

Index of the Cycle of Money - The case of Georgia

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Annotation. *This paper aims to establish how the theoretical background of the cycle of money applies to a real-world scenario, specifically focusing on the economic system of Georgia. The cycle of money index measures how an economic system can counteract a monetary crisis and assesses the structural robustness of a country's economy. The index calculations for Georgia are compared to the global average, providing insight into the country's economic health and its capacity to withstand economic crises. The conclusions indicate that Georgia's index is under but dynamically increased achieving to meet the global average, suggesting that its economy is relatively strong and capable of facing economic challenges. The methodology applied in this study adheres to established theories, utilizing mathematical, statistical, and econometric techniques to arrive at its conclusions. This research is significant as it highlights the resilience of Georgia's economy in the face of potential crises. The findings align with prior studies on the cycle of money index in other countries, such as Latvia, Bulgaria, Serbia, Thailand, and Greece. According to this theory, companies with substantial capital should focus their investments on manufacturing and high-technology sectors, benefiting from reduced taxes to ensure better money distribution across the economy. Smaller companies would then address other economic sectors, promoting overall economic balance. This study is part of a broader project that examines the cycle of money index across multiple countries, marking the first time such an analysis has been conducted for Georgia. The period analyzed for this study spans the global recession from 2012 to 2017.*

1. Introduction

This paper studies the economy of Georgia, using the concept of the cycle of money. The theory of the cycle of money supports that the dynamic of an economy is based on the idea of the number of times that money is used in an economy. An economy should be considered not as a closed system, but as a system with fragments, meaning that an economy has its limits, but simultaneously it is in interaction with other economies (Choi, Furusawa, & Ishikawa, 2020; Goswami & Purkayastha, 2020; Irawan, Kinanti, & Suhendra, 2020; Merle, Al-Gamrh, & Ahsan, 2019; Waworuntu & Hadisaputra, 2016). Interpreting the aforementioned terms, the meaning of fragments shows that an economy interacts with other economies but contemporaneously protects its money. An amount of money in many cases gets out from an economy to external banks or other economies. The main concept is that bigger companies and international companies severely times save their money to external banks and economic heavens. According to this theory, the tax authorities should put an additional tax on this kind of company to reduce the losses to the economy. Additionally, smaller companies and freelancers should be taxed with lower tax rates. Thus, it would be plausible to increase the dynamic of the economy. The factories, know-how services of big companies, health care system, and educational system comprise a special case for the economy, as they belong to

exemptions where the taxes improve the quality of the economy. The factories and big know-how companies ameliorate the cycle of money, as they do not substitute the activities of the small-medium companies and the freelancers (Ainsworth & Shact, 2014; Boland, 2014; Caldara, Iacoviello, Molligo, Prestipino, & Raffo, 2020; Feinschreiber, 2004; Gihman, Skorohod, Gihman, & Skorohod, 1972; IMF, WB, & WTO, 2017; Kushner, 1974; United Nations, 2012; Wijnbergen, 1987; Wilson, 1986). The educational and health care systems improve the quality of the economy, boosting the economy. Thus, this paper seeks to well-establish the way that the concept of the cycle of money acts in a real case scenario like this of the economic system of Georgia. The index of the cycle of money indicates how an economic system should face a monetary crisis and examines how well-structured a country's economy is. The estimations of the index of the cycle of money of Georgia are used for a comparison with the global average index of the cycle of money. The conclusions capture that Georgia is under but dynamic to to the average global value and then could face a financial crisis, as it has a well-structured economic system.

The theory of the cycle of money reveals that the taxes return to the economy, in the case of the education and the health care system (these are exclusions from the mainstream where taxes support the economy). But, the mainstream is that the tax authorities should maintain the taxes to the lowest level. For small and medium companies, the government should protect them with very low taxes and contemporaneously should put greater taxes on the larger companies. But, there is a type of big and international companies that should have low tax rates, as these types of companies do not substitute the activities of smaller companies. These types of big companies are factories and technological know-how companies. Then, the principal idea is to have a financial system, with the best allocation of production. (Helpman & Krugman, 1989) Larger companies should not

provide similar products and services, like that of smaller companies, as they can make investments in economic fields that smaller companies cannot support. In that way, an economic system achieves its best level. Additionally, the idea of the cycle of money, which proposed by first time in that way by Constantinos Challoumis, shows that with the appropriate allocation of production units and of taxes the money is cycled inside the economy achieving the maximum dynamic of the economy (Challoumis, 2018c, 2019c, 2019b, 2020, 2021h, 2021b). This paper is about Georgia's s index of the cycle of money. The research stands on an actual case scenario of a country's economic system. The principal hypothesis of this paper aims to estimate the index of the cycle of money of Georgia and to answer the question if it's near the worldwide general index of the cycle of money, according to the simple index or the general index of the cycle of money (Challoumis, 2021g, 2021a, 2023d, 2023g, 2023e, 2023f, 2024d, 2021h, 2021f, 2021e, 2021c, 2021b, 2021d, 2022c, 2022b). The cycle of money of Georgia should be similar or close to the worldwide general index of the cycle of money to be able to counteract a potential depression. The applied approach is based totally on mathematical estimations from the relevant theory. The results confirm that Georgia's economic system is properly established, as it follows the general international index of the cycle of money (the value of 0.5) which represents the average global case. The countries near 0.5 and above it have an appropriate distribution of money to their financial system. Consequently, Georgia's economic system is considered as well established, standing on the results of this paper. The question about the way the index of the cycle of money functions in the case of Georgia is answered from the structure of its economy and the way that the money is distributed to its economy. But, it acquires some improvements to have an even better index cycle of money. Thus, Georgia should decrease taxes for small and medium enterprises, to meet better reuse of

money in the country's economic system, and to increase taxes to big and international (OECD, July 2017).

This paper delves into the economy of Georgia through the lens of the money cycle concept. According to this theory, the health of an economy depends on how frequently money circulates within it. Rather than a closed system, an economy is composed of fragments, interacting with other economies while also preserving its own financial resources. This notion of fragments highlights how an economy connects with external economies while safeguarding its own financial assets. Often, money flows out of an economy to foreign banks or other countries, especially when larger international companies save their money in foreign banks or tax havens. The theory suggests that tax authorities should impose higher taxes on these companies to offset the economic impact, while smaller companies and independent workers should benefit from lower tax rates to boost the economy's vitality. There are specific sectors in the economy, such as factories, large company services, healthcare, and education, that receive tax exemptions in order to improve the overall quality of the economy. These sectors help to enhance the flow of money without overshadowing the activities of smaller companies and freelancers. The contributions of the educational and healthcare systems also play a significant role in strengthening the economy. This study aims to examine how the concept of the money flow applies in a real-world scenario, specifically in Georgia's economic system. The money flow index is used to determine how an economic system should respond to financial crises and evaluate the structural integrity of a country's economy. When comparing the index calculations of Georgia to the global average, the findings suggest that the country's economy is well-organized and able to endure financial crises. According to the theory of the money cycle, it is important for taxes to be reinvested into the economy, with a particular focus on education and healthcare. These sectors are

unique in that taxes directly contribute to economic growth. However, the general principle is that tax authorities should aim to keep taxes low, especially for small and medium-sized companies, while imposing higher taxes on larger companies. Certain larger and international companies, such as factories and technology firms, should be subject to lower tax rates as they do not directly compete with smaller businesses. The main idea is to establish an efficient financial system by allocating production effectively. Large companies should invest in sectors that smaller companies can't support, maximizing the economy's potential. The cycle of money concept shows that with proper production and tax allocation, money circulates more effectively, making the economy more dynamic. This paper focuses on Georgia's cycle of money index, exploring its economic system. The main hypothesis is to estimate Georgia's cycle of money index and see how it compares to the global average. To respond effectively to a potential economic slowdown, Georgia's cycle of money should be similar to the global average. The methodology used is based on mathematical estimations from relevant theory. The results confirm that Georgia's economic system is well-established, aligning with the global average cycle of money index value of 0.5. This indicates a healthy money distribution within the financial system. Georgia's economy is considered well-structured based on this study. Further analysis of the economy's structure and money distribution provides insight into how the cycle of money index works in Georgia. However, improvements could enhance Georgia's index. Lowering taxes for small and medium enterprises and increasing taxes on large and international companies could help better reuse money within the country's economic system.

Money, a basic instrument and support for the development of trade, is believed to influence the economic wellbeing of a society. Responsible public policy will guarantee that this most significant subsystem of the economy will create more advantages than burdens. Public

policy is the means by which politically legitimate institutions attempt to influence broader economic, social, and environmental systems. How effectively and properly they do this is determined by the scientific knowledge that they possess/obtain for a better understanding of the subject of policy and by the means, conventions, and measures that are chosen to apply outside of it. There are considerably fewer public policy tools to influence economic processes involving high uncertainty than those involving low uncertainty. Money – a phenomenon of high uncertainty – is believed not to be possible to influence directly by public policy (money cannot be socialized like products, a broad socio-informational-political arrangement concerning money is impossible). The public policy of money is normative (describing what ought to be in the view of public decision-makers) rather than a real policy (describing and quantifying development processes of money, its sources, and imaginative influences) which does not present the view of a concrete country and does not guarantee its ability to act in case of prominent shocks. However, if the rise of indebtedness, inflation, largeness of the financial system could be predicted, public measures could have been applied, etc.

Emerging countries, like Georgia, with currency unions similar in their construction and attribution to development processes of money, on one hand, and preconditions and immediate adaptation of the phenomenon of money on the other, provide an opportunity of broad micro-economic situation examination that is to explore the potential to create a better understanding of money's development and processes by its untapped subsystems inclusively looking at the cycle of money. Development processes of money concerning Georgia are presented here, covering both its direct and savings borrowing interpretation. It presents the reasons for the adaptation of money, its sources, and further hypothetical influence (exploited) on the development processes of various economic systems and

wider issues of a possible external protection of money together with a broader socio-informational-political arrangement. In light of recent and contemporary financial systems and macroeconomic shocks (e.g., free market, privatization of money, credit crunch perception, and euro/dollar resolution), there is a tendency within this financial system to abandon the euro/dollar and to social credit its money.

Undoubtedly, money is the foundation of trade. It is the only instrument that can capture the wealth of human labor and intellectual work, or in other words, the wealth of productivity. Historically, money has played such an important role that historians sometimes symbolize human civilization by the named value of money (e.g., pre-metal money - labor-based money; metal money - commodity-based money; and possibly in the future - blockchain-based cryptocurrency - knowledge-based money). Nevertheless, all properly designed cash-based currencies convert monetary wealth into the value of goods and capital of interest (either positive or negative). This cycle is cyclic. Following the generation of monetary wealth, it must be eventually allocated among consumers (or should enter the state budget), and thus the cycle must begin again by converting this money back to capital of value. Such cyclical behavior has never been modeled before (Bedianashvili, Zhosan, & Lavrenko, 2022).

Nevertheless, the monetary wealth expressed by the so-called "GDP in cash". Taking the lifetime of money into account, the GDP in cash converted into cash per unit of time gives an average net monetary flux - "cash flow" - a flow of cash wealth through the borders of a district. It is the most important feature of the economy and the monetary heart of the world economy. Like the water flow, money flows to the most attractive places and hence it gets concentrated, thus forming the cycle of wealth that determines the development of regions. This concept has been implemented in the form of a simple geometrical model that predicts the main features of such cycles in a reasonable approximation. This cycle has proven to be a

source of own oscillations in economic development irrespective of some arbitrarily chosen parameters - either interest rates or taxation and investments in the case of Georgia. The model parameters have a clear economic meaning and can be used for productive economic policy. Georgia is a good object of study as a small country with a simple regional structure, particularly within the real world with all kinds of existing districts - developing, delayed development, and even with economic decline. The initial model has been extended so as to consider taxation and investments. The issue of tax rate optimization has been elucidated.

The study aims to create a composite index of the cycle of money economies - with an emphasis on the economic cycle aspect - for a selection of the European Union (EU) member states and Georgia. After providing a theoretical foundation on the conceptualization of the cycle of money economies, the established cycle of money economies, its components, and the construction of respective indices, attention will focus on the longitudinal analysis of the cycle of money economies indices for the specified selection of EU member states and Georgia.

The key research objectives of the study are the following: (1) To provide a theoretical foundation on the conceptualization of the cycle of money economies and an overview of the established cycle of money economies and respective components with the construction of the national cycle of money economy indices. (2) To compile a composite cycle of money economy index for a selection of European Union member states and Georgia stemming from the national cycle of money economy indices, including the robust analysis of the index components. (3) To longitudinally analyze the developed index of the cycle of money economies for a selection of European Union member states and Georgia with the in-depth focus on the analysis of the cycle of money economies of Georgia and the selected European Union member states. (4) To provide findings and recommendations for the relevant

stakeholders regarding the macroeconomic management and policies in relation to the trend of cycle of money economies.

The completion of each of the aforementioned objectives will be reflected in corresponding chapters of the study. Prior to pursuing the key research objectives and providing the respective outcomes, an introductory chapter is laid out, providing an overview of the background of the cycle of money economies, the rationale for the relevant selection of European Union member states, and an overview of the methodological approach that is utilized to address the research questions underlying the research objectives presented above. This introductory chapter sets the foundation for in-depth investigation of the research objectives outlined above.

2. Literature Review

In Georgia, economic messages represent significant structural changes. Georgia's entry into economic messages dates back to the 19th century, when the country's economic self-governance was neglected in terms of studies and information. The unification of Georgia's economic messages occurred in 1991, when the country gained international recognition. During this period, Georgia shifted towards economic transformations that deviated from traditional domestic frameworks. The second phase of economic reforms began in 2004, marking the most significant reforms. Economic messages contribute to the country's development at the forefront, as well as to the majority of its aspects. This means that the messages must always consider the country's concerns and distribute guidance to areas with notable deficiencies. Managing these messages in Georgia requires alignment of boundaries, an increase in transport capacity, and enhanced route efficiency. Regulatory support is also essential to ensure broad public access to Georgia's key regions. Additionally, legal processes in Georgia will see changes, requiring applicants to proceed accordingly. Key sectors of the Georgian economy include agriculture, tourism, and

manufacturing. These sectors play a crucial role in driving economic growth and creating employment opportunities. The government has been implementing various policies and initiatives to support and promote the development of these sectors to enhance their contribution to the overall economy. Understanding the significance of these sectors is essential for formulating effective economic reforms and strategies to further boost their performance and maximize their potential impact on the Georgian economy. Agriculture is a key sector of the Georgian economy, contributing significantly to the country's GDP and employment. The sector is characterized by the production of various crops such as grapes, hazelnuts, and tea, as well as livestock farming. The government has been focusing on implementing reforms to modernize and improve the productivity of the agricultural sector, including providing support to smallholder farmers, promoting sustainable agricultural practices, and enhancing infrastructure for agricultural production and distribution. Tourism is another important sector of the Georgian economy, attracting a growing number of international visitors due to the country's rich cultural heritage, natural beauty, and unique tourism offerings. The government has been actively promoting the development of tourism infrastructure, improving the accessibility of tourist destinations, and implementing marketing campaigns to boost the country's tourism sector. Additionally, efforts have been made to diversify tourism offerings and enhance the overall visitor experience to further drive the growth of the tourism sector. Manufacturing is a significant sector of the Georgian economy, encompassing various industries such as food and beverage processing, textiles, and machinery production. The government has been focused on attracting foreign direct investment to enhance the competitiveness and technological advancement of the manufacturing sector. Additionally, efforts have been made to improve the business environment for local manufacturers, promote export-oriented manufacturing, and upgrade

industrial infrastructure to support the growth and expansion of the manufacturing sector. Georgia is one of the few countries with unique advantages due to its excellent geographical position, internal resources, and proximity to key markets. These factors positively influence Georgia's business climate, enhancing its attractiveness. Georgia, with its youthful assets, has also become an appealing destination for new ventures, with the potential to bring about radical transformations in property investments through official incentives introduced all at once. There are great opportunities for export within Georgia's broader economic environment. Georgia is positioned to become a significant producer, especially in furniture manufacturing, domestic production, and as a supplier of horticultural products, all of which show considerable potential. The country's advantage lies in its favorable geographic location and in its capacity for high-quality local production. Georgia could attract major manufacturing complexes and may one day establish itself as a recognized leader in global production. Dynamic processes in business are a continuous component of economic development in Georgia. This dynamic approach impacts individuals, companies, projects, and operations through implementation and accreditation opportunities. Changes and updates in legislation, support mechanisms, and other factors are necessary to create inflation control mechanisms. Research and analysis of these dynamic business elements are required to ensure the optimal development of value within Georgia.

For the authorities using the arm's length principle, it is tough to obtain the controlled transactions, as the international companies offer similar data with that of the uncontrolled transactions and they hide with a purpose to avoid paying taxes. Therefore, the government needs to apply the fixed-length principle. The fixed-length principle indicates that the companies of controlled transactions manage transactions and achieve avoiding tax paying. Then, according to the fixed-length principle, international companies should pay plus a fixed

amount of tax. In that way, the cycle of money is enhanced, because the larger companies generally send the money out from the society and the economy and save them in international banks. Therefore, that money is lost from society, decreasing consumption (Bourdin & Nadou, 2018; Challoumis, 2018c, 2019c, 2019b, 2020, 2021h, 2021b; Driver, 2017; Dybowski & Adämmer, 2018; Khan & Liu, 2019; Marques, 2019; Mialhe, 2017; Ortun, Lopez-Valcarcel, & Pinilla, 2017; Shamah-Levy et al., 2019; Taub, 2015). Then, according to the fixed-length principle, the local companies which save their money in local banks should have lower tax rates.

In conclusion, the fixed-length principle serves the theory of the cycle of money, where the small and medium companies pay lower taxes than the larger companies, which substitute their commercial activities. On the other hand, the arm's length principle estimates the taxes standing on methodologies provided by the companies that make international transactions. In that way, the large companies cover the activities of the smaller companies. Finally, the mainstream is that small and medium companies boost the distribution of money to a country's economy as usually, they don't save their money out of the country's economic system, and reuse the money inside the economy. Therefore, the money distributed inside the economy increases the cycle of money many times. The reason why money increases the cycle of money is obvious according to eq. (4) of the general index of the cycle of money (Dybowski & Adämmer, 2018; Koethenbuerger, 2011; Limberg, 2020; Mancuso & Moreira, 2013; Ortun et al., 2017; Prestianawati, Mulyaningsih, Manzilati, & Ashar, 2020; Rashid, Warsame, & Khan, 2020; Siegmeier et al., 2018; Sikka, 2018; TUTER, 2020; Van de Vijver, Cassimon, & Engelen, 2020; Wright, Smith, & Hellowell, 2017).

A prior application of the theory of cycle money could be found in the case of Latvia, which belongs to the range of 0.5 meaning that is a well-structured economy and would not collapse to a strong economic crisis. In the case

of Georgia the index of the cycle of money is under but dynamically increasing to meet the value of 0.5, anticipating that Georgia could also face a strong economic crisis, but with a little bit slower rhythm. The countries that are above the value of 0.2 can counteract potential crises (Arai, Naito, & Ono, 2018; Bartels, 2005; Castro & Scartascini, 2019; Challoumis, 2018c, 2019b, 2019c, 2020, 2021b, 2021h; Ewert, Loer, & Thomann, 2021; Holcombe, 1998; Kiktenko, 2020; Koethenbuerger, 2011; Martinez & Rodríguez, 2020; Ratten, 2019; Ruiz, Jurado, Moral, Uclés, & Viruel, 2017).

In this paper, the focus is on the economy of Georgia and how the cycle of money impacts it. The theory of the cycle of money suggests that the health of an economy is determined by how frequently money circulates within it. The economy is viewed as having boundaries but also interacts with other economies. This means that money flows out to foreign banks or countries, especially for larger international companies. The theory proposes that additional taxes should be imposed on these companies while smaller businesses and freelancers should benefit from lower tax rates to boost the economy. Certain sectors like factories, large companies, healthcare, and education benefit from tax exemptions, improving the overall economy. The paper aims to examine how the cycle of money concept applies to the real-world scenario of Georgia's economic system and assess its response to a monetary crisis through the cycle of money index. This index's calculations for Georgia will be compared to the global average. The findings suggest that Georgia's economy is under but dynamically increasing to meet to the average global value, indicating that it could withstand a financial crisis due to its well-structured economic system. The theory of the cycle of money emphasizes that taxes should be reinvested into the economy, particularly in education and healthcare, as these sectors are exceptions where taxes directly support economic growth. However, the general rule is that tax authorities should keep taxes low, especially for small and medium-sized

companies, while imposing higher taxes on larger companies. Certain large and international companies, such as factories and technological know-how companies, should be subject to lower tax rates since they do not compete directly with smaller businesses. The main idea is to create a financial system with optimal production allocation. Large companies should not offer similar products and services to those of smaller companies but should invest in economic sectors that smaller companies cannot support, thereby maximizing the economy's potential.

The cycle of money concept illustrates that with the right allocation of production units and taxes, money circulates more effectively within the economy, enhancing its dynamism. This paper focuses on Georgia's cycle of money index, exploring a real-world scenario of the country's economic system. The primary hypothesis of this paper is to estimate Georgia's cycle of money index and determine whether it aligns with the global average index of the cycle of money. For Georgia to effectively counteract a potential economic downturn, its cycle of money should be similar to or close to the global average. The methodology employed is based entirely on mathematical estimations derived from the relevant theory. The results confirm that Georgia's economic system is well-established, as it aligns with the global average cycle of money index value of 0.5, which represents the global norm. Countries with a cycle of money index near or above 0.5 demonstrate a healthy distribution of money within their financial systems. Consequently, Georgia's economy is considered well-structured based on the results of this study. The question of how the cycle of money index functions in Georgia is answered by examining the structure of its economy and the distribution of money within it. However, some improvements could further enhance Georgia's cycle of money index. Therefore, Georgia should consider reducing taxes for small and medium enterprises to encourage better reuse of money within the country's economic system, while increasing

taxes on large and international companies. The cycle of money is a dynamic ongoing process that describes changes in the form of money, identifying different stages in the economy regarding money, developing an index of the cycle of money to assess monetary development in countries, and applying the index to the specific case of Georgia. Johansen's monetary approach to economic growth is applied to analyze a model with different forms of money where changes are driven by the growth of money's productivity in terms of goods. The cycle is conceptualized as a sequence of six stages, each indicated by a development in the form of money in one direction. Some concepts used in monetary economics inspire the construction of the stage index. The model and its equilibrium states facilitate the development of a variable that indexes the stage of the cycle of money. Applying the model to the specific case of Georgia allows exploring paths with different time profiles of the parameters determining the cycle of money, depicting different national monetary histories. The steps to explore the monetary history of Georgia include finding the parameters that provide a close fit to the data, tracking the calculated time path of the index of the cycle of money, and conducting the equivalent analysis of the monetary history of other countries.

The cycle of money is the ongoing process of changes in the form of money that all economies go through, discussing different time profiles of the parameters that characterize the productivity and acceptance of money. Different paths of the cycle are explored, describing how money goes from being costly to being free and the causal mechanisms involved. There are six stages of the cycle of money, each indicated by a development in the form of money in one direction. As economies develop, money takes on different forms corresponding to different stages of the cycle. The cycle of money is global in the sense that money takes on this cycle as a whole, with simultaneous changes in the form of money in all economies. A monetary edge of the world economy indicates the cycle of money leading

the world economy unevenly involving the same stage of the cycle. Topics in monetary economics such as the relationship between money, good money, prices, and monetary shocks lean towards this interpretation. The discussion concerning the relationship between the neutrality of money moves in the opposite direction.

The model describes how the productivity of money and the acceptance of money affects transactions that shape the economy. The model is based on cycle of money equilibrium, covering three components of money centrally discussed. The model and its equilibrium states provide the basic tools for defining the index of the cycle of money, with the essential aspect of the model being that all forms of money go through exactly the same sequence of stages in each economy. The forms of money considered are currency, coins, goods with intrinsic value, goods without intrinsic value, debt money, and an abstract unit of account. In applying the model to Georgia, it is argued that there is no reason to believe that the productivity or acceptance of any form of money is constant over time. Turning to Georgia, nothing is done but to assess the parameters that determine the paths of the cycle of money in the model.

The advent of fiat money and the commercial banking system transformed the economy from the so-called barter economy into the monetary economy. Scholars have extensively investigated the foundations and implications of such a complex economic system, fundamentally different from the previous one, with the banks at its core. Monetary economics studies values, production, and consumption, with a focus on the stock of money in the economy and its role in determining GDP in the short run. Consequently, monetary policy and interest rate changes affect economy-wide variables, prompting further waves of research like the Gross Financial Assets/Debts, Dynamic Stochastic Macroeconomic Models, New Keynesian Macroeconomic Models, etc. The central idea is that the money stock and its net financial

position impact the economy. The first-wave pyramidal models do a good job describing the co-evolution of the economy-wide variables but fail to integrate the financial nature of the money stock. The challenge for macroeconomic models remains understanding the monetary and financial structure of the economy itself.

Inspired by the pioneering work of economists and mathematicians, the pre-modern bartering economy was remodeled by its dual pyramid monetary architecture. In this money-cycle model, all currency stocks, both in existence and freshly created, are viewed as economic flows in the simplest circular production-consumption-production system, illuminating the monetary structure of bartering economies participating in global trade. In addition to that, a similar 2-D monetary pyramid model is presented for fiat money economies.

Fiscal as well as monetary transactions create money, and so do transactions in foreign exchange markets. In turn, monetary transactions do not necessarily create money. They simply transfer currency stocks without altering the financial positions or the states of the corresponding pyramids. Nevertheless, monetary transactions are not reflections of pre-monetary bartering trade. In the monetary economy, the purchase or cover price of the goods targeted for sale or purchase is defined in terms of the currency unit used to execute the transactions, and thus the pre-monetary pair trading is generalized into a comprehensive monetary list of all buy and its corresponding sell trades. In the monetary economy, transactions do not leave the money in the agent's pockets as credit or debt, but they remove the currency stock from an economic agent to another, transferring currency stocks between bald vertices without altering the pyramidal structure of the economy.

Bartering is a network of simultaneous congruent transactions based on believing mutual gain. To be tradable, the stocks of the goods and the corresponding stocks at the beginning of the transactions are presumed to fit in such simultaneous networks executed in a timely manner. So the analysis of bartering is inherently

constrained by aggregate full trades. This mathematical description of bartering fails in the monetary economy, as the quantity of the traded goods is expressed in terms of the currency unit, so bartering for monetary goods and commodities on fixed prices cannot be arranged in simultaneous networks. Not to mention that currency stocks cannot be preserved intact. Some agents need to sell, and some agents need to buy the goods, and each agent is assumed to participate in a number of trades executing transactions with a number of goods and currencies.

3. Methodology

Georgia represents a European case study of evolution in the cycle of money. The institutional and regulatory framework there has undergone significant transformation over the last three decades, from completely state-controlled through a gradual opening to foreign banks and down to privatization. This has seen an increase in the number of foreign banks in the Georgian banking sector, and their contribution to total assets and revenues has been above 90% on average over the last three years. The aim of this study is to construct a money cycle index for Georgia in order to broaden an understanding of the underlying causes of the banking crises and to provide an objective benchmark against which the effectiveness of the supervisors and regulators of the banking sector can be gauged.

Georgia provides a convenient case from which to draw important lessons when considering the arguments of macroeconomic stabilization and an advanced economy's liberalization and socialization, as the banking sector there remains among the most advanced on the globe. Georgia is shown to have evolved through five distinct stages with regard to the cycle of money, from the state's monopoly on banking, through foreign banks' entry and privatization, epoch of ne-Monetarism and rising money cycle index, domestic banks' rediscovery, and new, high investment returns and high inflation era down to the crisis of the banking system and collapse

of socialistic notions of banking. Georgia provides a case of an experimental laboratory at both national and local levels.

The banking sector of the Republic of Georgia is presented in three divided parts: structure with regard to banks & non-banks, economic indicators on banks, NBG & public, and last, regulatory framework. The banking sector is dominated by banks, with huge liquidity surplus indicated by all structured economic indicators. The banking sector in Georgia has undergone a number of different developments, gaining experience and applying it in practice.

The National Bank of Georgia is considered as a central bank and an independent supervisory authority of purely state and public banks, non-banking financial credit intellectual service companies, associations of banks and insurance companies, non-banking financial funds and counseling companies, and companies and other commercial organizations forming part of the banking group. The Commercial Law and the License of Banking Activity Law define each different banking activity separately. For the banking sector to function properly, that is to secure normal functioning, as well as proper organization, strict observance of legislative acts, soundness and integrity, independence and impartiality of decision making and actions, the NBG's supervisory authority is fully guaranteed.

The methodology applied for the current study is presented below, being in the same line with the presented theory. The calculations of the cycle of money are clarified by the following mathematical types:

$$c_y = c_m - c_a \quad (1)$$

$$c_y = \frac{dx_m}{dm} - \frac{dx_m}{da} \quad (2)$$

$$i_{cy} = Y * b_d \quad (3)$$

$$g_{cy \text{ Country}} = \frac{c_y \text{ country's}}{c_y \text{ Average} + c_y \text{ country's}} \text{ or } \frac{i_{cy \text{ country's}}}{i_{cy \text{ Average}} + i_{cy \text{ country's}}} \quad (4)$$

$$g_{cy \text{ Average}} = \frac{c_y \text{ Average}}{c_y \text{ Average} + c_y \text{ Average}} \text{ or } \frac{i_{cy \text{ Average}}}{i_{cy \text{ Average}} + i_{cy \text{ Average}}} = 0.5 \quad (5)$$

The c_m is the velocity of financial liquidity, c_a is the velocity of escaped savings and c_y is the cycle of money. The i_{cy} is the index of the cycle of money, Y is the national income or GDP, and b_d is the bank deposits of the country. In

addition, $G_{cy\ Country}$ symbolizes the general index of C_y of the country,

$i_{cy\ country's}$ or $C_y\ country's$ is the index of C_y of the country, and $i_{cy\ Average}$ or $C_y\ Average$ is the global index of i_{cy} . The X_m is the condition of the economy (GDP), the a is the lost savings from the economy, and the m is about the money which is maintained in the economy. Finally, $G_{cy\ Average}$ is the general global index of C_y , and is obtained as a global constant (Amanor-Boadu, Pfromm, & Nelson, 2014; Challoumis, 2018a, 2019d, 2019a, 2019e; Prestianawati et al., 2020; Saraiva et al., 2020; Zamudio & Cama, 2020).

Proof: Eq. (4) and (5) mean that an economy close to the value of 0.5 can face immediately an economic crisis. Results close to this value represent an appropriate index of the cycle of money, revealing an adequate economic structure of the society and then the fine

$$Y = S_T + I_T + (X - M), \text{ or } Y = (S - S') + (I - I') + (X - M) \text{ or } Y = \Delta S + \Delta I + (X - M).$$

According to the theoretical background, for the lost money from the economies, the problem of controlled transactions could be administrated, if an organization could identify

$$C_{y\ total} = \sum_{i=1}^n \sum_{t=1}^m C_{y,i,t} = \sum_{i=1}^n \sum_{t=1}^m \left[\frac{\partial(GDP)}{\partial(S+I+X)} d(S+I+X) - \frac{\partial(GDP)}{\partial(S'+I'+M)} d(S'+I'+M) \right]_{i,t}.$$

Data from an organization for these activities don't exist following the application of the index of the cycle of money. The cycle of money is an expression of the minus between the differential equations of the volume of money that is used in an economy and the volume of money that are lost from the economy. This is the reason why the theory of the cycle of money supports the higher tax of companies that make controlled transactions and the bigger companies because with that way the smaller companies are using an amount of money multiple times. An exemption is for the high technology companies and the factories, where their activities cannot substitute by smaller companies.

The current work is formed on real data of the economy and rates of them per GDP. The period of 2012 - 2017 is a period of general

distribution of money between the citizens - consumers. Equation (1) is the term of the cycle of money which used to define the $C_y\ country's$ and $C_y\ Average$ of eq. (2). The cycle of money to a quantity value is expressed by GDP, basically is an expression of $\frac{\partial(GDP)}{\partial(S+I+X)}$, according to $\frac{dx_m}{dm}$

and $-\frac{\partial(GDP)}{\partial(S'+I'+M)}$ based on $\frac{dx_m}{da}$. Then,

$$C_y = d(GDP) = \frac{\partial(GDP)}{\partial(S+I+X)} d(S+I+X) -$$

$$\frac{\partial(GDP)}{\partial(S'+I'+M)} d(S'+I'+M), \text{ formed on}$$

$$C_y = \frac{dx_m}{dm} - \frac{dx_m}{da}, \text{ of eq. (2). Thus, } S \text{ is the}$$

savings, I is the investments and X is the exports. Then, S' , is about the savings which are oriented to banks out of the country's economy, I' , is about the investments which oriented to banks out of the country's economy, and M are the imports. Therefore, the cycle of money expresses the GDP as the following one:

the money transitions between the economies, by a comparison of the global economies, by ΔS , ΔI , and $(X-M)$.

Thus,

recession, especially in Europe, therefore is scrutinized this period for multiple countries.

According to the OLS test, is presented the following equation (it's general form):

$$i_{cy} = c + \beta_1 b_a + \beta_2 GDP + \beta_3 \log i_{cy\ Average} \quad (6)$$

To the prior table, the variables are defined before, except c which is the constant, and β_1, β_2 and β_3 are the multipliers. According to the prior methodology are excluded the country's results.

4. Results of Georgia

Standing on the prior methodology the following results were extracted. Table 1 includes the parameters of bank deposits, GDPs, and the indexes of the cycle of money. The econometrical estimations formed on eq. (6). This section reveals the dependence of Georgia's

index of the cycle of money using the bank deposits of Georgia’s economy and the GDP per capita of Georgia’s economy. The bank deposits of the global average case and the global GDP per capita are used for the comparison of Georgia’s economy, in terms of its GDP, and the country’s bank deposits. Then, for these variables are used yearly data for the period of 2012 - 2017:

Georgia

$$C_y = \beta_0 + \beta_1 \times \text{Bank Deposits Georgia} + \beta_2 \times \text{Global GDP per Capita} + \epsilon$$

Where:

- β_0 is the intercept.
- β_1 is the coefficient for Bank Deposits Georgia (%).
- β_2 is the coefficient for Global GDP per Capita (\$).
- ϵ is the error term.

The same conclusions arise from an econometric point of view also, with the dependent variable to be the index of the cycle of money:

Table 1 Georgia’s regression analysis (OLS)

| Variable | Coefficient | Standard Error | t-ratio | p-value |
|------------------------------|-------------|----------------|---------|-----------|
| Constant (Intercept) | 14,440.80 | 561.029 | 25.74 | 0.0001*** |
| Georgia Bank Deposits | 101.895 | 10.0784 | 10.11 | 0.0021*** |
| Global GDP per Capita | -230.764 | 11.4187 | -20.21 | 0.0003*** |

Note: ***statistically significant at 1% level, ** statistically significant at 5% level, *statistically significant at 10% level.

Source: Author’s estimations

The R-squared value of 0.7359 suggests that approximately 73.59% of the variance in the Index of Georgia Cy is explained by the independent variables, which are Georgia Bank Deposits and Global GDP per Capita. The Adjusted R-squared of 0.5599, though slightly lower, still indicates a good fit of the model after accounting for the number of predictors used. The F-statistic of 205.6596 with a p-value of 0.000616 confirms that the overall model is statistically significant. The Durbin-Watson statistic of 1.9593, which is close to 2, implies that there is no significant autocorrelation in the residuals.

In terms of individual predictors, the intercept is 14,440.8, reflecting the expected value of the Index of Georgia Cy when all other predictors are zero. The coefficient for Georgia Bank Deposits is 101.895, indicating that each percentage point increase in Georgia’s bank deposits is associated with an approximate

increase of 101.895 units in the Index of Georgia Cy. This relationship is statistically significant with a p-value of 0.0021. Conversely, the coefficient for Global GDP per Capita is -230.764, suggesting that a rise in global GDP per capita corresponds to a decrease in the Index of Georgia Cy. This negative relationship is also statistically significant, with a p-value of 0.0003. In conclusion, the model is statistically significant and demonstrates that both Georgia’s bank deposits and global GDP per capita are important predictors of the Index of Georgia Cy. Specifically, Georgia's bank deposits have a positive effect on the index, whereas global GDP per capita has a negative impact.

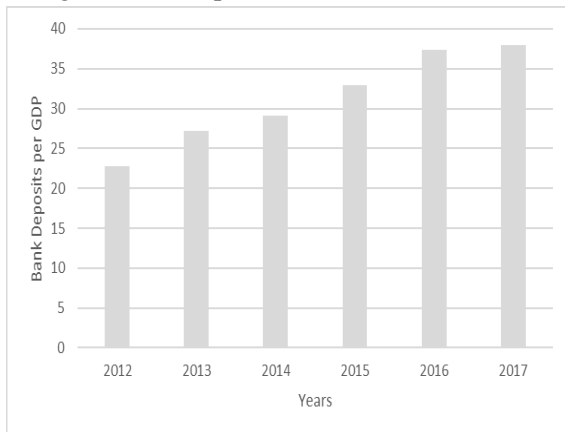
According to these conclusions, it's plausible to determine the condition of the cycle of money in Georgia:

Table 2 Georgia’s index of the cycle of money

| Year | Bank Deposits Global Average (%) | Bank Deposits Georgia (%) | Global GDP per Capita (\$) | Georgia GDP per Capita (\$) | Index of Global Average c_y (\$) | Index of Georgia c_y (\$) |
|----------------|----------------------------------|---------------------------|----------------------------|-----------------------------|------------------------------------|-----------------------------|
| 2012 | 52.48 | 22.78 | 16,653.01 | 4,520.00 | 873,949.96 | 128,300.40 |
| 2013 | 53.96 | 27.24 | 17,266.62 | 4,710.00 | 931,706.82 | 140,794.50 |
| 2014 | 55.81 | 29.15 | 17,159.02 | 4,830.00 | 957,644.91 | 134,520.10 |
| 2015 | 59.38 | 32.89 | 15,295.71 | 4,090.00 | 908,259.26 | 154,753.20 |
| 2016 | 60.77 | 37.38 | 15,330.03 | 4,140.00 | 931,605.92 | 167,783.20 |
| 2017 | 60.07 | 37.96 | 15,082.49 | 4,420.00 | 906,005.17 | 102,965.60 |
| RESULTS | | | | | 5,509,172.04 | 829,117.00 |

Source: Author's Conclusion

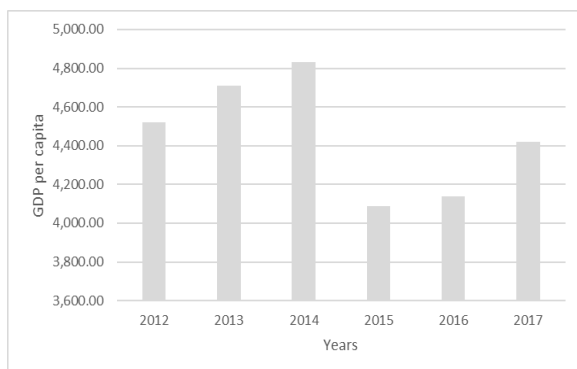
Georgia's bank deposits:



Source: Globaleconomy.com

Figure 1. Georgia's bank deposits

Figure 1 presents the situation of bank deposits of Georgia's financial system, as a percent of the GDP, for the period from 2012 to 2017. Moreover, the next scheme presents the GDPs of Georgia:



Source: Globaleconomy.com

Figure 2. Georgia's GDPs per capita

Figure 1 presents the condition of GDPs of Georgia's economy for the period from 2012 to 2017. Also, the next scheme (fig. 2) presents the GDPs of Georgia, for the same period.

According to prior results, the index of Georgia's c_y is 2,910,607.34 \$

We obtain from the prior results that:

The index of global average c_y is 5,509,172.04 \$

Calculating the general index of the cycle of money for the case of Georgia and the global view we arrive at:

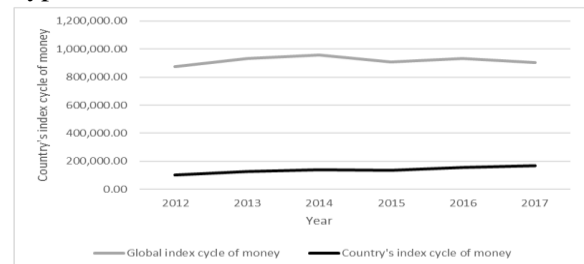
– The general index c_y for Georgia is

$$G_{cy\ Country} = 0.13$$

– The general index of c_y global view is

$$G_{cy\ Average} = 0.5$$

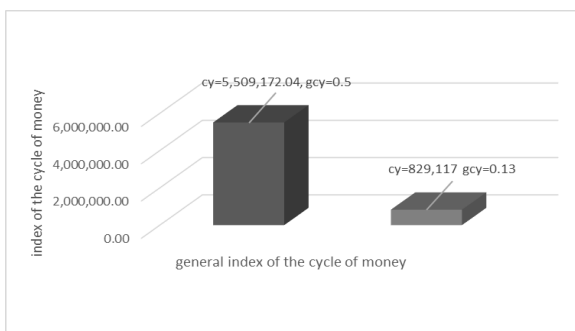
Therefore, it is concluded that Georgia's index cycle of money is under to the global average cycle of money. Then, the dynamic of Georgia's economy complies with the global average and its structure is near to the initial hypothesis. Then we receive the next scheme:



Source: Author's Conclusion

Figure 3. Graph of the index of the cycle of money

The index of the cycle of money of Georgia's economy is under but not so far to the global average of the index of the cycle of money, which is 0.5 (considered as a global constant). The countries that are near 0.5 have a well-structured economy - standing on eq. (5), according to the theoretical background of the cycle of money. This conclusion means that the economic structure of Georgia has a good distribution of money to its economy, then international transactions do not fully use the local banking system. The international and bigger companies substitute the local medium and small enterprises. The government should follow a protective policy for small and medium enterprises to avoid losing money from transactions of bigger companies. The authorities should apply the fixed-length principle, then higher taxes should be put on the bigger companies. The index of the cycle of money (more precisely the fixed-length principle of the current theory) abides by the last decision of G7, for a minimum 15 % tax rate for international companies that proceed to international transactions. In that way, the distribution of money inside the economy will be increased, and social welfare will be boosted. The general index of the cycle of money appears to the following figure:



Source: Author's Conclusion

Figure 4. The cycle of money indexes

The previous framework outlines a comparison between Georgia's money cycle index and the global average index, examining how Georgia's performance aligns with international standards. Both the specific and general indexes for Georgia should closely

aligned with the global averages, indicating that Georgia's financial system operates at a relatively stable level within the global context. This positioning suggests that the dynamics of Georgia's money cycle are favorable, yet there is room for structural enhancements. One potential avenue for improvement is to adjust the tax structure. Lowering taxes for small and medium-sized enterprises (SMEs) while raising them for larger corporations could enhance economic dynamics. Larger companies, which often engage in activities that SMEs cannot, should be incentivized through reduced taxes on innovative and high-tech sectors. This strategy would ensure that large corporations contribute significantly to the economy while allowing smaller businesses to thrive (Challoumis, 2018b, 2019d, 2024b, 2024a, 2024d, 2024c, 2021h, 2022a, 2023b, 2023h, 2023d, 2023i, 2023c, 2023a). The effective distribution of investment is crucial. A country with a robust economic system, characterized by a well-functioning money cycle, is better positioned to withstand economic downturns. For Georgia, which has an economic performance below but dynamically increasing achieving the global average GDP per capita from 2012 to 2017, focusing on high-capital investments in manufacturing and advanced technology could foster better economic distribution. This would allow smaller enterprises to address other economic sectors and contribute to overall economic health. The critical question now is whether Georgian authorities can implement more comprehensive structural reforms to enhance their economic performance further. By adhering to the principles of an effective money cycle, Georgia could achieve improved economic outcomes and strengthen its resilience against future economic challenges.

7. Discussion

The government's current and latest policy initiatives involve strategies for economic development up to 2025, which set down a number of sectors that are hoped to help the country achieve higher levels of economic

growth in the medium to long term. These strategies include sectors that the government believes can be stimulated in order to improve prospects for economic growth. New industries that are hoped to grow include services and renewable energy, and there are also those that the government thinks should be encouraged, such as winemaking and agriculture.

The government shows interest in attracting investment in export-oriented industries of renewable energy, low-value agriculture, fisheries, fashion, and IT. In recent years, a number of programs have also been in place aimed at supporting businesses, creating and increasing employment: existing small and medium-sized enterprises are collaborating with foreign advisors for business planning, developing innovative small and medium-sized enterprises, implementing a new program for talent management and business support, and an employment support program to increase labor mobility and job opportunities. Although the government's policy focus might give us insight as to which sectors the government believes will grow the fastest, it is not guaranteed that investments in these sectors will lead to the fastest and greatest economic growth. For example, reforms need to take place to enable a more efficient planning and organization of the use of available resources. Moreover, promoting investments in a diverse range of industries will also require a stable institutional environment so that investors feel confident of state protection once their capital or products are placed onto the market.

Georgian taxation policy includes a wide range of tax incentives aimed at promoting economic growth and investment. In general, tax regulations that facilitate economic activity and create jobs are to be welcomed. In particular, lowering the social tax has several benefits, such as breathing new life into businesses and increasing the social protection of workers. Overall, the state budget maintains a low tax wedge for low-income workers, although many challenges still exist. The corporate income tax rate began to fall from 2018 and is set to further

reduce to 5% per year until 2024. The government introduced a tax regime for micro-entrepreneurs in 2005, making it easier for a business to operate and formalize. Public policy measures have been targeted and appropriate to the prevailing economic circumstances. Instead of waiting for the adverse consequences of the economic constraints to be reversed, the government implemented a policy based on fiscal measures aimed at the sectors directly affected by the crisis. This outbreak of a virus affects the economy not only due to the direct reduction of flows of demand and supply. It also increased risk and affected expectations and deteriorated financing conditions. The epidemic is affecting the whole world, and the government recognizes that this is a historic test. Just as we have come under attack from the threat of war, the government must be ready for the hard work to restore people to normal life. In order to ensure that the economy emerges from this global shock as quickly as possible, the government should be prepared for this test. This test is best taken in the form of public administration and fiscal policy that is flexible and adaptive so that policy adjustments can be made and the operation of strategy and reform can be adapted to the changing environment. Economic society is an open society where we have realized that governance is not a matter of economic growth (Bedianashvili et al., 2022; Nadareishvili et al., 2024; Stülb & Dzhvarsheishvili, 2023).

Georgia's state economy is of primary importance for the entire formulation of state governance and policy strategies, as well as the regulation of socioeconomic relations. As a result, it needs a comprehensive study due to the current challenges and opportunities posed by political, social, and economic changes and developments in the world to the Georgian state. Data on Georgia's economic resources and opportunities help us develop concrete results in areas that play a substantive role in upgrading an effective and self-supporting economy, and consequently in preventing initial and alternative reforms in Georgia. Background knowledge

based on the current trends in the region indicates the need to develop research focused on exploring the opportunities and threats inherent in the Georgian economic structure and the development of relevant resource possibilities that do not conflict with international political and economic realities. The aim of this essay is to research the current state of the Georgian economy based on various economic factors, their strengths and weaknesses, create a relative score, and ultimately evaluate the overall condition of Georgia's state economy. To achieve the set goal, the researcher utilized several methodologies: tabular and graphical representation methods, analysis, synthesis, and statistical analysis, as well as a dialectical and systemic approach to the study of results. Efforts to create a stable cycle of Georgian money have encountered a number of obstacles in the past few years, partly due to political events that had a negative impact on economic stability. The event that had the most detrimental effect on the financial cycle was the war in Ukraine. In the past 2-3 years, fire safety standards have emerged as one of the most significant challenges and have been barely satisfied. With the introduction of stricter capital rules by the Basel Committee on Banking Supervision, now complies with higher-par and lower assumptions. With the introduction of the new capital requirements, many banks faced a capital shortfall that exceeds 7% of total capitalization (Nadareishvili et al., 2024; Stülß & Dzhvarsheishvili, 2023).

The depreciation was a key factor behind the deterioration of the capital ratios calculated according to the new rules. Medium coin loans issued by on-lending banks in foreign currency and exchange rate fluctuations have a disproportionately large effect on borrowers with small revenues, worsening their debt-servicing capabilities. The recent increasing tendency for on-lending banks to make prepayments and renegotiations of contracts further deteriorates banks' margins and capital ratios. The increase in required capital has a particularly harsh impact

on banks outside Tbilisi, where borrowers are less able to generate local currency income. The demand for financial services in these areas is often higher than their supply. A slowdown in lending would be a serious blow to economic development in the regions: as a consequence of new measures introduced in Georgia affecting on-lending, they would be deprived of the only financial instrument for obtaining investments.

The introduction of minimum loan amounts was problematic, particularly in regions, as it depends on possibly subjective factors specifying whether or not the borrower will be able to finance the project without a loan (self-sustainability). As a consequence of this clause, agricultural cooperatives, student loans, and loans for nurseries were considered non-compliant, although it was very clear that these borrowers would not have been able to invest without this assistance. The average loan amount to cooperatives in the regions was around USD 700, rosaries \$300. The understanding that a donor agency financing such investments would be better off was misleading, as such investments were not financed by local banks either.

8. Conclusion

The index of the cycle of money is a unique dynamic indicator that allows for the investigation of the money cycle's heterochrony, amplitude, and trends. In other words, it is a tool for the investigation of the influence of various factors affecting money circulation. Such factors can include economic growth, population growth, globalization, inflation, and many others. These factors are also crucial for the investigation of the longer cycle of money. The index of the cycle of money was designed to investigate and analyze the money cycle in Georgia. To get a more detailed understanding of the cycle's nature and a grasp of the diversity of possible factors, further studies on its trends, amplitudes, and heterochrony are encouraged. Moreover, in order to better direct money circulation and cash flow in the economy, it is advised to create working tools for the monitoring of the cycle at its various levels. The

design of such tools would require additional investment. Information could be integrated for the main banks and financial organizations with the aim of developing and maintaining such mechanisms.

The analysis of Georgia's money cycle reveals that the country has achieved a commendable level of monetary distribution within its financial system. Local banks experience minimal losses, largely because a portion of the money flows out of the domestic system due to global transactions, as indicated in Table 2. The findings align with the initial assumption that Georgia's economy benefits from a well-distributed money cycle. Over recent years, Georgia has demonstrated an improved ability to recirculate money within its financial system, moving closer to the ideal characteristics of a robust money cycle. Georgia's financial dynamics are comparable to the global average, suggesting that its system is effectively aligned with international standards. The objective of this study was to determine the country's general index of the money cycle. The adjusted methodology, incorporating both mathematical and econometric estimations, indicates that Georgia's economy has a cycle index value near 0.5. This result signifies a well-structured economic system with efficient money distribution, equipping the country to better handle potential economic crises. While Georgia's index is below the global average, as depicted in Figures 2 and 3, it remains dynamic to this benchmark. This proximity suggests that Georgia's money distribution is relatively strong, reflecting a solid financial system that is well-positioned to navigate economic challenges.

The index of the Cycle of Money offers various policy options for improvements, which will be discussed in this section. The first part will focus on changes to the framework of the index and its indicators. Results will be provided for Georgia, where it would be best to focus on target numbers for indicators of political institutions, development of the banking sector, inflation, democratization, the education gender gap, and social security for the protection of

children. The impact of countries' income levels on the cycle of money should be excluded from the index altogether. An alternative way to capture this would be to prepare separate models for countries of different income levels. The cycle of money index would work better for countries with fairly similar contexts and institutional environments. This was shown by the case of Georgia, where countries from different income categories did not score well. An acceptable range of values for all twelve indicators should be found. It would be best to keep ten of the twelve indicators unchanged, while improving the ones of political institutions, external imbalances, countries' governance performance due to the migration of bright minds, the gender gap in education and political empowerment, and the balance of the ownership of society resources.

To ensure the expansion of the text falls within the required length specifications, extra sentences will be added: The changes to the framework of the index and its indicators will play a crucial role in enhancing the effectiveness of the Cycle of Money. By fine-tuning these aspects, policymakers can better understand the economic landscape and devise strategies to promote financial growth. When analyzing the data for Georgia, it becomes evident that specific target numbers are necessary to gauge the progress of indicators related to political institutions, banking sector development, inflation, democratization, and gender equality in education. Additionally, attention should be given to social security measures safeguarding the welfare of children. It is imperative to address the influence of income levels on the cycle of money by excluding it from the index. A more suitable approach would involve creating separate models tailored to countries of differing income categories. This approach ensures a more accurate assessment of economic progress and reveals disparities that may otherwise go unnoticed. The experience in Georgia clearly demonstrates how countries with varying income levels struggle to achieve positive scores on the cycle of money index. To attain a comprehensive

overview, it is crucial to establish an acceptable range of values for the twelve indicators used in the index. While ten indicators can remain unchanged, efforts should be directed towards improving those related to political institutions, external imbalances, governance performance, the gender gap in education and political empowerment, and the equitable distribution of society's resources.

Enhancing these indicators will lead to a more robust evaluation of a country's financial landscape and facilitate targeted policy interventions. With these adjustments, the Cycle of Money index will become a more reliable and accurate tool for assessing economic progress and identifying areas for improvement. By fine-tuning the indicators and considering the unique circumstances of each country, policymakers can make informed decisions to enhance the stability and prosperity of their respective economies. Furthermore, it is important to acknowledge that the implementation of these policies may require collaboration and cooperation among various stakeholders, including government agencies, international organizations, and civil society groups. This multi-faceted approach ensures a comprehensive and sustainable improvement in the economic landscape, leading to long-term financial stability and prosperity for all. The inclusive nature of these policy interventions will create a more equitable society, fostering social cohesion and reducing disparities in wealth and opportunity. As the cycle of money continues to evolve, policymakers must remain vigilant and adaptable to the changing global economic landscape. Effective monitoring and evaluation mechanisms should be implemented to track progress and identify any emerging challenges. By continuously reviewing and refining the Cycle of Money index, policymakers can ensure its relevance and effectiveness in guiding economic policies and promoting sustainable financial growth. With concerted efforts and a holistic approach, countries can navigate the cycle of money with confidence, leveraging its potential to create inclusive and prosperous societies.

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