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Index of the cycle of money: the case of Costa Rica

Índice do ciclo monetário: o caso da Costa Rica

Índice del ciclo del dinero: el caso de Costa Rica

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The article presents evidence and an original methodology that combines contrasted econometric elements with economic theory, resulting in an effective combination to guide future studies in small economies..

ABSTRACT

The paper aims at determining, in a real-case scenario such as Costa Rica's economic system, how the theoretical basis of the money cycle plays out. The Money Cycle Index takes into account how well a country's economic structure is set up and what kind of financial model it needs to respond to the monetary crisis. Costa Rica's index of the cycle of money calculations is compared to the average global index of the cycle of money. This indicates that Costa Rica is in line with the global average, thus being a good economy, which could be at risk of falling into recession. The methodology shall conform to the theory, mathematics, statistics, and econometrics results. The work is efficient, as it demonstrates the strength of Costa Rica's economy. The application of the theory of the cycle of money to a country's economy has resulted in these results. These are the previous case scenarios from Latvia, Bulgaria, Serbia, Thailand, and Greece. This theory states that to improve the distribution of resources between the economy and smaller companies covering other economic sectors, businesses with a high level of capital should take an interest in manufacturing and technology areas where taxes are lower. The global recession period from 2012 to 2017 shall be used as a basis for compilations., by the Q.E. technique.

Keywords: the cycle of money, Costa Rica, index of the cycle of money.

RESUMO

O artigo visa determinar, num cenário real como o do sistema económico da Costa Rica, como funciona a base teórica do ciclo monetário. O Índice do Ciclo Monetário tem em conta a qualidade da estrutura económica de um país e o tipo de modelo financeiro necessário para responder à crise monetária. O índice do ciclo monetário da Costa Rica é comparado com o índice global médio do ciclo monetário. Isto indica que a Costa Rica está em linha com a média global, sendo assim uma boa economia, que pode correr o risco de entrar em recessão. A metodologia deve estar em conformidade com os resultados teóricos, matemáticos, estatísticos e econométricos. O trabalho é eficiente, pois demonstra a força da economia da Costa Rica. A aplicação da teoria do ciclo monetário à economia de um país resultou nestes resultados. Estes são os cenários anteriores da Letónia, Bulgária, Sérvia, Tailândia e Grécia. Esta teoria afirma que, para melhorar a distribuição de recursos entre a economia e as pequenas empresas que abrangem outros sectores económicos, as empresas com um elevado nível de capital devem interessar-se pelas áreas industriais e tecnológicas onde os impostos são mais baixos. O período de recessão global de 2012 a 2017 será utilizado como base para compilações pela técnica Q.E.

Palavras-chave: o ciclo monetário, Costa Rica, índice do ciclo monetário.

RESUMEN

El artículo tiene como objetivo determinar, en un escenario real como el sistema económico de Costa Rica, cómo se desarrolla la base teórica del ciclo monetario. El índice del ciclo monetario tiene en cuenta qué tan bien está configurada la estructura económica de un país y qué tipo de modelo financiero necesita para responder a la crisis monetaria. Se compara el índice del ciclo del dinero de Costa Rica con el índice global promedio del ciclo del dinero. Esto indica que Costa Rica está en línea con el promedio global, siendo así una buena economía, que podría estar en riesgo de caer en recesión. La metodología se ajustará a los resultados de teoría, matemáticas, estadística y econometría. La obra es eficiente, pues demuestra la fortaleza de la economía costarricense. La aplicación de la teoría del ciclo del dinero a la economía de un país ha dado como resultado estos resultados. Estos son los escenarios anteriores de Letonia, Bulgaria, Serbia, Tailandia y Grecia. Esta teoría establece que para mejorar la distribución de recursos entre la economía y las empresas más pequeñas que cubren otros sectores económicos, las empresas con un alto nivel de capital deberían interesarse en áreas manufactureras y tecnológicas donde los impuestos son más bajos. El período de recesión global de 2012 a 2017 se utilizará como base para las compilaciones bajo la técnica Q.E.

Palabras clave: el ciclo del dinero, Costa Rica, índice del ciclo del dinero.

INTRODUCTION

To identify the advantages of SMEs we could point out as follows: Flexibility in management decisions, allowing companies to respond more quickly to environmental challenges. A swift acceptance of market opportunities by big companies is difficult to achieve in several ways. Sales partners are unable to negotiate freely on the terms of a transaction. Proposals for various project programs must be time-consuming and reviewed by internal audit and marketing before being approved by management. This is precisely a great opportunity for small and medium-sized enterprises. Their executives have complete freedom in negotiations. It shall be possible to access the same or another decision-maker at any time. In the case where SMEs are located, in geographically distant areas and isolated from major business centers, this contribution plays a particularly important role both economically and socially. In these areas, the small business, whether engaged in the primary exploitation of natural resources (forest exploitation, agricultural, livestock or fishing activity, mining of minerals) or the concentration and further exploitation and channeling to the consumer markets of the production of the inhabitants of the area, is a source of life and progress, providing employment opportunities to the usually underemployed inhabitants of such areas. The small business has, as we pointed out above, flexibility in choosing and changing the place of establishment and thus can always be close to its consumers, to whom it provides direct service. Personal contact with customers is made by the entrepreneur. He may assess his personal preferences, develop a public relations program and make direct advertising of his products. The staff shall be directly supervised. To avoid error and waste of time and materials, given the small number of staff in a small undertaking, entrepreneurs can manage their work independently and provide instructions directly.

It also provides the opportunity to develop relationships of mutual appreciation and trust between entrepreneurs and staff, which contributes to maintaining a favorable climate for peaceful cooperation and increasing efficiency. The owner of the large enterprise, as a rule, is deprived of the possibility of direct personal communication with clientele or staff. It should be noted, however, that for some people with unusual dynamism, unusual initiative, and an inclination for hard work, the establishment and active participation in a company is a beneficial way for these people themselves, but also society, of making use of these characteristics. These people usually prefer independence in action and initiative rather than the constraints and commitment created, for example, by holding a well-paid job, even if it is well paid, within another company or public service. Making it easier for large businesses. In many cases, small enterprises specialize in the production of goods or the provision of services necessary to carry out the production process of large enterprises. In general, large enterprises source most of their inputs from small enterprises rather than from other large enterprises. The help of small businesses is also valuable for large ones and the fact that they undertake to channel their products to consumer markets. Innovations. The enduring role of the small business and its owner in the field of innovation is fascinating. Many inventions such as the photocopier, and the personal computer, were the fruit of the efforts of small businesses of individuals (Πυλοστόμου, 2016).

SMEs play a significant role in the development of our economy, contributing substantially to creating new jobs, producing additional value, and making an important contribution to GDP nationally. They play an important role in boosting employment, competitiveness, and innovation while ensuring social stability. In today's globally competitive environment, however, their survival is not an easy task. In addition, it needs to be continuously modernized in terms of manufacturing and management, innovation services and products, access to appropriate information and funding, the introduction of the latest technology, data usage, networking, and collaboration. The creation of favorable conditions and the establishment of support structures is essential for the state to play a key role in supporting SMEs.

The study of the Costa Rica economy in this paper was based on a money cycle concept. The economy's dynamic depends on how much money an economy uses at any given time, as explained in the Money Cycle theory. An economy should be viewed as a system with fragments rather than a closed system, implying that it has its limits while also interacting with other economies. In interpreting those terms, the meaning of fragments indicates an economy's interconnection with other economies while at the same time safeguarding its own money (Challoumis, 2018b, 2018c, 2018d, 2019c, 2019d, 2019e, 2019f, 2023). Money flows from an economy to external banks or other economies in several cases. The main point is that major corporations and international companies save a lot of money in external bank accounts and economic sanctuaries. In line with that theory, an additional tax would be levied by the tax authorities on those types of companies to reduce their losses. Moreover, a lower rate of taxation should be applied to small enterprises and freelance workers. This will make it possible to improve the dynamism of the economy. The factories, know-how services of large corporations, health care system, and educational system are special cases for the economy because they fall under exemptions where taxes improve the economy's quality. Because they do not replace the activities of small-medium businesses and freelancers, factories and large know-how companies help to improve the money cycle. To improve economic quality, education, and healthcare systems are boosting the economy. Therefore, this paper aims to gain a thorough insight into how money cycles work in real-world scenarios such as Costa Rica's economy. The Money Cycle Index assesses how well the economic system responds to a currency crisis and provides an evaluation of the country's financial structure. The estimations of Costa Rica's index of the cycle of money are compared to the global average index of the cycle of money (Arbel et al., 2019; Bowling et al., 2019; Erickson, 2016; Fan et al., 2020; Franko et al., 2013; Hai, 2016; Haigh, 2020; Korenik & Wegrzyn, 2020; Menguy, 2020; Nayak,

2019; Ud Din et al., 2016; Williamson & Luke, 2020). The conclusions show that Costa Rica is close to the global average and may face a financial crisis due to its well-structured economy.

According to the theory of the money cycle, taxes return to the economy for education and health care, which is an exclusion from the mainstream where taxes support the economy. Nevertheless, the consensus seems to be that tax administrations should aim at reducing taxes as much as possible (Anguera-Torrell et al., 2020; "Crisis, Institutional Innovation and Change Management: Thoughts from the Greek Case," 2019; Giglio et al., 2021; Kalambokidis, 2014; Olcina et al., 2020; Omrani et al., 2021; Swanstrom, 2019). The government should protect small and medium-sized firms by providing low taxation, while larger companies would have to pay higher taxes. Nevertheless, given that the activities of these large and international firms do not replace those of small companies, they should be subject to reduced tax rates. The manufacturing industry and the technical know-how firms are included in these large corporations. The key idea is to create a financial system that ensures the best allocation of production. Because they can make investments in sectors that smaller firms are unable to do, larger enterprises should not provide similar products and services to small companies (Acs & Szerb, 2007; Amanor-Boadu et al., 2014; Baldwin et al., 2011; Cruce & Quinn, 2019; Domingues & Pecorelli-Pere, 2013; dos Santos Benso Maciel et al., 2020; Johnston & Ballard, 2016; Kiktenko, 2020; McIsaac & Riley, 2020; Miailhe, 2017; Nowicki, 2019; Ortún et al., 2016; Pircher, 2020; Reeves et al., 2019; Russo Rafael et al., 2020; Stern, 2015; Swanstrom et al., 2002; Victral et al., 2020). This allows the economic system to attain its highest level of performance. Moreover, the concept of a monetary cycle or money cycle illustrates that money flows into an economy to achieve maximum economic dynamism by allocating production units and taxes appropriately.

The Costa Rican monetary cycle index is discussed in the present paper. The study takes into account a real-world case scenario for the country's economic system. The main hypothesis of this paper is to estimate Costa Rica's cycle of money, using either a simple index or a general index of the cycle of money, to determine whether Costa Rica is close to the global general index of the cycle of money. The Costa Rican monetary cycle should be similar or close to a global general index of money cycles, enabling it to counter the potential depression. The method can be relied upon completely on mathematical estimates of the relevant theory. These results confirm that Costa Rica's economy is well established in line with the general international Money Cycle Index of 0.5, which represents a global average. In their financial system, countries below 0.5 have an appropriate distribution of funds. The Costa Rica economic system is considered to be in good condition, thanks to the findings of this paper (Challoumis, 2019a, 2021d, 2021e, 2021f, 2021g). The structure of Costa Rica's economy and how money is distributed to its economy provide answers to the question of how the index of the cycle of money functions in that country. However, for an even more robust money index cycle, it is necessary to carry out some improvements. Therefore, to improve the use of money in the country's economic system and increase taxes on big international businesses, Costa Rica should lower its income tax rates for smaller companies and raise them for larger ones (Altman, 2012; "Awareness of Tobacco Tax Policy and Public Opinion on Tobacco Tax Reform in Taiwan," 2020; Azzone, 2018; Bento, 2009; Berg et al., 2020; Ewert et al., 2021; Haskel & Westlake, 2021; Marenco et al., 2017; Muñoz & Flores, 2020; Strassheim, 2019).

As international companies provide similar data to unregulated transactions and hide them to avoid taxation, it is difficult for the authorities to apply the arm's length principle when obtaining controlled transactions. Accordingly, the principle of arm's length needs to be applied by the government. This principle states that companies that engage in controlled transactions manage the transactions and avoid paying taxes. International companies are thus obliged, by the principle of "fixed length", to bear a fixed amount of tax and interest. This means that money circulation is supported by the fact that larger firms are often withdrawing cash from society and the economy, making it available to foreign banks. This leads to the loss of that money for society and a decrease in consumption (Bartels, 2005; Burstein, 2020; Castro & Scartascini, 2019; Cornelsen & Smith, 2018; Cruce & Quinn, 2019; Haskel & Westlake, 2021; Menguy, 2020; Miailhe, 2017; Mohindra, 2007; Ng, 2018; Ortún et al., 2016; Rasmussen & Callan, 2016; Ribašauskiene et al., 2019; Tummers, 2019; Waardenburg et al., 2020).

Thus, the government must apply the arm's length principle to obtain controlled transactions, which requires international companies to pay a fixed amount of tax and interest. This encourages the circulation of money, leading to lower consumption. Then, according to the fixed-length principle, local businesses that keep their money in local banks should pay lower taxes. In the case of Latvia, which is in the 0.5 range and appears to be a well-structured economy that will not fall into recession during periods of severe Economic Crisis, there was an early application of cycle money theory. In the case of Costa Rica, a currency cycle index is close to 0.5 indicating that it could be faced with a serious economic crisis but at a slower pace. Potential crises can be avoided by countries with a gross domestic product above 0.2. Therefore, the Cycle money theory has been applied to Latvia and Costa Rica, indicating that potential crises can be avoided if GDP is above 0.2.

METHODS

The methodology used in this study is set out below, which corresponds to the theory described above. Clarifications of the monetary cycle calculations can be achieved through these mathematical types:

$$c_y = c_m - c_\alpha \quad (1)$$

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

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

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

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

The c_m is the velocity of financial liquidity, c_α the velocity of escaped savings, and c_y 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, $i_{cy\ coyntry's}\ or\ c_{y\ coyntry's}$ is the index of c_y of the country, and $i_{cy\ Average}\ or\ c_{y\ Average}$ is the global index 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 the money that is maintained in the economy. Finally, $g_{cy\ Average}$ is the general global index of c_y, and is obtained as a global constant.

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Proof: Eq.4, 5, show that an economy close to the value of 0.5 can be in immediate financial difficulties. The results close to these levels represent an appropriate index for the money cycle, which provides a detailed picture of society's economic structure as well as its distribution between citizens and consumers. Equation (1) is the term for the cycle of money which used to define the $c_{y\ coyntry's}$ and $c_{y\ Average}$ of eq. (2). The cycle of money to a quantity value is expressed by GDP, which is an expression of $\frac{\partial(\text{GDP})}{\partial(\text{S+I+X})'}$ according to $\frac{dx_m}{dm}$ and - $\frac{\partial(\text{GDP})}{\partial(\text{S}'+\text{I}'+\text{M})}$ based on $\frac{dx_m}{da}$. Then, $c_y = d(GDP) = \frac{\partial(\text{GDP})}{\partial(\text{S+I+X})} d(\text{S} + \text{I} + \text{X})$ - $\frac{\partial(\text{GDP})}{\partial(\text{S}'+\text{I}'+\text{M})}\ d(\text{S}' + \text{I}' + \text{M})$, formed on $c_y = \frac{dx_m}{dm} - \frac{dx_m}{da}$, of eq, (2). Thus, S 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 are oriented to banks out of the country's economy, and M is the imports. Therefore, the cycle of money expresses the GDP as the following one: $Y = S_T + I_T + (X - M), or\ Y = (S - S') + (I - I') + (X - M) or\ Y = \Delta S + \Delta I + (X - M)$. 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 the money transitions between the economies, by a comparison of the global economies, by ΔS, ΔI, and (X-M). Thus, $c_{ytotal} = \sum_{i=1}^{n} \sum_{t=1}^{m} c_{yi,t} = \sum_{i=1}^{n} \sum_{t=1}^{m} [\frac{\partial(\text{GDP})}{\partial(\text{S+I+X})} d(\text{S} + \text{I} + \text{X}) - \frac{\partial(\text{GDP})}{\partial(\text{S}'+\text{I}'+\text{M})}\ d(\text{S}' + \text{I}' + \text{M})]_{i,t}$.

Real data on the economy and their rates per GDP are currently being developed. For this period, which runs from 2012 to 2017 and is characterized by a prolonged recession, like in Europe particularly, several countries are subject to scrutiny. The following equation is used for the OLS test:

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

In the prior table, the variables are defined before, except c which is the constant and $\beta_1, \beta_2\ and\ \beta_3$ are the multipliers. The results of that country were not taken into account in the previous methodology.

RESULTS

Based on this methodology, the following results have been obtained. The indices for bank deposits, GDPs, and the Money Cycle are shown in Table 1. eq.6 shall be used to calculate the econometric estimates. This section shows that in the Costa Rican economy, bank deposits and GDP per capita are dependent on the Costa Rican money cycle index. The global average of bank deposits and global GDP per capita shall be used to compare Costa Rica's economy with that of the world. Then, for these variables, yearly data from 2012 to 2017 are used: The same conclusions emerge from an econometric standpoint, with the dependent variable being the index of the money cycle:

Table 1 Costa Rica's regression analysis (OLS)

	OLS		
Variables	**Coefficient**	**std. error**	**p-value**
Constant	−496123	18514.0	0.0014 ***
Costa Rica's bank deposits	19632.2	277.536	0.0002 ***
Costa Rica's GDP per capita	25.0091	0.727282	0.0008 ***
Global index of the cycle of money	0.00604314	0.0120671	0.6662

Note: ***statistically significant at 1% level, ** statistically significant at 5% level, *statistically significant at 10% level.
Source: Author's estimations

The result of adjusted R^2 is over 0.9 because as expected there is a strong relation between the bank deposits and the GDP. The Breusch-Pagan test revealed that heteroscedasticity does not exist, with P (Chi-square (3) > 0.595840) = 0.897384. A result of 1.9812288 has been obtained in the Durbin-Watchon test. The indicators show the distribution of monetary resources and economic structure in Costa Rica, as shown in Table 2. The position of the country's economic structure is determined, based on these estimates and theoretical assumptions, as to whether Costa Rica belongs to a well-structured economy. Given those findings, the status of the Costa Rican money cycle can be established as follows:

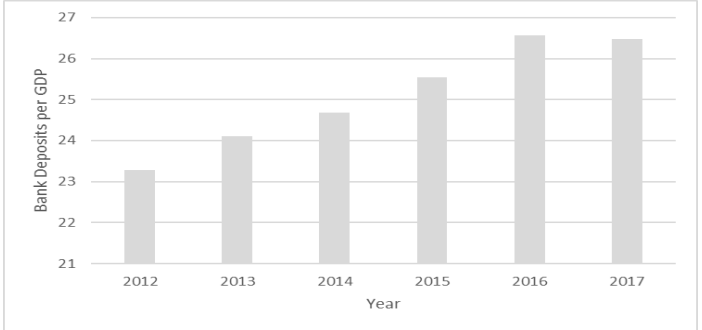
Table 2 Costa Rica's index of the cycle of money

Year	Bank Deposits Global Average (%)	Bank Deposits Costa Rica (%)	Global GDP per Capita ($)	Costa Rica GDP per Capita ($)	Index of Global Average Cy ($)	Index of Costa Rica's Cy ($)
2012	52.48	23.28	16,653.01	19,679.29	873,949.96	458,133.87
2013	53.96	24.1	17,266.62	18,233.02	931,706.82	439,415.78
2014	55.81	24.69	17,159.02	18,669.10	957,644.91	460,940.08
2015	59.38	25.55	15,295.71	19,142.68	908,259.26	489,095.47
2016	60.77	26.56	15,330.03	19,737.67	931,605.92	542,232.52
2017	60.07	26.48	15,082.49	20,347.04	906,005.17	538,789.62
RESULTS					5,509,172.04	2,910,607.34

Source: Author's Conclusion

Costa Rica's bank deposits:

Figure 1. Costa Rica's bank deposits

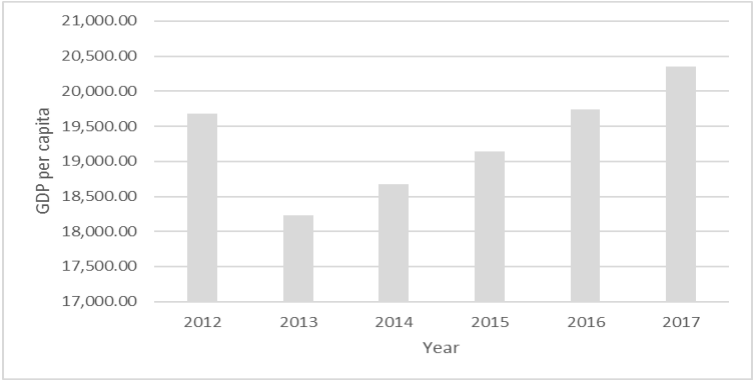


Source: Globaleconomy.com

From 2012 to 2017 the state of bank deposits in Costa Rica's financial system as a percentage of GDP is shown in

Figure 1. Moreover, there is a graph showing the GDP of Costa Rica:

Figure 2. Costa Rica's GDP per capita



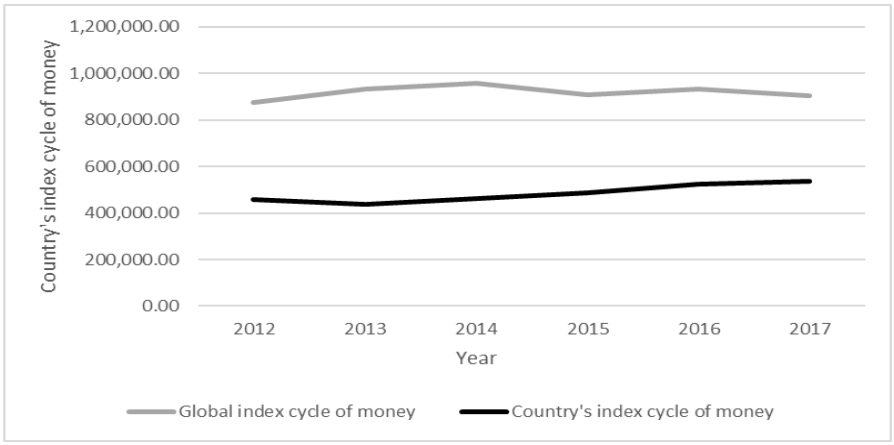
Source: Globaleconomy.com

The state of the Costa Rican economy's GDP from 2012 to 2017 is shown in Figure 1. Costa Rica's gross domestic product is shown in the following graphic.2 for that period.

The index of Costa Rica's c_y is 2,910,607.34 $
The index of the global average c_y is 5,509,172.04 $
The general index c_y for Costa Rica is $g_{cy\ country}$ = 0.35
The general index of c_y global view is $g_{cy\ Average}$=0.5

Consequently, Costa Rica is comparable with the global average in its index cycle of money. So, the Costa Rica economy's dynamic is in line with the world average and its structure has been similar to that of the original hypothesis. So we're going to get the following system:

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

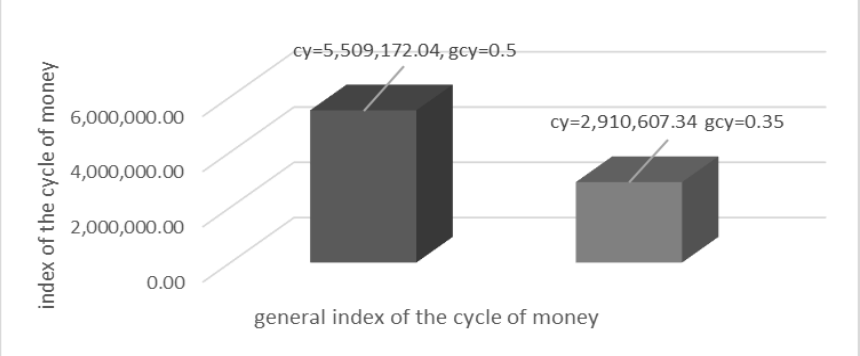


Source: Author's Conclusion

The Costa Rica economy's cycle of money index is below the global average of the cycle of money index of 0.5 (considered as a global constant). In the theoretical backdrop of this money cycle, countries below 0.5% have well-structured economies on an eq basis. (5). This suggests that international transactions are not fully used by the local banking system when compared to Costa Rica's economic model, which is a good distribution of money for its economy. Local medium and small enterprises have been replaced by international and multinational corporations. A policy of protecting SMEs should be put in place by the Government so that they will not lose money when large corporate transactions take place. The government should apply the fixed length principle, which would subsequently lead to an increase in taxes on large companies. The index of the money cycle (more precisely, the fixed-length principle of current theory) adheres to the most

recent G7 decision, which calls for a minimum 15% tax rate on international companies that conduct international transactions. As a result, the distribution of resources in the economy and societal benefits will be improved:

Figure 4. The cycle of money indexes



Source: Author's Conclusion

The previous scheme combines the index of the money cycle with the case of the general index of the money cycle. The relationship between the global average indexes and the Costa Rica index is depicted. Costa Rica is one of the countries that has a simple and general index of the money cycle that is close to the global average. The explanation is that this financial system belongs to a good level of the money cycle, so there is a good dynamic because the structure of the economy can be improved by lowering taxes on small and medium-sized businesses while raising taxes on larger corporations. Furthermore, larger corporations must provide economic support.

The activities of small businesses should not be taken over by large corporations. Increasing the distribution of money will improve investment in a country. The good money cycle means that a country with an economically sound system can face economic crises. Costa Rica's economy has fallen short of the common GDP per capita index between 2012 and 2017 but remains close to it. To make the distribution of funds across the economy more efficient, big companies must invest in manufacturing and technology sectors that pay a lesser amount of taxes while small firms should cover other economic sectors. This leads to an issue of whether the authorities will be able to carry out more systematic changes in their economies.

DISCUSSION

The issue of transfer pricing concerns the determination of the portion or consideration charged by each affiliated company, based on the law, in the trading relationships it develops with any other business at the national and international levels. However, the implementation of this practice has implications. On the one hand, it has an impact on the market, which suffers from artificially inflating the cost of both the group's goods and services. This artificially inflated cost does not leave unaffected the prices that will be addressed to consumers since the prices of products and services are disproportionate. On the other hand, the consequences concern the tax part, since the aim is to prevent the correct assessment and determination of the taxable material. This suggests a situation of tax evasion, which is illegal, or rather tax avoidance, which is legal and certainly more tolerable. The whole problem of transfer pricing is the inability of national tax authorities and multinational groups to determine the exact amount of income earned and the expenses deducted by each foreign subsidiary or affiliated company or permanent establishment of a foreign business in the country where it is established. If one considers the organic, operational, and financial connection that exists between subsidiaries and generally affiliated companies based in different countries, as well as companies with permanent establishments abroad, the problems that arise are obvious.

Income from transactions and expenses cannot be easily calculated. This is due to the profits of each business and consequently to the taxes that the state is required to collect from transactions. Here it is appropriate to refer to the treatment of transfer pricing transactions based on OECD guidelines. The original OECD publication, published in July 1995 and last republished recently, dealt with transfer pricing with guidelines being widely accepted as regards transfer pricing documentation not only by the respective tax authorities but also by the companies themselves in each OECD member country; but also worldwide. The general spirit of the OECD guidelines is governed by the existence of guidelines concerning the determination and control of transfer pricing by the tax authorities.

The issue of the documentation of transfer pricing transactions, as will become obvious below, is a wide and complex subject, in which it is difficult to set strict and absolute rules since there is a dependence on a multitude of parameters, such as economic, business, geographical that are related to the wider economic and political environment. Next, for the 29

transfer pricing transactions to be meaningfully examined, not only the tax administration but also the companies themselves must be critical. The OECD guidelines aim to avoid double taxation that may arise in the context of transfer pricing between multinational enterprises, to apply administrative procedures for eliminating double taxation, and to protect the tax base of the countries where transfer pricing occurs (Δεμερτζή, 2019).

To analyze the research findings in light of these studies and other similar works, we shall make a fundamental analysis using this section on theoretical foundations. This means that the findings of your research confirm, supplement, and refute any theory or hypothesis which has been developed. The findings and how they can be interpreted should be discussed by the authors, having regard to past research, and working hypotheses. The widest possible context should be established for the analysis and implications of these findings. Thus, the authors should make a fundamental analysis of the research findings to confirm, supplement and refute any theories or hypotheses, and establish a wide context for the analysis.

CONCLUSIONS

Today, the transfer pricing issue is perhaps the most controversial and important economic issue worldwide. It is necessary, Well, everyone should be informed about the concept and the issues that arise around it, i.e. in what ways it is used by each business to achieve any objectives set by it. It is a management tool or configuration tool for the total corporate tax burden. The fact that the market has become globalized has led to the spread of multinational companies and therefore the increase in the number of transactions. Each company, with this condition, finds it difficult to adapt since the Tax laws vary, as do transfer pricing rates. Logically, due to this situation, the control of pricing will constantly employ tax authorities around the world. The OECD with its guidelines and the arm's length principle has managed to create a legislative framework for the implementation of the pricing of transfer pricing transactions. In fact, by creating a clear transfer pricing documentation framework and international forecasting contracts relating to the avoidance and settlement of disputes resulting from transfer pricing transactions, a large number of companies have benefited. It may be that the OECD with its guidelines directed many companies since worldwide it has been adopted by many countries, however, it has been questioned and criticized. The main objection is based on the fact that not every branch can participate in the total revenues of the group being separated, since it is difficult for the methods promoted to determine prices of transfer pricing transactions to be applied practically.

In any case, all these issues have been arranged by the proposed theory of the fixed length principle (Challoumis, 2019b) and the regulation of the 15 % constant and minimum tax rate of G7 that came after the definition of the fixed length principle. In real cases, such as in the case of Costa Rica's economic system, the money cycle plays its role. The Money Cycle Index measures the structure of a country's economy, as well as the adequacy of its Financial Model for dealing with monetary crises. Costa Rica's index of the cycle of money calculations is compared to the average global index of the cycle of money (Challoumis, 2019c, 2021a, 2021e, 2021b, 2021c, 2021g). The findings showed that Costa Rica's economy was very similar to the world average; thus, it is a good economy and could be not in trouble.

Efficient money distribution is possible through the country's monetary cycle. Losses at local banks are low because a significant amount of money is excluded from the Local Financial System through global transactions, see Table 2 above. The model shows the distribution of funds in Costa Rica's economy, which is consistent with the original assumption. In recent years, it seems that the Costa Rican economic system has better use of money within its financial system compared with previous years because it is more consistent with the concept of monetary cycles. The financial situation of Costa Rica is like the global average in terms of the money cycle.

Better distribution of money can further improve the economy of each economy, in this case, Costa Rica. The money cycle shows that when there is function and structure they are two sides of the same coin, therefore the detection of a problem in the functioning of the economy is reflected in its structure and vice versa. Improvement can be brought about by providing incentives or other measures for companies substituting smaller functions to operate in industry, or high-level know-how companies. Therefore, small companies should be taxed less than larger companies that substitute their economic activity. These larger companies need to have low taxes when they move into manufacturing or know-how companies. Therefore, fiscal policy, as well as fiscal policy incentives, can lead to a well-structured economy, and therefore to a well-functioning economy, with proper distribution and reuse of money.

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