

importance to accounting theory and practice in the contemporary wave of economic development - in the era of digital transformation.

References

1. IFRS Foundation (2022). *The growing momentum for integrated reporting. Part 1*. Accessed: <https://www.integratedreporting.org/news/the-growing-momentum-for-integrated-reporting-part-1/>
2. *Integrated Reporting* (2021). International <IR> Framework, January 2021. Accessed: <https://www.integratedreporting.org/>.
3. Slack, Richard and David, Campbell (2016) *Meeting users' information needs: The use and usefulness of Integrated Reporting*, ACCA, www.accaglobal.com, August 2016.

Mikiashvili N.G.,

PhD, Associate Professor,
Ivane Javakhishvili Tbilisi State University
nino.mikiashvili@tsu.ge

INNOVATIONS AS A BASIS FOR MACROECONOMIC STABILITY

ABSTRACT. One of the most pressing problems of developing countries is the consumer model of the economy. Unfortunately, economic development policy usually is directed to the stimulation of consumption, not to the growth of productivity. It is impossible to achieve an economically strong country with stable macroeconomics without a developed real sector. This paper aims to describe and analyze the difficulties, problems, and challenges that occurred in small open developing countries. We will try to focus on issues of macroeconomic stability. The paper describes the current economic situation and its short-term perspectives by using the Global Innovation Index. The Global Innovation Index is an annual ranking of countries by their capacity for, and success in, innovation. Innovation is important for the country's rapid economic growth and competitiveness. Innovation enables a company to gain a competitive advantage, eliminate competitors, create entry barriers, and quickly become a leader. With significant innovation, a company may even gain monopoly power. Innovation is important not only for companies to increase their profits but also for the population. The latter is the driving force of progress. Thus, through the development-focused policy, a state must direct the funds to improve the social and innovative fields (more qualified medical and academic personnel that have been needed so much, particularly in terms of the Pandemic, operable infrastructure, introduction of innovations, availability, etc.) and must stimulate the private structures to do the same. Society needs macroeconomic stability that brings social progress and determines the prospects for future development. Targeted innovation policies can reduce the unemployment rate, macroeconomic instability and improve social security.

Keywords: Innovation, Macroeconomic Stability, Global Innovation Index

Introduction. Low- and average-income small open economies have to make efforts to reach macroeconomic stability. The authorities of such countries need a complex, consistent and logical approach to avoid the destabilization of their domestic economies as a result of significant shocks in the permanently changing environment. As a rule, the small scale of a country may be viewed as an advantage in some cases as it is more flexible and allows certain manoeuvring as well.

Description of the economies of the countries by using various indices in global and local sections is gradually becoming more urgent. In general, the opportunities of the present-day situation and development must be considered in different respects. Social and innovative development in the global environment depends not only on the individual states only, and it is important to consider the issue at a regional level. Therefore, it is interesting to calculate regional indices or provide a region-specific analysis. The unequal development of provinces across the countries is still an unsolved problem. To provide similar living standards, it is necessary to identify so-called “narrow” spots for individual components/different components and to make efforts to eliminate them.

In general, macroeconomic Stability describes a national economy that has minimized vulnerability to external and internal shocks. Macroeconomic stability acts as a buffer against fluctuations in the global and local markets. Inflation and related unemployment can be seen as

the main causes of fluctuations and, as a result, macroeconomic instability. Such, macroeconomic instability is mainly described by using such macroeconomic indices, as unemployment and inflation. Their gross effect is given by the economic discomfort index (EDI). The values of these indices themselves and changing trends are seen in the economic well-being and development of the nation (Mikiashvili, N., Karmowska, G., 2019). However, a target index must not give only quantitative results. Rather, it must consider the qualitative outcomes as well. Therefore, it is desirable to describe the state in some or other country with several indices and evaluate future perspectives. A wider understanding of macroeconomic stability must mean both, economic and social perspective stability. The paper will focus on Global Innovation Index (GII). This index evaluates future development and stability. The modern world is characterized by global competition, and thus, under such an intensely competitive environment, every country has to develop and improve various areas of the national economy. Innovation based technologies have gained special importance for small economies, and it is expected that their significance will only increase in the future. With a view to establishing themselves in the global economy, countries with emerging economies have to ensure rapid economic growth, which is impossible unless the developing industries are based on innovations and research (Mikiashvili, N., Lobzhanidze, N., 2016).

The modern world is inconceivable without deepening interconnections, which is the concomitant process of globalization. The country's economic security is closely related to the introduction and use of new technologies and innovations (Mikiashvili, N., Seturidze, R., 2018). Semiautomatic stabilizers are proposed to achieve macroeconomic stability. Semiautomatic stabilizers are targeted tax or spending measures that are triggered if the output growth rate declines or the unemployment rate increases beyond a specified threshold. The trigger should be changed in unemployment rather than changes in output, and the design of semiautomatic stabilizers changing the timing of consumption depends crucially on the design of the discretionary policy (Blanchard, O.J., Summers, L.H., 2020). However, it should be noted that the introduction of such tools is advisable in countries with developed economies. As for the economies of developing countries, they have the opportunity to more effectively use the mechanisms of monetary policy.

According to macroeconomic theory, there are four main macroeconomic variables that policymakers should try and manage: Inflation, Unemployment, Balance of Payments, and Economic Growth. Macroeconomic stabilization is a condition in which a complex framework for monetary and fiscal institutions and policies is established to reduce volatility and encourage welfare-enhancing growth (USIP). The European Union defined macroeconomic stability in law (the Maastricht Treaty 17.45). It has four criteria and five indicators such as low and stable inflation; low long-term interest rates; low national debt relative to GDP; low deficits; and currency stability. After the financial crisis, the EU adopted a broader Macroeconomic Imbalance Procedure scoreboard to help identify macroeconomic imbalances. This scoreboard comprises 14 headline indicators (with thresholds) and 25 supplementary indicators (without thresholds). Beyond the indicators specified by the treaty, the scoreboard includes indicators relating to export market share, private sector debt, house prices, unemployment (including youth and long term), participation rates, and labour costs. The supplementary indicators include labour productivity, residential construction, poverty, deprivation, and social exclusion, spending on research and development, foreign direct investment flows and stocks, gross fixed capital formation, and GDP. The European approach illustrates the interconnectedness of the real and financial economies with society and the number of factors that may influence macroeconomic stability (UNCTAD, 2016). In the article, several of the listed indicators are presented using various indices.

Purpose. This paper aims to describe and analyze the difficulties, problems, and challenges that occurred in small open developing countries. The methodological foundations of the study are based on general scientific methods of cognition (such as dialectics, analysis, synthesis, etc.). Various scientific articles, reports of international organizations, and other works have been studied in the process of writing this paper. The data used for analysis was taken from official and international organizations. The main focus of the research process was on GII.

Stability of the economy and Global Innovation Index. The GII was initiated by the business school INSEAD in 2007. Soon it has become established as one of the most important and respected frameworks to evaluate main innovation indicators. The GII is developed in cooperation with Cornell University, the World Intellectual Property Organization (WIPO), and a specialized agency of the United Nations (UN). The GII has produced a holistic framework for measuring innovation, looking at seven main categories as Institutions, Human Capital and Research, Infrastructure, Market Sophistication, Business Sophistication, Knowledge and Technology Outputs, and Creative Outputs. Each of the main categories is supported by further indicators, making an overall framework of 84 indicators. The GII measures 131 economies around the world.

There are several types of innovations: “Product Innovation” - includes the introduction of a new or significantly improved product or service; “Innovation process” - includes the introduction of new or significantly improved methods of production and delivery; “Innovative Delivery Network” - involves the process of converting manufacturing resources into products and delivering new or significantly improved deliveries to customers; “Innovative Marketing” - includes the introduction of new or significantly improved marketing methods (product design and packaging, advertising campaign, pricing, etc.).

The economic policy of the country must be realized in such a manner as to make the total income the means for reaching social progress and realizing future perspectives. The lives of people, groups of people, and society as a whole must improve in practice and the opportunity for stable future development must be maintained. This is what each of us strives to achieve either consciously, or unconsciously.

As for innovation, it means a new idea to be embodied in the product, technology, different management style, etc. Innovation is important both, for companies (micro-level) and society as a whole (macro-level). The innovations help society develop, reach higher living standards and accelerate economic growth.

The advantages of Georgia are the business environment and market development level, while education, research and development, investments, and personnel proficiency are viewed as disadvantages.

From 2011 to 2016 Georgia had periods of growth and decline of GII, and then growth until 2020 due to human capital and research. Despite the positive trend, Georgia still has an unsatisfactory indicator for this component. The upward trend has stopped due to the pandemic in 2020. The GII of Georgia has described in the table. The GII is characterized by variability in the example of Georgia and ranges from 27.9 to 37.

Table. Global Innovation Index in Georgian economy context (2011-2021)

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GII	31.87	34.3	35.6	34.5	33.8	33.9	34.4	35	37	31.8	27.9

Source: Website of Global Innovation Index. <https://www.globalinnovationindex.org/analysis-indicator>

The importance of innovation in modern business is growing more and more. Innovation enables a company to gain a competitive advantage, eliminate competitors, create entry barriers, and quickly become a leader. With significant innovation, a company may even gain monopoly power. Therefore, modern advanced companies spare no time and money to strengthen the research component. However, innovation is important not only for companies to increase their profits but also for the population. The latter is the driving force of progress. Thus, through the

development-focused policy, a state must direct the funds to improve the social and innovative fields (more qualified medical and academic personnel that have been needed so much, particularly in terms of the Pandemic, operable infrastructure, introduction of innovations, availability, etc.) and must stimulate the private structures to do the same. Society needs macroeconomic stability that brings social progress and determines the prospects for future development.

Conclusions. By considering the epochal vision, it is necessary to consider the economic stability of the country not only by traditional macroeconomic indices. Rather, the stability of social, environmental, political, and other factors determine the stability of domestic production. Therefore, a complex approach is justified and necessary.

Macroeconomic stability must not be calculated only based on non-stability indices. It must be considered as to how well the state institutions manage the social environment, to what extent some or other goods are available for individual citizens or groups, and what kind of the country's development perspectives are by considering scientific and technological trends.

The macroeconomic environment of the country described in complex creates the opportunity to realize the economic measures both, at the microeconomic level on the one hand and the macroeconomic and regional levels on the other hand, and improves the degree of evaluation of the existing situation and prospects.

The expenditures of the state and private sectors must be not only quantified but also the quality analysis is needed to determine whether people (the society) have high standards of living (i.e. happy and full-value life) and if they manage to realize their opportunities.

Thanks to innovations, society develops and reaches a higher standard of living. Innovation is also important for a country's economy as more innovation contributes to economic growth and enhances social progress.

References

1. *Blanchard, O.J. & Summers L.H.* Automatic stabilizers in a low-rate environment. AEA Papers and Proceedings (2020), pp. 125-30. <https://www.aeaweb.org/articles?id=10.1257/pandp.20201075>. Retrieved 25 September 2022.
2. *Karmowska, G. & Mikiashvili N.* Some Aspects of Macroeconomic Stability and Transformation (Example of Poland and Georgia). *Globalization and Business*, No.11 (2021), pp. 35-42. Retrieved 25 September 2022.
3. *Mikiashvili, N. & Karmowska G.* The Development of Georgia and Poland Compared to Other Post-Socialist Countries. *Oeconomica* 2019, 352(94)1, (2019), pp. 43-58. [http://foliaoe.zut.edu.pl/Volume352\(94\)](http://foliaoe.zut.edu.pl/Volume352(94)) Retrieved 25 September 2022.
4. *Mikiashvili, N. & Lobzhanidze N.* Green Innovations and Economy Policy in Small Economy. *Forum Scientiae Oeconomica*, Volume 5 No. 2 (2017), pp.29-40. DOI: 10.23762/fso_vol5no2_17_3
5. *Mikiashvili, N. & Seturidze R.* The Globalization, Network Economy and the Security of small economies (Case of Georgia). *Public Security and Public Order* (20), (2018), pp. 182-191. https://repository.mruni.eu/bitstream/handle/007/15256/Mikiashvili_2018_VSVT.pdf?sequence=1&isAllowed=y Retrieved 25 September 2022.
6. *Montiel, P. & Servén L.* Macroeconomic stability in developing countries: how much is enough? *World Bank Research Observer*, 21(2), (2006), pp. 151-178.
7. Geostat Database (PC-AXIS Database) of National Statistic Office of Georgia. Retrieved from: <http://pc-axis.geostat.ge>. Retrieved 25 September 2022.
8. Global Innovation Index INSEAD. <https://knowledge.insead.edu/entrepreneurship-innovation/global-innovation-index-2930>. Retrieved 25 September 2022.
9. Global Innovation Index. <https://www.globalinnovationindex.org/analysis-indicator>. Retrieved 25 September 2022.
10. Growth Policies and Macroeconomic Stability (2014). OECD Economic Policy. February, No. 8. <https://www.oecd-ilibrary.org/docserver/5jz8t849335d-en.pdf?expires=1627341322&id=id&accname=guest&checksum=4F04C310027A6DBFA5241425FCC5A9B7>. Retrieved 25 September 2022.
11. The World Bank Open Date (2021). <https://data.worldbank.org/> Retrieved 25 September 2022.
12. The World Bank. Indicators. https://tcdata360.worldbank.org/indicators/3aa2eb70?country=BRA&indicator=40712&viz=line_chart&years=2013,2020#comparison-link. Retrieved 25 September 2022.

13. UNCTAD (2016). Development and Globalization. Facts and Figures. Goal 17: Partnerships for the goals. Target 17.13: Global macroeconomic stability.

https://stats.unctad.org/Dgff2016/partnership/goal17/target_17_13.html Retrieved 25 September 2022.

14. USIP. Macroeconomic Stabilization. Guiding Principles Stabilization and Reconstruction. United State Institute of Peace|usip.org. Retrieved 25 September 2022.

Sepashvili Eka

PhD, Professor
Tbilisi State University,
Faculty of Economics and Business
eka.sepashvili@gmail.com

GLOBAL ECONOMIC DIGITALIZATION: NEW CHALLENGE FOR COUNTRY DEVELOPMENT

Abstract. *Modern technological achievements in digital spare determine the nature of global economy. digital technologies significantly improve the efficiency of economy due to the reduction of the cost of business transactions and other communications. Industrial revolutions that start since XVIII century, significantly changed the behavior of government, business and individuals. The development of the Internet, information technologies (IT technologies), sustainable communication channels, cloud technologies and digital platforms, increase in the amount of information generated from various sources, ensured the emergence of open information systems and global industrial networks. This, in turn, had a transformative impact on all sectors of the modern economy and business outside the IT sector itself and contributed to the transfer of industrial automation to a new 4th stage of industrialization. Nowadays, technological achievements are a significant factor for development. Success of the country in science and research boost country's development. Emergence and unprecedented wide spread of digital technologies dictates national governments to take special measures to generate knowledge and to encourage national firms for innovation.*

Key words: *Global economy, digital transformation, industrial revolution.*

Introduction. Technological achievements determine modern development trend in Global Economy. The great majority of these technological achievements are based on digital process. Generally, digital technologies significantly improve the efficiency of economy due to the reduction of the cost of business transactions and other communications. The combination of technology and devices along the whole value chain is the key feature for computer-driven systems that monitor and conduct physical processes. Digital technologies, in certain meaning, create a virtual copy of the physical world.

Purpose. Purpose of the paper is to overview the evolution of the industry trends that lead to the contemporary technological up-wards, as well as generates urgent need for national economies to adequately response new challenges and simultaneously use the opportunities created by digital transformation.

Results. The first Industrial Revolution - began at the end of the XVIII century around 1800 in England and was called the "Great Industrial Revolution". The prerequisites for its appearance were the mechanization of manual labor and the agrarian revolution, which freed up a large number of low-cost labor. In the period up to the beginning of the 19th century, many new discoveries took place, including the invention of the spinning and weaving loom, steam and water engines, and agricultural machines. Steam-powered looms symbolize the transition from an agricultural economy to industrial production. The first revolution led to the establishment of the capitalist system and accelerated the migration of people from villages to large cities.

The second industrial revolution - fell on the second half of the XIX - early XX century. Thanks to advances in the field of chemistry and physics, people were able to introduce many scientific discoveries into production. Thus, the key achievements were electrification, the invention of the telegraph and telephone, the use of conveyors in mass production. The second