Methods of Solving Macroeconomic Issues of the Economic Development in Azerbaijan - Global View

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Abstract: The main aim of the research consists of macroeconomic issues, modelling and definition of the most optimized solutions, approaches of the national economic development in the conditions of global economic challenges. From this point of view, the theoretical methodological features of the national economic development and review and solution issues of these problems with acceleration of the national economic development were analyzed. In the article a greater emphasis was put on the issues of provision of the national economic growth rate, improvement and development of domestic income, export structure, improvement of the export potential, formation and launch of foreign markets for the competitive and export oriented national brands. The issues of maximum rational use of the national wealth and resources were reviewed by the analyses of economic development processes of the post-Soviet republic Azerbaijan. The paper also includes the economic development model features of Azerbaijan, the self-development potential, and the possibilities to increase the competitiveness under conditions of global economic challenges. Special emphasis placed on the problems of rational model choice and implementation mechanisms for the national economic development. Activity of the economic fields capable for value added creation of the issues of the dynamic development provision of the national economy and increase of its competitiveness were strongly marked as a discussion point and formed the possibility for scientific polemic. In the post oil period in Azerbaijan the problems of flexibility and durability of the sustainable national economic development were revealed in this paper. The block scheme of activity directions on solution of macroeconomic problems of the national economy was prepared and the forecasts on a group of main indicators of the national economy for 2030 were formed in the context of impact enhancement of the global economic processes by taking into account the development tendencies of Azerbaijan in the post oil period. There were given suggestions and advices prepared on the problems mentioned in the article. The article investigates scientific polemics associated with the methods of different authors on the mentioned issues and scientific practical thoughts. The research paper touches implementation of the mechanisms of macroeconomic problems solution of the national economic development.

Keywords: macroeconomic; competitiveness problems; national economic development; issues of innovation; global economic challenges

JEL Classification: E02; O1; O10; O11; O2; O20; O3; O4.

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1. Introduction and Research of the Problems

It was not easy to write this article. I came to fruition of expressing my attitude to the macroeconomic problems of the national economic development in one of the affluent scientific journals of the world long ago, but I was little hesitant because of the huge responsibility of this work and mission. But the rapid changes taking place in recent years in the national economic development of my motherland post-Soviet and in present independent Azerbaijan Republic which insist on compensability of its national economic development model adequate to the experience of national economic development models which were successful in the world economic processes made me prepare this article. After the successful realization of the "Oil strategy" the economy of Azerbaijan managed the increase several times, the modern economic development model of the national economy was formed by means of the currency from oil, the economic reforms took place, the strong infrastructure network was created. As the result of global economic tendencies, the several times price decrease of the main export product of Azerbaijan – the oil on the world market strongly tested the national economic development model of the country. During 2015-2016 the national currency and credit bank systems of Azerbaijan, the economic and finance systems in general faced the serious problems. The local currency manat fell in price, problem loans number increased, several large banks closed, the granting of credits were limited, the financial difficulties appeared in solution of social economic problems of population. In the article there were main efforts for clarification of such kind of macroeconomic problems and definition of the optimal ways of their solution. As the modern global economic tendencies and transformations are extended, the importance of issues of macroeconomic problems solution of the national economic development draws attention. The measures taken on damage control of the world financial crisis and institutional reforms in recent years are best remembered for the complexity of issues of new mechanisms development and implementation. The traditional mechanisms and practical activity tools of the world economic processes draw in horns, in other words, the continuation of economic processes within the previous framework is impossible. On the assumption of specific features of the national economic development and development tendencies, the necessity of preparation of adequate models of the national economic development and its active implementation appeared. The problems of strengthening of the national economic development model in Azerbaijan and the improvement problems taking into account the modern global economic challenges also stand in the spotlight. Despite the historical success of the country in the regional and international development processes, in global economic projects, and also in international transportation and energy projects, the issues of solving the problems of competitiveness strengthening of national economy in the country, injection of the anti-crisis productive economic mechanisms into the national economic system arise. The problems of improvement and renovation of the current mechanisms of the national economic development model should be reviewed and solved in accordance with the goals and priorities of the adequate economic development, which cause the economic development in Azerbaijan. The issues of preparation of the economic development mechanisms adequate to the period going after the confirmation of the strategically road maps on the national economy and main sectors of the economy and the issues of finding the optimal solution ways for the problems of rational economic development model choice appeared. If from one side the strategic development goals, views and indicators have been determined taking into account the short and long term perspectives on the different sectors of the economy, from the other side as we have mentioned before the necessary diversification of the national economic structure in the short term because of the spottiness and decrease of the oil price on the world market, the acceleration of development of the economic fields which are able to create the value added, the provision of rational use of the natural resources

and recourse potential in general which exists for the national economic development are characterized as important terms. In the last period of the complex problems re the issues of stabilization and intensification of growth rate of the national economy. Without the solution of problems of GDP and national income structure enhancement in Azerbaijan the reproduction of growth rate of the national economy is impossible. From this point of view, the national economic field's potential which is able to create the GDP should be objectively assessed, and the modern productive mechanisms of their rational use should be prepared to be involved into the economic development turnover. The other problem is determination of the optimal variants of adaptation of the economic development model in Azerbaijan to the progressive models of the world economic processes and realization of their implementation. Thus, the problems of detrimental effect elimination of the globalization trends to the macroeconomic and financial stability or the problems of their decrease remain unsolved. From the other side the intension of the innovation processes of the national economy was not reached, and the problems of strengthening of the national economic safety draw a huge attention. Finally, the issues of determination of solution ways for the current problems and national economic development perspectives during the post-oil period in Azerbaijan require the complex and systematic scientific economic researches. The national economic development mechanisms and tools which possess strong immunity in the direction of reducing of the negative effects of the global economic dangers and world financial crisis should be developed and implemented. The improvement of the export structure and the remodeling in accordance with non-export products for reducing the negative effect of several times decrease of the main export product of the country to the world market - oil price still also remains as an unsolved problem. The indicated problems contribute to the scientific practical discussions on determination of the optimal solution ways for the macroeconomic problems of the sustainable development of the national economy during the post-oil period in general.

1.1. The Problems Covered in the Article

The problems covered in the article consist of determination of the solution ways of the macroeconomic problems mainly in the sustainable development of the national economy. In connection with this the fulfilment of several tasks was set as a goal in the article. It consists of reviewing the issues of theoretical and methodological features of the nation economic development, determination and generalization of the modern aspects, the analyses, study and determination of the important factors of the national economic development models, the progressive economic development trends in the world economic development processes, the analyses of economic development situation and its features in Azerbaijan, choosing the economic development model in accordance with the national economic development tendencies, assessment of the rational use of the resource potential connected with national economic development, finding the ways of solution of the problems of national economic structure enhancement, research of the problems of GDP and national income structure diversification in the country, analyses of the macroeconomic problems caused by the national economic globalization effect, research of the innovation problems of the national economy, determination of the provision directions of national economic competitiveness, analyses of the national economic stability problems in terms of global crisis, and research of ways to decrease the negative effects of such kind of crisis on the national economy, review and determination of improvement directions of the foreign trade turnover structure in the country, determination of conceptual solution ways of the national economic development in the post-oil period and etc.

1.2. Theoretical and Practical Importance of the Article

The theoretical value of the articles related to determination of solution ways for the macroeconomic problems, rational national economic development models and adequate activity mechanisms of the national economic development in the context of global economic challenges and economic transformations. The theoretical materials and provisions of this article can be used to study state programs which are focused on the strategies in the conceptual and strategic direction of sustainable development of the national economy, to strengthen the legal framework for macroeconomic regulation of the sustainable development of the national economy as well as to use scientific polemics in the relevant scientific fields. Practical suggestions and recommendations this article propose can be used on the development of new mechanisms to address the macroeconomic problems of the national economy, taking into account the specific features of the macroeconomic problems of Azerbaijan national economy development after oil, key indicators of the national economy development in the context of the new mechanisms development for the solution of the macroeconomic problems, modeling, the use of concrete action programs and preparation of events.

1.3. Methods and Approaches

In the preparation of the article there were used the methods and approaches recognized in the economy: benchmarking analysis, synthesis, systematizing, generalization, diagrams, histograms, graphics and tables. The adequate approach and generalization of the thoughts and opinions of the classic economists and modern research was held. The main directions of the problem approach and the modern situation and perspectives of the national economic development as an empiric basis, the tendencies and features of the national economic development, the national economic development models, conceptions, strategies, the publications, scientific works and statistical information about the macroeconomic problems of the national economic development were taken. The main idea in the article consists of approach to the problem set by the author and the author's position. The author thinks that in the optimization of the solution ways of the macroeconomic problems in the national economic development the adequate national economic model which makes possible the economic development by the sustainable and dynamic growth rate have not been still formed in Azerbaijan in comparison with the world experience, and the researches connected with this are at their fundamental stage.

1.4. The Possibility of the Article to Give Contribution to the World Economic Science

The author's opinion is that the results taken from the research materials, scientific polemics, and the suggestions given in the article are of a great significance and can draw attention during the future researches and investigations of the world economists. The determination of the optimal solution ways of the macroeconomic problems of the national economic development and more rational economic development directions in the context of global economic challenges in the world economy draws attention with its actuality in present and from this point of view the materials given in the article can be fruitful.

2. Problem Determination Level and Literature Review

The determination processes of the problems given in the article is not a new issue in the world economy. The macroeconomic problems of the national economic development are the issues which have been drawing attention in all periods of time. Even in the period of formation of the classic economic theory the main problem was organization of the economic rationality. Most of the elements of the problems mentioned in the article were mentioned in the scientific works and scientific views of several classic economists. Adam Smith (1909-1914; 2001) considered important to use the natural resources for the nations' and populations' welfare. Alfred Marshall (1890-1891) paid special attention to the mutual activity of such main economic resources as labour and capital. But Alfred Weber (1909) mentioned the dominancy of the geography of the main resources as one of the main terms of industry placing in national economy organization. J. B. Say (1803) assessed the role of the main economic resources such as labor, land and capital role in determination of the goods value in his theoretical views about the production factors. Friedrich List (1841) took as a basis the activity of three main maintenances of the economic policy in the national system – production power, economic development stages and state economic role. K. Menger (1871) mentioned that the economy would be rational in conditions of liberalism provision in the economic policy and that all members of society would benefit from this. John Keyns (1936) formed the basis of the final passage in national economy balancing and formation of new economic models. He considers that he should play a leading role in national economy balance by intervention to the state economy work or instead of this. Different problems of the national economic development permeated in the works of a group of notable world economic factors. Robert Merton Solow (1974) placed great store on complex review of economic growth influence on all fields of national economy and strategic issues related to this in the context of national economic development. Peter F. Drucker (1999) considered that the historical achievement of the nation is not reached by national resources nd technologies and the 80% of achievement in this field is connected with management effectiveness. As to J. Schumpeter (1934), the rational organization of the innovation activity open whole new opportunities to the economic development system of the country. T. Hagerstrand (1967) considered that innovation activity and implemented innovations direct the economic processes to the necessary course and productive environment. The growth and rationality problems of the national economy took the place in the scientific works of P. A. Samuelson and W. D. Nordhaus (2009). Jozeph Stiglitz and Andrew Charlton (2005) considered important to place greater emphasis on trade rationality and diversification of economic development. P. Krugman (1979; 2009) gave preference to technologies and innovations exchange and availability of high-technological mechanisms and economical fields in the issue of rational model of the national economy in his scientific views. O. Brendan, H. Terence, H. David and L. Patrick (2016) suggest an implementation of stimulating mechanisms, tax resources diversification, equitable distribution of the incomes to provide economic growth. T. Gerard, F. Darragh and M. Stephen (2015) consider more important to balance the finance and resources, to provide the rational use of fiscal finance mechanisms required for acceleration of the national economic development and realization of implementation of the relevant new mechanisms. As to G. Grossman and E. Helpman (1991), the new and productive resources of the economic development of the country are created by means of innovative products manufacturing, the serious foundation is formed for choosing the rational model of the national economy and economic growth rate. M. Trajtenberg (2005) considers that of the important tasks standing before the state is an attribution of innovative economic tendency to all fields of national economy and acceleration of the national economy innovatisation. R. Levine (2004) put a high value on the role of financial provision in the national economic development. From the other hand the formation of resources which can create

the value added for provision of the national economic development is considered important and were reflected in the scientific views of Zurga Gordana (2011). E. Mansfield (1988) and S. Metcalfe (1995) considered important the rational use of the innovations for importance of active implementation of the innovations functions, national economy renewal and improvement of its structure in their scientific approach.

In the context of strengthening of global economic challenges the processes of active consideration of the macroeconomic problems of the sustainable development of the national economy draw attention. Also in Azerbaijan the researches were made, the monographs were written and the scientific articles were published on improvement of the national economic development model, determination of more optimal solution ways of the macroeconomic problems of the sustainable development of the national economy, diversification of the national economy, increase of its competitiveness and innovation, and provision of economical safety, increase of maneuvering ability in the anti-crisis conditions, and determination of conceptual solutions of the sustainable economic problems of the national economy in the post-oil period. Academician R. A. Mehdiyev (2005) stated the importance of adequateness determination of improvement of the national economic policy and its strategic goals in conditions of globalization. Professors A. Musayev and A. Nuriyev put rational use of the human resources above the resource and regional potential of the national economy as the main diretions in development of the conceptual basis of economy in Azerbaijan (Musayev, 2013; Nuriyev, 2013).

The provision of rational use of the national economic development tendencies and the problems of adequacy to the world economic development processes were considered in the scientific researches of professor S. Hajiyev (2011). The problems of export potential increase of the national economy and improvement of state economic policy connected with this were in the center of attention in the economic researches (Shakaraliyev, 2009). Improvement of the national economic development model in Azerbaijan, finding the optimal solutions of the macroeconomic problems of the national economy find place in the economic researches and works of the scientists and researchers in recent years (Allahverdiyev, 2004; Hasanli, 2011; Hasanov, 2012; Huseynov, 2015; Rustambekov, 2009). Researcher S. Aliyev covered the problems of national economy in the post-oil period, development of the non-oil fields, export potential increase, acceleration of development of the national economic fields which can form the GDP by the way of special economic zones creation in his scientific works (Aliyev, 2015; Aliyev, 2016; Aliyev, 2017). Alongside with mentioning the works of these authors and researches wider place in the article was devoted to the author's point of view on the current problems.

3. Analyses of Theoretical Methodological and Practical Aspects of the Macroeconomic Problems of the National Economic Development

The issues of national economic development, the problems of adequate division between the fair and world civilization of the rational use of the national resources, natural resources of each country and nation, and natural and economic resources in general are quite of immediate interest in present time. The reliable and possessing the high potential natural and economic resources reservoir should exist for national economic development provision, determination of economic fields activity in regards of this in the context of new economic goals and growth dynamics, economic development modelling (Allahverdiev, Gafarov & Ahmedov, 2012).The national economic development conception should be reviewed as synthesis of three aspects mutually dependable and the availability of which are

unmistakable. These three aspects are: 1) economic development growth; 2) safety and repair of environment and ecosystems; 3) establishment of social justice (Shakaraliyev, 2009). The block scheme of the main indicators of the national economic development was given in Figure 1.
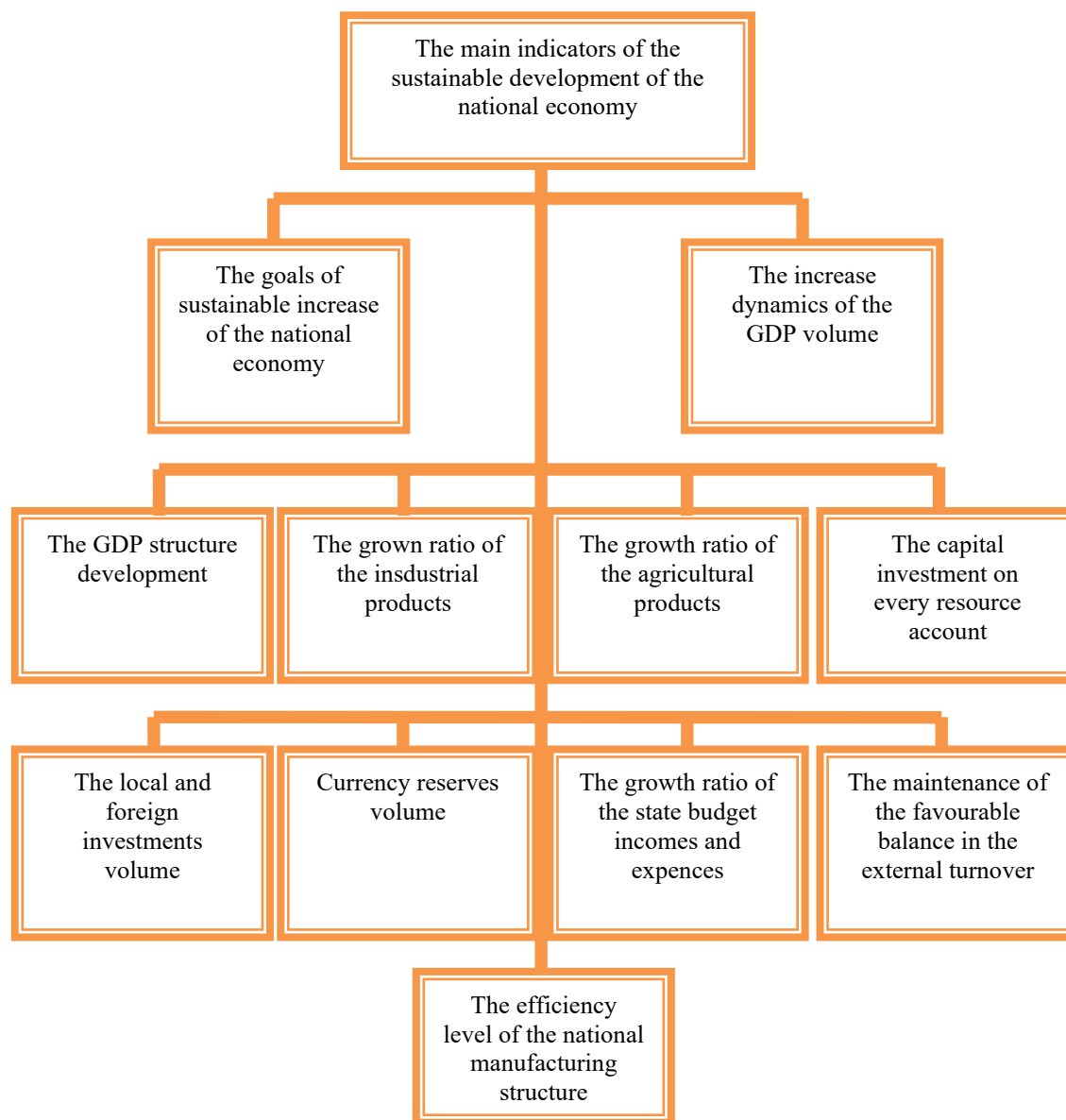

Figure 1. The block scheme of the main indicators of the sustainable development of the national economy (prepared by the author)

In terms of starting of retaliation of important stragegical conceptions it is stated that it is time for implementation of the economic mechanisms which have been successfully tested in the world experience and which are not traditional to the economic system of our country for increase of the maneuverity and sustainability of economic capability in Azerbaijan on important level in modern period (Aliyev, 2016). At the same time the renovation and implementation of the economic system in the country, account keeping of the contributions which can be given to the national economy by the current economic mechanisms after their maximum rationality and productivity levels have been known in the period of assessment of the adequateness level of the main mechanisms of the formation process of national economic development level, prognostics optimality of the national product – the economic

power which can form the economic mechanisms appealed to the additional turnover. But alongside with this the definite periods and stages in the society development are formed and exist as objective processes irrespective of us (Nuriyev, 2013). For example, the oil price have been beginning to grow rapidly till the last world financial crisis and this factor plays a huge role in the national economy of Azerbaijan and also in the society development. Alongside with this the development of non-oil national economic fields were lived in the shadow, and many directions of the agriculture which has traditional activity fields were completely forgotten (winegrowing, tobacco farming, cotton farming, etc.). As the result in last years the economy of Azerbaijan faced serious complexities. The objectivity consists of the fact that it seems to be unreasonable to hope for fantastic price increase of the oil and oil factor again and at the same time both government and society have to accept this factor.

3.1. Macroeconomic Analysis of the National Economic Development of Azerbaijan

Approaching the macroeconomic analysis of the national economic development in Azerbaijan from the methodological point of view we prefer to avoid the idea of a long period analysis. As the aim of the article is connected with solution of the macroeconomic problems of the national economic development in modern period, we deemed appropriate the analysis of recent years indicators. Thus even if the negative effects of the world financial crisis began in the early 2008, the negative effect of this crisis on the economics of Azerbaijan could be considerably felt only in some years. The Azerbaijan government had been able to hold steady the national currency – manat till 2014, but beginning with the early 2015 the significant decrease of the oil price in the world market uplifted the serious macroeconomic problems in the country. The national currency went down in value, the credit-bank system faced the spottiness, the funds from oil export decreased and the dynamic growth rate of the economics in the country started to significantly decrease in comparison with US dollar. Especially in 2015-2016 we became the real witnesses of this. In Figure 2 there was indicated the dynamics of the GDP and GDP per capita in Azerbaijan during 2010-2021 in US dollar.
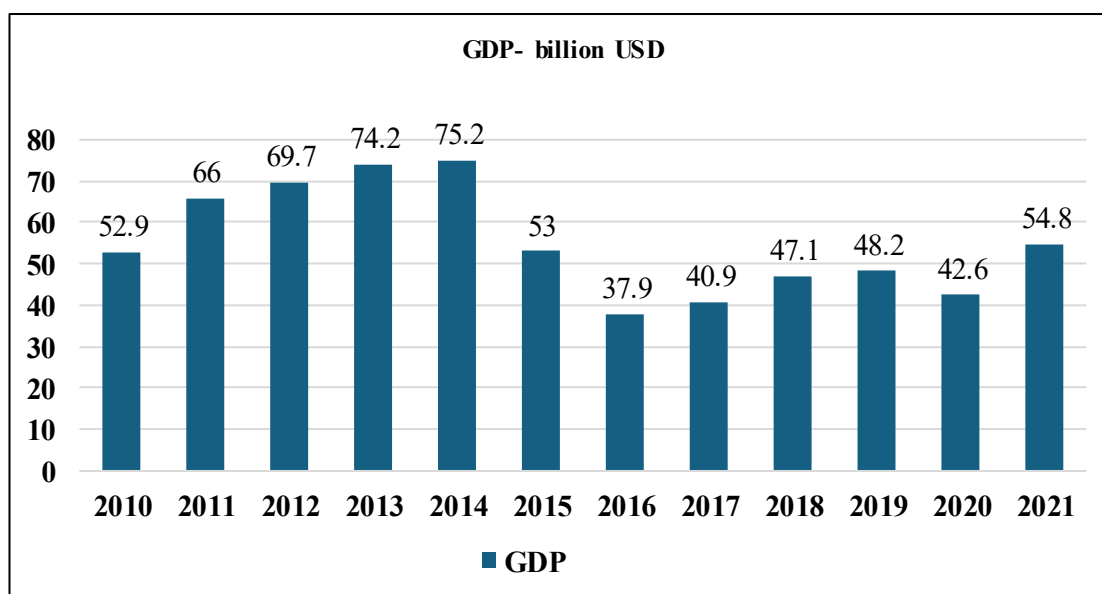
Figure 2. The dynamics of the GDP in Azerbaijan Republic during 2010-2021, milliard USD (prepared by the author on the basis of Azerbaijan in figures, 2021[1]).

In accordance with Figure 2 it is possible to arrive at a conclusion that during 2010-2021 the real volume and value of GDP across Azerbaijan increased 1.04 times. If the real value of GDP in the country in 2014 composed USD 75.2 billion, this indicator in 2015-ci composed USD 53 billion and in 2021 it organized to USD 54.8 billion. The similar situation refers to the GDP per capita in Azerbaijan (see Figure 3).
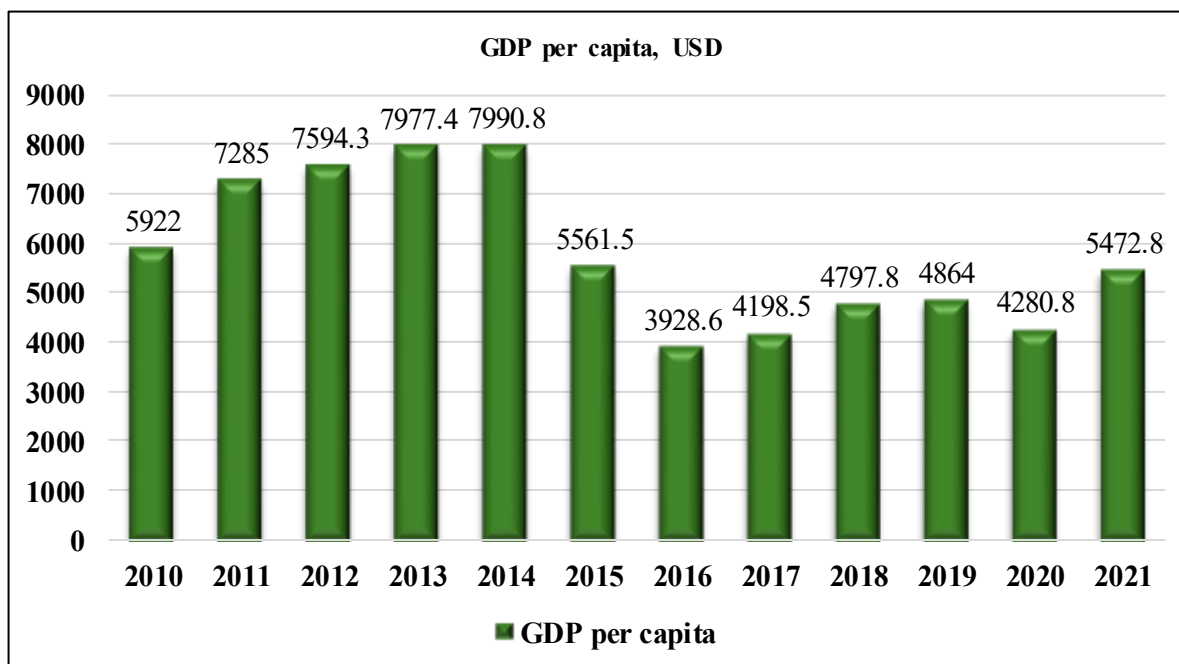
Figure 3. The dynamics of the GDP per capita in Azerbaijan Republic during 2010-2021, USD (prepared by the author on the basis of Azerbaijan in figures, 2021[2])

According to the analysis of Figure 3, the GDP per capita in Azerbaijan in 2011 composed USD 7285, in 2014 this indicator became USD 7990.8, in 2015 - USD 5561.5 and in 2021 this indicator composed USD 5472.8. In other words, in 2010-2021 the volume of GDP per capita in Azerbaijan decreased 1,08 times. The opponents can mention that the growth rate of the national economy decreased in the dollar value, but this decrease in the local currency manat is not felt so much. Because of this in accordance with the analysis of the non-oil sector and the GDP in Azerbaijan Republic expressed in manat we indicated the growth dynamics in Figure no. 4 according to the official sources.

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[1] http://www.azstat.org.

[2] http://www.azstat.org.
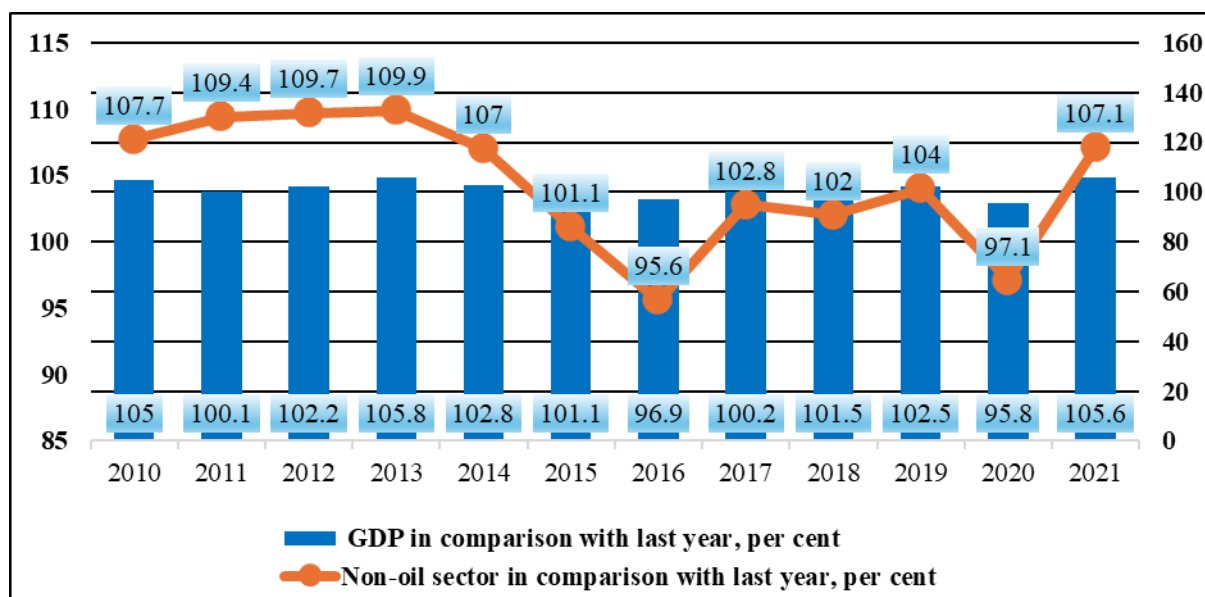
Figure 4. The GDP and non-oil sector in Azerbaijan Republic in comparison with the last year (National Accounts of Azerbaijan. Statistical yearbook, Baku, 2022)

As we can see from Figure 4 the GDP was not able to show the valuable growth tendency in the years after 2010. Even if there was an increase in the non-oil sector in this period, in 2015 the growth rate decreased 6% in comparison with 2014, but in 2021 the growth rate was a little bit restored, and if to approach objectively this increase took place because of the difference in AZN and USD currency rate. From this point of view, the diversification of national economic structure should be accelerated, the activity of potential economic fields for the GDP growth should be enhanced, and especially the development of the non-oil fields should be strengthened (Mehdiyev, 2005; Hajiyev, 2011). Taking all into consideration the provision of stable economic formation of the national economy in the terms of market economics and the regulation of macroeconomic dynamic and structure changes are important issues. In Figure 5 the structure of the general domestic products in Azerbaijan Republic in 2021 is given.

Figure 5. The structure of the general domestic products in Azerbaijan Republic during 2021, per cent

Source: Azerbaijan in figures, 2021

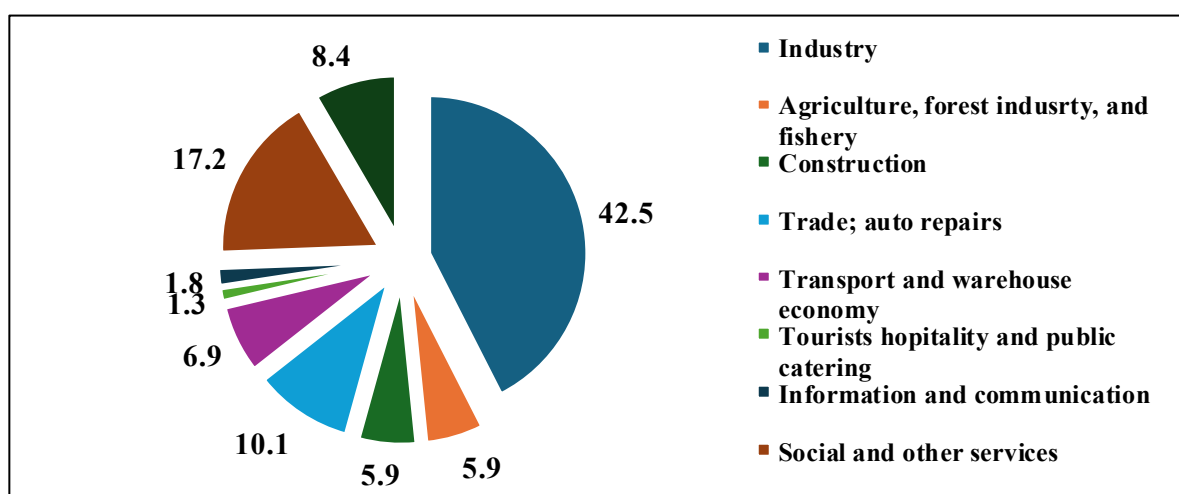As we can see form Figure 5, the special value of the service sector in the GDP structure for 2021 in Azerbaijan significantly decreased, though the living conditions and tourism development in the country are intensified on a significant level. Tens of thousands of service objects function in the capital city of the country Baku and other cities, at the same time the service oriented sectors of the economics crossed over to the intensive development phase (construction, trade, transportation, communication, etc.). Taking these into consideration, the special value of the service sector in the GDP structure of the country in the near perspective should be objectively assessed and determined, the statistic approach should be rebuilt, and the record keeping and reports, the accountability assessment of the national products which form the activity fields of the national economic structure should be provided.

3.2. Assessment of the Analysis and Innovation Processes of Development of the Industrial Sector Which Possesses Strong Potential in Creation of Value Added

The analysis of Azerbaijan economic structure shows that among the economic fields possessing the strong potential and ability to create a value added the share of industry sector remains high. Azerbaijan had traditional industry fields with strong potential (chemistry and oil-chemistry, metallurgy, etc.) and possibilities of rational use of such fields potential still remain. From this point of view the stabilization of the national economic growth rate in modern period and provision of dynamic development stipulates and makes important the maximum rational use of the traditional industrial fields capabilities, reserves sources and development potential with the growth rate of these fields in general (Aliyev & Sazmani, 2017). The economic fields and production processes possessing the potential to form the value added, and also the modernization and innovation of production technologies and their strengthening by means of productive mechanisms are able to create additional opportunities for acceleration of national economic growth and increase to a great extent. If review in the example of Azerbaijan the dynamics of industrial production which has string potential to create value added for the period of 2010-2021 draws attention (see Figure 6).
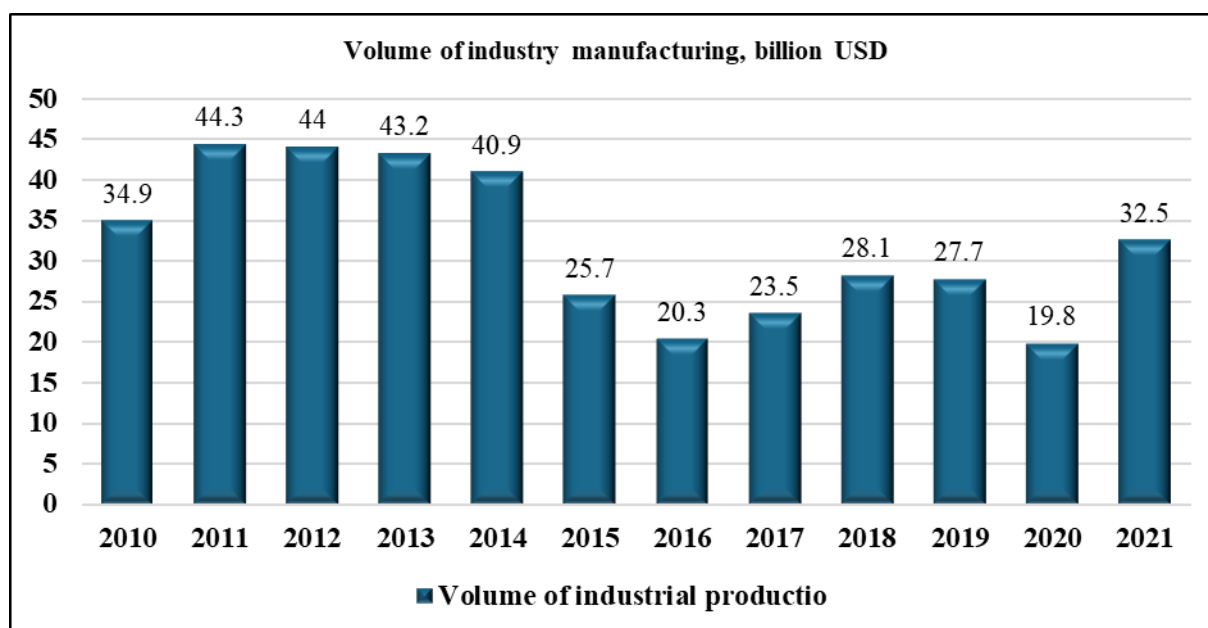
Figure 6. The industry production volume dynamics in Azerbaijan Republic during 2010-2021, billion USD (prepared by the author on the basis of Economic indicators of Azerbaijan and Azerbaijan in figures, 2021[1])

On the basis of Figure 6 it can be mentioned that in the period of 2010-2021 the general volume of industrial production in our country showed dynamic growth in comparison with 2010-2014, but in 2015 the decrease was mentioned and this was directly associated with the world economic financial crisis. Thus, in 2010-2011 the real growth rate was regenerated and starting with 2015 the industry production volume had begun to decrease rapidly in the expression of dollar. If in 2011 the total industry production value in Azerbaijan composed 44.3 billion USD, in 2021 this indicator decreased 1.36 times and composed 32.5 bln. USD. Unfortunately, the processes of foreign investment into the other economic sectors of the country except oil and gas is on a low level. The division of foreign investments in 2011-2021 in Azerbaijan Republic is shown of Figure 7.
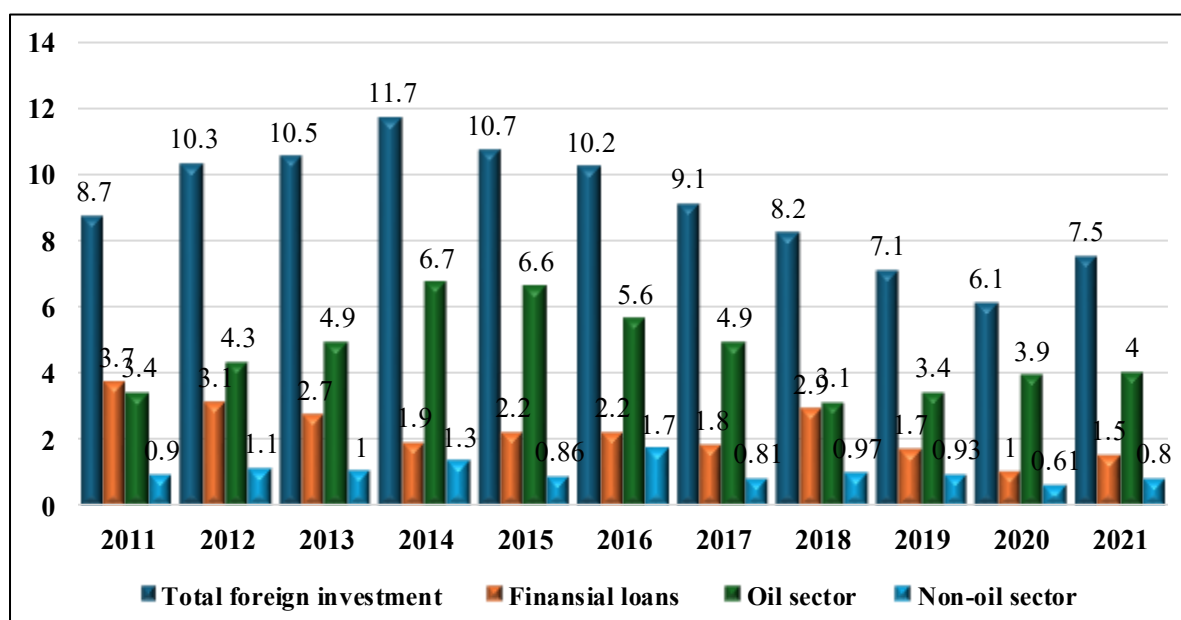
Figure 7. Division of the foreign investments by the fields in Azerbaijan Republic during 2011-2021, billion USD (prepared by the author in accordance with the official statistical publication Azerbaijan in figures, 2021)

If we analyses the Figure 7 we can see that during 2011-2021 the investments volume into the non-oil sector was not so large and undoubtedly the reason of this is that the modeling of the non-oil sector in the country have not still reached the necessary level and the monetary fund's volume from this field is much more under this field potential. From this point of view if the development of the non-oil sectors is not provided to a great extent in recent time it will be hard to get good results in solution of the macroeconomic problems of the national economy. For this reason, the innovation problems of the non-oil sector fields and national economy in general should be solved without delay (Mahmudova, 2016). In Figure 8 there are indicated the main problems preventing innovations in Azerbaijan and the economic and production factors connected with this.

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[1] http://www.azstat.org.

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                    │ Main problems intervening the innovations │
                    └──────────────────────────────────────┘
          ┌──────────────────────────┐      ┌──────────────────────────┐
          │   Economic factors:      │      │   Production factors:    │
          │                          │      │                          │
          └──────────────────────────┘      └──────────────────────────┘

  ┌──────────────────────────────────┐  ┌──────────────────────────────────┐
  │ Lack of financial resources of   │  │ Weakness of the innovation       │
  │ the enterprises                  │  │ potential of the enterprise      │
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  ┌──────────────────────────────────┐  ┌──────────────────────────────────┐
  │ Lack of state financial support  │  │ Lack of high qualified experts   │
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  │ High value of the new implemented│  │ Lack of information about the new│
  │ innovations                      │  │ technologies                     │
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  ┌──────────────────────────────────┐  ┌──────────────────────────────────┐
  │ Small number of orders of the new│  │ Weak legislation base            │
  │ innovation products              │  │                                  │
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  │ The risk of process of getting   │  │ Not development of technologies  │
  │ the new innovation products and  │  │ market and etc.                  │
  │ etc.                             │  │                                  │
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Figure 8. The main problems intervening the innovations in Azerbaijan Republic (prepared by the author on the basis of Azerbaijan Industry, 2022).

As we can see in Figure 8, there are quite many factors which interfere the acceleration of innovation development, and systematic review and solving of these problems draw attention.

3.3. Improvement Directions of Foreign Trade Turnover Structure of Azerbaijan in Terms of Instability of the Oil Price on the World Market

In terms of global changes and global effect increase one of the main problems in Azerbaijan refers to objective analysis, assessment and adequate results output of the situation caused by decrease of oil price on the world market. Azerbaijan government still faces difficulties in formation of the non-oil export potential which makes possible the compensation of monetary funds lost in the oil export last years. It is necessary to wait for the valuable results of the measures taken and strategic goals. The dynamics of foreign trade turnover in Azerbaijan Republic during 2010-2021 is given in Figure 9.
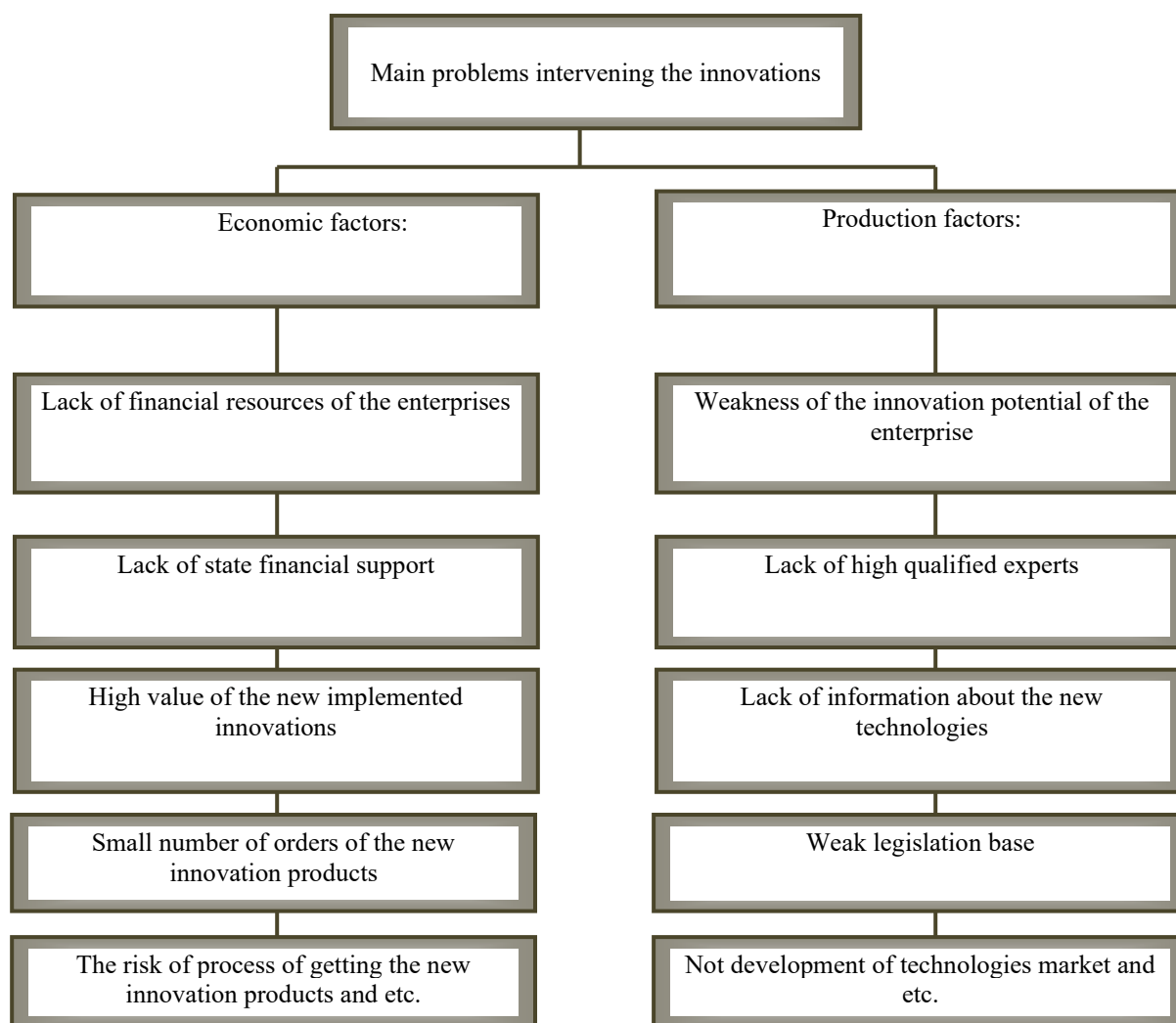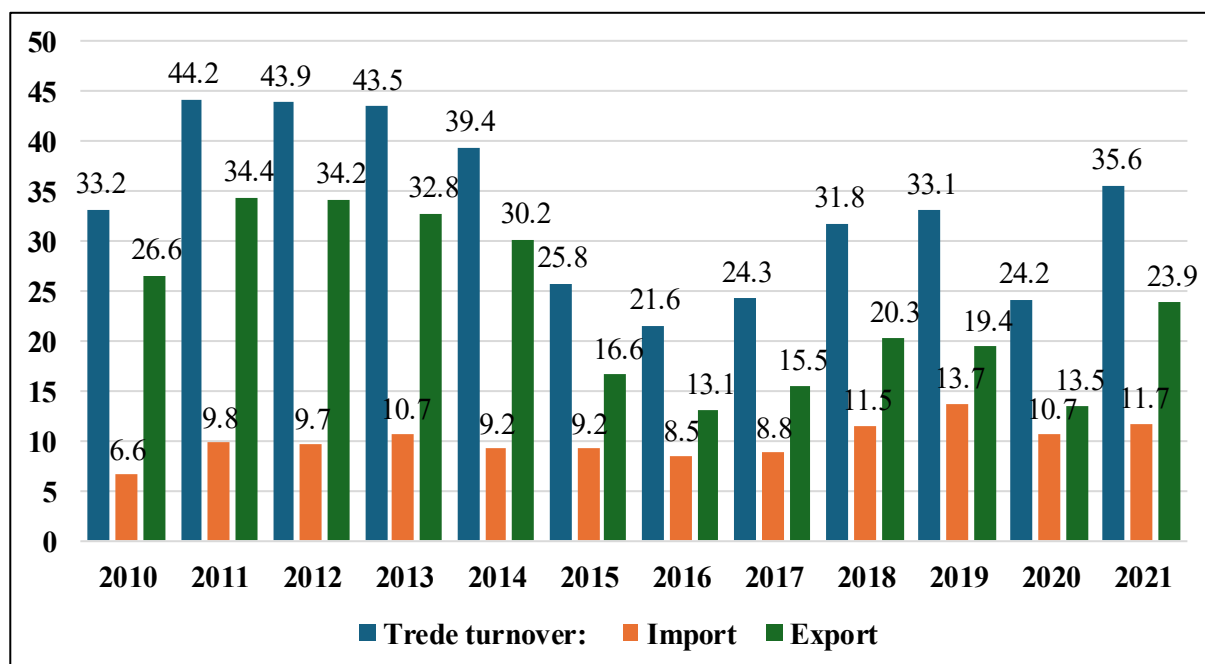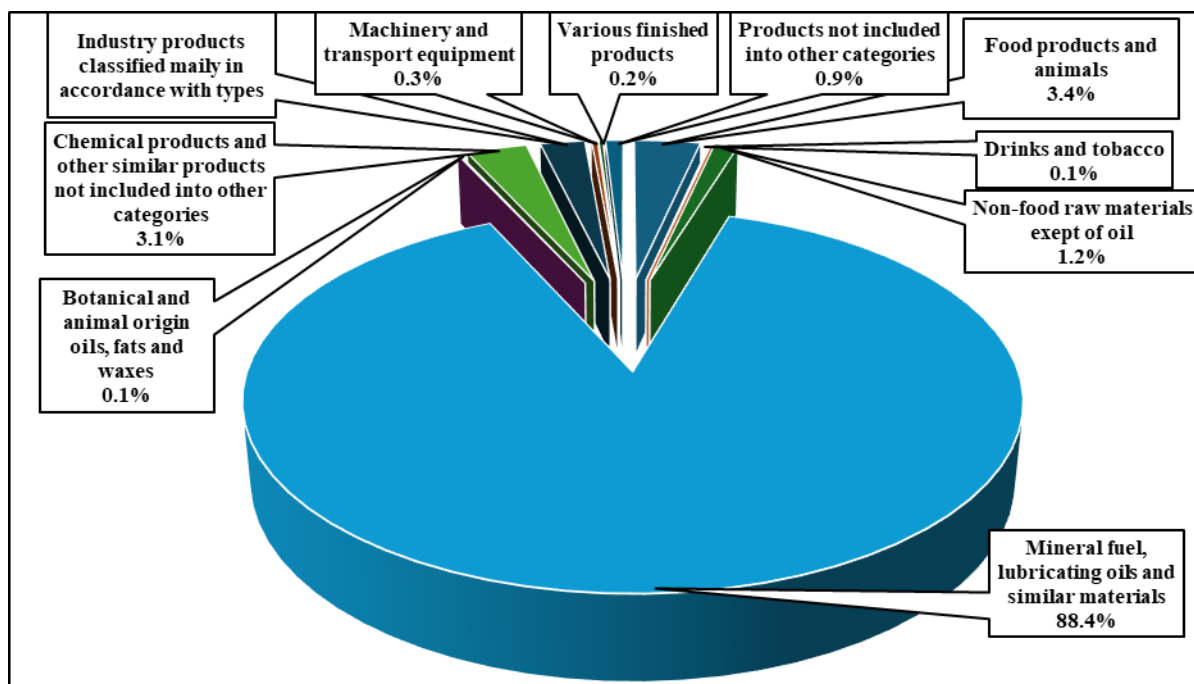
Figure 9. The foreign trade turnover dynamics in Azerbaijan Republic during 2010-2021, billion USD (prepared by the author on the basis of "Foreign trade of Azerbaijan", 2022[1])

As it can be seen from Figure 9 during 2014-2017 the volume of foreign trade turnover in the country was decreasing to a great extent and first of all it was connected with the several time decrease of export - exactly oil price. The export structure on International Standard Trade Classification in Azerbaijan Republic for 2021 was shown in Figure no.10.

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[1] http://www.stat.gov.az.

Figure 10. Structure of export on International Standard Trade Classification in Azerbaijan Republic for 2021, in % (prepared by the author on the basis of "Foreign trade of Azerbaijan", 2022[1])

As it is seen from Figure 10, the mineral fuel, lubricating oils and similar materials – in other words – oil products share in the export structure of Azerbaijan for 2021 composed 88,4%. Unfortunately, in spite of enhancement of modernization of the refining industry sector in recent years, the share of this field products in the export structure is not adequate; the similar situation refers to agriculture and agrarian products. From this point of view, the solution of problems on improvement of foreign trade turnover in Azerbaijan, especially adequate to the global economic challenges of export structure should be accelerated.

4. Conceptual Solutions of the Macroeconomic Development Problems of the National Economy in the Post-Oil Period

In relation to increase of global economic tendencies and dangers the fundamental reviews of the problems of the optimal determination and organization mechanisms of development tendencies of the national economy in the post-oil period, the modelling of their conceptual solution ways in present time are the strategic goals which face many countries of the world and Azerbaijan among them. The concrete goals connected with realization of strategic goals of different fields of national economy in the post-oil sector, service sector including, were defined and the forecasts were prepared for the period of 2025-2030 by Azerbaijan government. But it is important to form alternative views and to prepare forecasts for these prognosis and strategic goals. In the acceptable for us variant the forecasts of the main social economic indicators in Azerbaijan Republic in 2025-2030 were given in Table 1.

Table 1. Main social economic indicators forecasts of Azerbaijan Republic for 2025-2030

	Main social economic indicators	Unit of measure	Fact		Authors forecast	
			2020	2021	2025	2030
01	GDP	billion. USD	42,6	54,8	105,0	168,0
02	GDP per capita	USD	4280,8	5472,8	10406,9	16760,3
03	GDP structure, and also:	billion.USD	100	100	100	100
	Industry	billion.USD			43,0	69,0
	Agriculture, forestry and fishery	billion.USD			12,0	19,0
	Service sector and others	billion.USD			50,0	80,0
04	GDP structure and also:	%	100	100	100	100
	Industry	%			41,0	41
	Agriculture, forestry and fishery	%			11,42	11,3
	Service sector and others	%			47,58	47,7
05	Total currency reserve	billion.USD	49,97 (01.01.21)	52,1 (01.01.22)	67,0	81,0
06	Foreign trade turnover, o including::	billion.USD	24,4	35,6	49	60
	Import	billion.USD	10,7	11,7	13	15

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[1] http://www.stat.gov.az.

| Export | billion.USD | 13,7 | 23,9 | 36 | 45 |

Note: Developed by the author

Not depending on the attitude the opponents gave to the forecasts indicated in Table no. 1 we would like to highlight one point. If Azerbaijan economics is not able to rationally build the mechanisms of use of non-oil sector fields' potential neither the government will be able to achieve its strategic goals nor will the forecasts given by the expert researches be able to prove their value. The problems of production increase of wide network of the non-oil national products in Azerbaijan and maximum rational use of the potential of their launch to the world market as national brand have to be solved. Therefore, we believe that the realization of a group on strategic measures should be provided promptly. In the Figure 11 we provided the model scheme of solutions of the macroeconomic problems of the national economic development in the post-oil period.
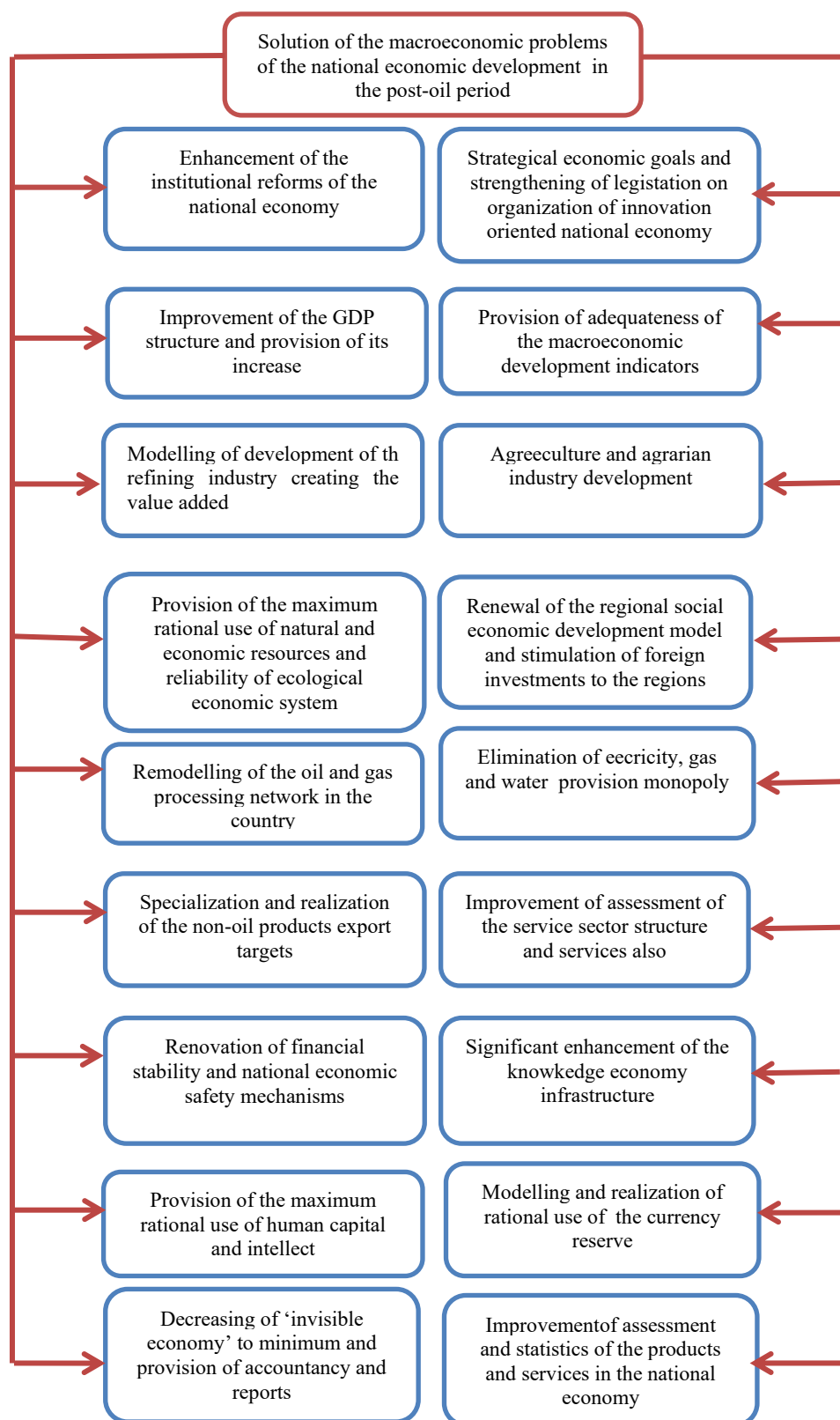
Solution of the macroeconomic problems of the national economic development in the post-oil period

- Enhancement of the institutional reforms of the national economy
- Strategical economic goals and strengthening of legistation on organization of innovation oriented national economy
- Improvement of the GDP structure and provision of its increase
- Provision of adequateness of the macroeconomic development indicators
- Modelling of development of th refining industry creating the value added
- Agreeculture and agrarian industry development
- Provision of the maximum rational use of natural and economic resources and reliability of ecological economic system
- Renewal of the regional social economic development model and stimulation of foreign investments to the regions
- Remodelling of the oil and gas processing network in the country
- Elimination of eecricity, gas and water provision monopoly
- Specialization and realization of the non-oil products export targets
- Improvement of assessment of the service sector structure and services also
- Renovation of financial stability and national economic safety mechanisms
- Significant enhancement of the knowkedge economy infrastructure
- Provision of the maximum rational use of human capital and intellect
- Modelling and realization of rational use of the currency reserve
- Decreasing of 'invisible economy' to minimum and provision of accountancy and reports
- Improvementof assessment and statistics of the products and services in the national economy

Figure 11. The scheme model of problem solution of the national economic development in the post-oil period in Azerbaijan

Note: Prepared by the author

On the bases of generalization of the forecast indicators of the social economic development of the national economy in Azerbaijan up to 2030 in Table 1 and Figure 11 we can come to a conclusion that it is possible to forecast the 3.9 time increase of the economics of the country in 2030 in comparison with 2020. We consider that there should be an economical potential to increase the GDP volume to 168 milliard US dollars before this period. There is no doubt that preparing a forecast especially for a long-term period is very complex and responsible job. From this point of view, we consider that it is essential condition to provide the improvement of the current approach and mechanisms of the macroeconomic problems of the national economic development in Azerbaijan. In any case we consider that the population's welfare in the country, increase of living standards, increase of GDP per capita and the national income, the complex solution issues of the social economic problems etc., and also the social oriented issues should certainly take place in the basis of national economic development model in Azerbaijan and sustainable development mechanisms of the national economy. But we should objectively approach to the fact that the national economy of Azerbaijan has been already formed on the basis of market economics mechanisms and the intensification and modelling of development should be composed especially on the basis of market economics principles. From the other side the problems of completion of the diversification of national economy, formation of the new sources of provision of the GDP increase in the country and the problems of accordance of the economic development model of the country to the progressive economic development models which justify themselves in the world experience should be solved promptly. At the same time the problems of affection of the globalization trends to the macroeconomic situation should be kept in the center of attention in the processes of mechanisms renovation and improvement of the important directions of national economic development provision in Azerbaijan, the renovation of them by the national economic innovation functions should be accelerated, the problems of rationality increase of the components of safety strengthening of the national economy and the issues of strengthening of competitiveness of the national economy to a great extent should be solved.

5. Conclusions

It is time to answer to the question: "What conclusions should we come to from the materials, analysis and author approaches shown in the article?" Of course, we do not put in a claim for ability to get the most optimal results on solution ways of macroeconomic problems of the national economic development. But alongside this we make a matter of conscience to lead a number of our thoughts and considerations to the discussions of world economists and scientific community. We believe that first of all in conditions of increase of the global economic dangers and challenges, and in terms of implementation of the strategic ways on the national economy and main sectors of economy in Azerbaijan the formation of different, alternative modern scientific practical views on macroeconomic problems of the national economic development, development perspectives of the national economy especially in the post-oil period, and conceptual solution ways of the national economic development problems is important. The enhanced reveal of the diversification problems of the national economy in Azerbaijan and bringing to attention non-adequacy of the GDP structure to the modern global economic challenges are of great importance. The authors' approaches to the improvement of national income structure and GDP in Azerbaijan and enhancement of the development of inclusive economic fields, and

foundation of perceptiveness of their implementation draw attention with the actuality. The investments into non-oil sector fields and the active implementation of the development acceleration mechanisms of the service sector should be provided for preparation of more rational solutions of the macroeconomic problems of the national economic development. The problems of invisible economy decreasing in Azerbaijan, formation and enhancement of transparency and accountability as a system in all fields of the national economy have to be solved. The maximum rational modeling of solution of the development problems in the post-oil period of the national economy and the diversification of the export structure were not completed. Generally, we consider that the realization of the mentioned below measures should be achieved for acceleration of solution of the macroeconomic problems of the national economic development in the post-oil period in Azerbaijan:

● The management principles of the national economy should be renewed and institutional reforms should be enhanced for the complex review and solution of the macroeconomic problems of the national economy in Azerbaijan;

● A concrete program and strategy in innovation oriented development of the national economy should be developed and implemented, the aimed investments should be created for production and technology of the innovation products;

● The processes of GDP structure improvement and formation of new sources of their increase should be intensified. The GDP measurement and formation of the new increase sources adequate to the regional potential should be concretized;

● The goals and aims of production industry fields which create the value added and enterprises which consider to be created, the investment value required for this field should be concretized, the active drawing of domestic and foreign investment to the production industry network should be organized promptly;

● The improvement of governmental support mechanisms of the agricultural and agrarian complexes, the preparation of rational mechanisms for increase of economic activity of the subjects, and the attraction of the real economic mechanisms into the turnover on the basis of market economics principles instead of stimulating mechanisms should be achieved;

● The state program on oil and gas production fields during 2025-2030 has to be developed and implemented to decrease the dependence of Azerbaijan economy from the oil. The monopoly position of State Oil Company of Azerbaijan Republic in the field of oil and gas production should be weakened and broad conditions should be created for enterprise and private business development in this field. We believe that solution of this problem can give a hard fillip to development of the national economy fields which have potential to create the value added, for example to development of chemistry and oil chemistry complex;

● The structure of the service sector in Azerbaijan, activity of this field, the statistics of assessment and determination of the services should be reviewed and concretized. "National Activity Program on acceleration of service sector development and provision of transparency and accountability in this field in Azerbaijan Republic" covering 2025-2030 years should be developed and implemented with the aim of value increase of the service sector GDP of the country, provision of transparency in this sector, implementation of tax laws and etc.

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