for conformity.

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