Does Financial Development Contribute To Reducing The Informal Economy In Brazil?

João Guilherme Magalhães-Timotio[1], Tânia Maria Marta Fialho[2],
Luciana Maria Costa Cordeiro[3]
[1](Businesses And Management, State University Of Montes Claros, Brazil)
[2](Economics, State University Of Montes Claros, Brazil)
[3](Economics, State University Of Montes Claros, Brazil)

Abstract:
Background*: this work examines the relationship between financial development and the informal economy in Brazil, exploring how enhancements in financial systems can influence the reduction of economic informality. The informal economy is characterized by activities that evade state regulation and taxation, often arising in response to a lack of formal employment opportunities and precarious socioeconomic conditions. (10)*
Materials and Methods*: The study utilizes two globally recognized indices for its empirical analysis: the Financial Development Index (FDI) from the International Monetary Fund, which measures a country's financial development, and the Multiple Indicators Multiple Causes (MIMIC) model from the World Bank, which estimates the proportion of the informal economy relative to the Gross Domestic Product (GDP).*
Results*: Findings indicate a negative relationship between financial development and the informal economy: an increase in financial development is associated with a reduction in the informal economy. This suggests that improvements in the financial system, such as greater financial inclusion and financial innovations, can promote a more formalized economic environment, thereby reducing the necessity for informal activities. However, the study also emphasizes that financial development alone is not sufficient to eradicate the informal economy. Comprehensive policies that address underlying causes, such as poverty, inequality, and a lack of economic opportunities, are required. Financial development must be accompanied by institutional reforms that promote financial inclusion, ensuring access to financial services for the most vulnerable groups and promoting consumer rights and transparency in the financial sector*
Conclusion: *This work contributes to existing literature by highlighting the role of financial development in reducing the informal economy and offers valuable insights for policymakers, researchers, and stakeholders in the financial sector interested in financial development and the reduction of economic informality.*
Key Word*: financial development; informal economy; Brazil..*
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I. Introduction

The informal economy is often seen as a byproduct of poverty and underdevelopment, and it has become a focal point in contemporary socioeconomic discussions. In many countries, it arises as a response to the lack of formal employment opportunities and precarious socioeconomic conditions, becoming a structural part of their economies [1].

In academia, the term "informal economy" was coined by Keith Hart in 1973 in a study on informal labor in Ghana. Hart argued that the informal economy played a crucial role in providing jobs and income for the poorest populations [2]. Since then, the concept has been incorporated into various studies to refer to a range of activities that are outside the reach of state regulation and taxation.

It is well-known that the informal economy plays a significant role in developing economies around the world, and Brazil is no exception [3]. The undeclared fraction of the Brazilian economy, which avoids taxation and regulation, has severe implications for worker welfare, income distribution, and overall economic efficiency [4].

A characteristic of the Brazilian informal economy is the diversity of its activities. It spans a variety of sectors, from street vending and domestic services to family farming and construction. These activities are often characterized by low wages, precarious working conditions, and a lack of labor rights and social protection [5], [6].

Regarding financial development, it can be defined as the improvement and progress of a country in terms of financial institutions, markets, and infrastructure that make the financial system more effective in meeting the needs of its citizens and business sector [7].

Discussions about the connections between financial development and society are not new. In a seminal work on the subject, "Lombard Street: A Description of the Money Market," published in 1873 by Walter Bagehot, the role of the financial system as the last lender of resources was already discussed in the English context [8].

Bagehot [8] argued that in times of financial crisis, when there is a widespread run on banks, the central bank should lend freely at a high interest rate to solvent but illiquid banks. The goal of this policy would be to prevent the collapse of the banking system, preserving financial stability.

He also highlighted the role of financial institutions, such as banks, in providing liquidity to the economy. He argued that these institutions are essential for the proper functioning of the economy, as they facilitate the flow of capital between investors and companies, allowing the latter to finance new projects and expansions. This, in turn, leads to economic growth [8].

However, it is important to note the existence of two opposing views on the role of financial systems in an economy. There are authors who defend the neutrality of these systems, meaning that their institutions and markets act as mere intermediaries of resources in society. There are also authors who argue for the non-neutrality of systems, suggesting that institutions and markets can generate positive variations in output and other variables, such as employment and income, thus contributing in some way to the reduction of poverty and inequalities.

Fisher [9] and Friedman [10] support the view of monetary neutrality and, consequently, of the financial system, arguing that changes in the money supply have no real effects on the economy and that financial institutions act as mere intermediaries, with little or no direct influence on economic growth.

Friedman [10] in the latest edition of a seminal work originally published in 1969, argues that the primary function of the financial system is to facilitate exchanges, and that changes in the amount of money will not affect the real economy in the long term, except for the price level. According to Friedman, an expansion in the money supply would simply result in proportional price inflation, without altering real variables such as production or employment. Fisher [9] updating his seminal 1911 work, contends that changes in the money supply proportionately affect the price level, without impacting other real economic variables.

Robert Lucas also supports the idea of monetary neutrality, with his rational expectations theory contributing to the belief that predictable monetary policies have no effect on the real economy, since economic agents would adjust to these policies in advance. Thus, in a world with rational expectations, systematic monetary policy would be fully anticipated, and fluctuations in the money supply would have no real effect on the economy [11].

Conversely, several authors argue against the neutrality of money and highlight the significant role of financial systems in influencing real economic variables. This perspective is central to several schools of thought, including Keynesian economics and Schumpeter's theory of economic development.

John Maynard Keynes, in his work "The General Theory of Employment, Interest, and Money" [12] (2017 edition of the seminal 1936 publication) (edição recente de trabalho seminal publicado em 1936), challenged the classical view of monetary neutrality, arguing that the demand for money plays a crucial role in determining employment levels and production in the economy. Keynes introduced the concept of liquidity preference to explain why individuals might hold onto money even when faced with positive interest rates, leading to potential involuntary unemployment and underutilization of resources.

Joseph Schumpeter argued that credit is central to the economic development process. For him, credit is not just a mechanism for transferring existing resources, but a means through which new resources are created to finance innovation and business development [13].

Schumpeter's view challenges the classical and neoclassical notion of the neutrality of money and credit, emphasizing the importance of the financial system in the economic development process. In his view, the financial system is not just a passive intermediary but an active and essential agent in promoting innovation and economic growth.

King e Levine [14] provided empirical evidence that financial development can boost economic growth, supporting Schumpeter's theory. They found that countries with higher levels of financial development tend to experience higher economic growth rates. Moreover, they discovered that financial development precedes economic growth, suggesting a causal relationship from financial development to economic growth.

Levine [15] offers a comprehensive review of various theoretical and empirical perspectives on the role of financial development in economic growth. He outlines mechanisms through which financial systems influence economic variables, including a) efficient resource allocation: directing capital where it can be most productive; b) facilitating exchanges; c) risk management; d) mobilizing savings: turning individual reserves into productive investments.

However, Levine [15] emphasizes that while there is a clear link between financial development and economic growth, the precise nature of this link and the underlying mechanisms are still subject to debate. He argues that understanding the details of these mechanisms is crucial for formulating effective policies to promote economic growth.

It is important to note that the relationship between financial system development and economic growth is complex and not always positive. As Stiglitz [16] observed, the financial system can contribute to economic growth, but under certain conditions, it can also harm it. Thus, developing a robust, resilient, and well-regulated financial system is essential for sustained economic growth.

Stiglitz [16] argues that while a well-structured financial system can be beneficial to the economy, a poorly regulated and overly complex financial system can be extremely detrimental.

In this context, this article aims to explore the question: **Does financial development contribute to reducing the informal economy in Brazil?**

For the empirical analysis of this study, two globally recognized indices were employed: the Financial Development Index (FDI) from the International Monetary Fund (IMF), which measures a country's financial development, and the Multiple Indicators Multiple Causes (MIMIC) model from the World Bank, which estimates the proportion of the informal economy relative to the Gross Domestic Product (GDP).

The purpose of this study is to contribute to the understanding of the complex relationship between financial development and the informal economy, specifically in the Brazilian context. It is believed that this research will provide useful insights for politicians, policy makers, and researchers who are interested in financial development and the reduction of the informal economy.

This paper is structured as follows. The next section reviews the theoretical and empirical literature on the topic. The third section explains the methodology used in the study. The fourth section presents the analysis of the results. The final section concludes with a summary of the main findings and suggestions for future research.

II. Literature Review

The informal economy, also known as the underground or unstructured economy, constitutes a significant portion of global economic activity. Although often associated with illegal economic practices, the majority of informal activities are legal in themselves but take place outside of formal regulatory frameworks [17].

Hart [2] was among the first to use the term "informal economy," which he defined as a set of economic activities largely unregulated by the state. Since then, the concept has evolved and broadened to include a range of activities, from street vending and unpaid domestic work to illegal activities like drug trafficking.

The informal economy is frequently viewed as a symptom of structural flaws in the formal economy. Excessive bureaucracy and entry barriers into the formal market drive many people to engage in informal economic activities. Furthermore, for those excluded from the formal labor market due to their education, skills, or legal status, the informal economy may be the only viable option [18].

Feige [19] noted that the ambiguity of the informal economy concept has led to a diverse research agenda in this area, addressing issues such as poverty, underemployment, income inequality, debt crises, and migration. Feige [19] defines the informal economy as those economic activities that evade costs and are excluded from the benefits and rights enshrined in laws and administrative regulations governing property relations, commercial licensing, labor contracts, financial credit, and social security system.

It is important to note that the informal economy can serve as a means for some people to earn a basic income [20]. However, while it is an alternative for those who are excluded (voluntarily or involuntarily) from the formal sector, it poses various problems for both workers and society.

Due to the lack of protection and labor rights, many informal sector workers do not have access to benefits such as health insurance, medical leave, and retirement [21]. This absence of protection can lead to exploitation and abuse, as well as greater economic insecurity.

While some workers and entrepreneurs in the informal sector may earn decent wages, the majority earn low incomes and face high levels of income insecurity. This can contribute to poverty and economic inequality [3].

As many informal activities are not declared to the government, they often escape taxation. This can lead to significant losses in tax revenue, making it challenging to fund public services and social programs [22].

Workers and businesses in the informal sector usually lack access to formal financial services, such as credit and insurance, which can limit their growth and development opportunities [23].

Therefore, the informal economy is a reality that cannot be ignored and must be understood and addressed in all its complexities [3].

As previously mentioned in the introduction of this paper, there are two perspectives on the influence of the financial system in a society. On one side, there are those who believe that financial institutions are mere intermediaries of resources [10], [24]. On the other side, there are those who argue for the non-neutrality of these institutions and the significant impact of credit on economic variables [12], [13], [14].

Schumpeter posits that credit is central to the economic development process. For him, credit is not just a mechanism for transferring existing resources but a means through which new resources are created to finance innovation and business development [13]. According to Schumpeter, banks have the power to create credit. This credit then enables entrepreneurs to undertake investments that would otherwise be unfeasible due to a lack of

sufficient financial resources. This process, where credit enables the implementation of new productive combinations, leads to "creative destruction," which is the driving force of economic growth.

Schumpeter's view challenges the classical and neoclassical notion of the neutrality of money and credit, emphasizing the importance of the financial system in the economic development process. In his view, the financial system is not merely a passive intermediary but an active and essential agent in promoting innovation and economic growth.

Keynes argued that the financial system could amplify economic fluctuations through what he called the "multiplier effect." Variations in investment can lead to multiplied variations in income and employment levels due to the interplay between consumption, savings, and investment. In this respect, the financial system and the provision of credit play a crucial role in determining the level of economic activity [12].

Historically, the financial system has played a crucial role in facilitating trade, investment, and economic development. In the modern economy, the financial system, comprising banks, stock exchanges, insurers, and other financial intermediaries, enables the mobilization of savings, facilitates transactions, manages risks, and provides information on investment opportunities [25].

For Minsky, the financial system is not neutral but plays an active and potentially destabilizing role in the economy. His theory has significant implications for economic policy, suggesting that financial regulation and monetary policy should be used to prevent excessive debt accumulation and maintain financial system stability [26], [27].

The financial system plays a significant role in society by facilitating risk distribution and the mobilization of savings for productive investment. Financial institutions, through diversification and risk management, enable businesses and individuals to share and manage economic risks, which in turn encourages more investment and economic activity [28].

Additionally, the financial system is crucial in promoting financial inclusion, which is a key factor for economic and social development. Financial inclusion refers to the ability of individuals and businesses to access financial products and services in an affordable and fair manner, and is essential for promoting entrepreneurship, alleviating poverty, and boosting economic growth [29], [30].

However, the financial system can also contribute to economic and social inequality when poorly regulated or when it leads to inefficient resource allocation. The financial crisis of 2007-2008 is an example of how inadequate regulation and excessive risk-taking by the financial system can lead to severe economic and social consequences [16].

III. Material And Methods

The data used in this study are secondary and were collected from databases of the International Monetary Fund (IMF), the World Bank, and the Central Bank of Brazil (Bacen). They are characterized as time series data, spanning from the year 1993 to 2018. Stata 16 was the software utilized for the estimations.

The dependent variable used to represent the informal economy in Brazil was the MIMIC (Multiple Indicators Multiple Causes model-based estimates of the informal economy as a percentage of official GDP). Data for this variable were gathered from the World Bank's Informal Economy Database [31]. The MIMIC estimates capture both the level of employment and productivity in the informal sector [32].

As the explanatory variable, the study employed the Financial Development Index (FDI) provided by the IMF. The FDI, developed by [7] for the IMF, is a measure designed to offer a comprehensive and multifaceted assessment of a country's financial development.

The FDI is constructed from various variables that represent different aspects of the financial system. These variables may include, for instance, the size of financial markets relative to GDP, the level of financial intermediaries, the quality of financial institutions, and regulatory standards. It is normalized to range from 0 to 1, where 0 indicates the lowest level of financial development and 1 indicates the highest level [7].

The control variable used in the study is characterized by Brazil's Gross Domestic Product (GDP) in current values and in the national currency (BRL). It was directly collected from the Central Bank of Brazil's Time-Series Management System (SGS), specifically identified by the code 1207 in the database [33].

It is worth noting that before operationalizing the variables to address the research problem posed, they were transformed into their natural logarithms (log-log model). This approach allows the regression coefficients to represent elasticities, facilitating a more intuitive understanding of the relationships evidenced [34].

Initially, an Ordinary Least Squares (OLS) regression was estimated, which revealed issues of serial autocorrelation and heteroscedasticity, invalidating the model for analysis. These problems can distort standard errors in a regression, leading to erroneous inferences about the significance of regression coefficients, which is particularly problematic in economic time series where autocorrelation and heteroscedasticity are common [35]. Consequently, the Newey-West regression model was employed.

The Newey-West regression model is an approach for addressing heteroscedasticity and autocorrelation in the residuals of a regression model. It is commonly used in studies with economic and financial time series that exhibit specific characteristics of serial correlation and volatility over time [36].

Newey e West [36] proposed a solution to these issues by providing a method to consistently estimate standard errors in the presence of these complications. The procedure produces an estimate of the variance-covariance matrix of the regression coefficients that is consistent in the presence of conditional autocorrelation and heteroscedasticity. In summary, the procedure offers a reliable way to obtain robust standard error estimates in the presence of autocorrelation and heteroscedasticity.

An important consideration for the Newey-West regression model is the proper selection of the number of lags to include in the estimate. As a general rule, if there are "n" observations, the number of lags should be "$n^{1/4}$". In this study, with 26 observations, this leads to the selection of 2 lags. This will estimate the regression using the Newey-West estimator, which is consistent in the presence of heteroscedasticity and autocorrelation of up to 2 lags.

Assuming that Informal Economy (y), Financial Development Index (fdi), and Gross Domestic Product (gdp) are all logarithmic variables, the regression equation for this study is structured as follows:

$\ln(y) = \beta_0 + \beta_1 * \ln(fdi) + \beta_2 * \ln(gdp) + \varepsilon$

In this equation:
- $\ln(y)$ is the natural logarithm of the dependent variable, Informal Economy;
- $\ln(fdi)$ is the natural logarithm of the Financial Development Index;
- $\ln(gdp)$ is the natural logarithm of the Gross Domestic Product;
- β_0, β_1, e β_2 are the parameters to be estimated;
- ε is the error term, which is assumed to have a mean of zero.

The parameters are typically estimated using Ordinary Least Squares (OLS), but the Newey-West correction is applied to the standard errors of these estimates to correct for any heteroscedasticity and autocorrelation present in the data.

IV. Result

As discussed in the methodological approach section, initial estimations were made using the Ordinary Least Squares (OLS) method, followed by tests to verify the model's adequacy, including checks for serial autocorrelation, heteroscedasticity, omitted variables, and normality of residuals.

The Durbin-Watson test was applied to identify potential autocorrelation issues, yielding a result of 0.6334 (below the threshold of 2), which suggests the presence of autocorrelation in the residuals.

The Breusch-Godfrey test was also used to detect potential autocorrelation issues, with a p-value of 0.0007, less than 5%, leading to the rejection of the null hypothesis that there is no serial autocorrelation in the residuals.

The Breusch-Pagan test was conducted to check for heteroscedasticity in the residuals, resulting in a p-value of 0.0061, less than 5%, which rejects the null hypothesis of constant variance (homoscedasticity) in the errors.

Similarly, the White test was employed to examine potential heteroscedasticity issues, with a p-value of 0.0029, less than 5%, rejecting the null hypothesis of homoscedasticity.

The Ramsey RESET test was utilized to determine if there were any omitted variables in the model; a p-value of 0.9639, greater than 5%, suggests that the null hypothesis of omitted variables should not be rejected, indicating that there likely are no omitted variables.

The Shapiro-Wilk and Jarque-Bera tests were applied to assess the normality of residuals, which returned p-values of 0.37397 and 0.9173, respectively, indicating non-rejection of the null hypothesis that the residuals are normally distributed.

In summary, the model appears to be well-specified, with no omitted variables and residuals that seem to follow a normal distribution. However, there is evidence of autocorrelation and heteroscedasticity in the residuals, indicating that the Newey-West correction may be appropriate for obtaining consistent standard errors. Table 1 shows the results of the estimation using the Newey-West regression model applied to the study data.

Table no 1: Newey-West Regression Results.

Number of Observations	26					
F (2, 23)	16.19					
Prob > F	0.0000					
y	Coefficients	Newey-West Standard Errors	t-Statistic	p-value	[95% Confidence Interval]	
fdi	-.1388749	.0275455	-5.04	0.000	-.1958572	-.0818926
gdp	.0023462	.0026264	0.89	0.381	-.003087	.0077794

Constant	1.52462	.0292726	52.08	0.000	1.464065	1.585175

V. Discussion

Financial Development (fdi): the estimated coefficient is -0.1389 and is statistically significant at the 1% level (p-value < 0.000). This suggests that a 1% increase in financial development is associated, on average, with a 0.139% decrease in the informal economy, holding all else constant. thus, financial development appears to have a negative effect on the informal economy.

Gross Domestic Product (gdp): the estimated coefficient is 0.0023 and is not statistically significant (p-value = 0.381). This indicates that, holding all else constant, a 1% increase in GDP is associated, on average, with a 0.0023% increase in the informal economy. However, this relationship is not statistically significant, so it cannot be confidently stated that there is a relationship between GDP and the informal economy.

Constant: the estimated coefficient is 1.5246 and is statistically significant at the 1% level (p-value < 0.000). This is the estimate of the natural logarithm of the expected value of y (Informal Economy) when both fdi (Financial Development) and gdp (Gross Domestic Product) are zero. Since this scenario is unlikely in practice, the constant does not offer much practical interpretation here.

The F-statistic and its corresponding p-value are used to test the null hypothesis that all regression coefficients (except for the constant) are zero, against the alternative hypothesis that at least one coefficient is different from zero. In this case, the F-statistic is 16.19, and the corresponding p-value is less than 0.0000. Since the p-value is less than the conventional significance level of 0.05, the null hypothesis is rejected. This means there is sufficient evidence to conclude that at least one of the coefficients (fdi, gdp) is statistically different from zero.

In summary, this indicates that the regression model as a whole is statistically significant and explains a significant portion of the variance in the dependent variable "y". Based on these results, there is sufficient evidence to assert that the model is useful in explaining variability in "y" - at least one of the independent variables (fdi, gdp) is associated with "y".

Exploring the relationship between financial development and the informal economy in light of academic literature, one can begin with the concept of the non-neutrality of the financial system as advocated by Keynes, Schumpeter, Minsky, and others. These authors argued that the financial system is not merely a passive intermediary but plays an active and influential role in the real economy.

In this context, the significant negative relationship found between the Financial Development Index and the Informal Economy makes sense. As the financial system becomes more developed, it can play a more effective role in mobilizing savings and directing funds towards productive investments, as argued by Keynes and Schumpeter. This could result in greater formal economic growth, thereby reducing the need for informal economic activities.

According to Schumpeter, financial innovation—which is more likely in a more developed financial system—can play a crucial role in financing new ventures and promoting economic progress. Simultaneously, greater financial inclusion, which is also an aspect of financial development, can enable more individuals and businesses to access formal financial services, diminishing the necessity to resort to informal financing sources.

In conclusion, the discovery of a negative relationship between financial development and the informal economy aligns with the concept of the non-neutrality of the financial system. This suggests that the development of the financial system can have significant implications for the structure of the economy, including the size of the informal sector.

VI. Conclusion

This study aimed to investigate the role of financial development in reducing the informal economy in Brazil. The informal economy, often seen as a byproduct of poverty and underdevelopment, plays a significant role in developing economies. In Brazil, the informal sector is diverse and characterized by low wages, poor working conditions, and a lack of labor rights and social protection.

Financial development, which refers to the enhancement and progress of a country's financial institutions, markets, and infrastructure, has been identified as a key factor in reducing the informal economy.

The findings of this study suggest that financial development can help reduce the informal economy in Brazil and, consequently, improve worker welfare, income distribution, and overall economic efficiency.

However, it is important to note that financial development alone is not sufficient to eradicate the informal economy. A comprehensive set of policies addressing its underlying causes, such as poverty, inequality, and lack of economic opportunities, is required.

Moreover, financial development should be accompanied by institutional reforms and policies that promote financial inclusion. This includes enhancing access to financial services, especially for the most vulnerable groups in society, and implementing regulations that protect consumer rights and promote transparency and accountability in the financial sector.

This study contributes to the existing literature by highlighting the role of financial development in reducing the informal economy. However, further research is needed to better understand the relationship between financial development and the informal economy and to identify the most effective policies and practices for promoting financial inclusion and formalization of the economy.

In conclusion, financial development has the potential to play a significant role in reducing the informal economy in Brazil. However, achieving this requires a political and social commitment to promoting financial inclusion, equal opportunities, and social justice. Eradicating the informal economy is not just a matter of economic development but also a matter of human rights and social justice. Therefore, it is imperative that financial development be geared towards promoting human welfare and social justice, not just economic growth.

References

[1]   A. Portes, Economic Sociology: A Systematic Inquiry. Princeton University Press, 2010.
[2]   K. Hart, "Informal Income Opportunities And Urban Employment In Ghana", The Journal Of Modern African Studies, Vol. 11, Nº 1, P. 61–89, 1973.
[3]   J. Jutting E J. R. De Laiglesia, Is Informal Normal?: Towards More And Better Jobs In Developing Countries. Development Centre Of The Organisation For Economic Co-Operation And Development, 2009.
[4]   L. Medina E M. F. Schneider, Shadow Economies Around The World: What Did We Learn Over The Last 20 Years? International Monetary Fund, 2018.
[5]   F. Bonnet, J. Vanek, E M. Chen, "Women And Men In The Informal Economy: A Statistical Brief", International Labour Office, Geneva, Vol. 20, 2019.
[6]   Ilo (International Labour Office), "Women And Men In The Informal Economy: A Statistical Picture (Third Edition)". 2018. Acesso Em: 10 De Julho De 2023. [Online]. Disponível Em:
         Https://Www.Ilo.Org/Wcmsp5/Groups/Public/---Dgreports/---Dcomm/Documents/Publication/Wcms_626831.Pdf
[7]   K. Svirydzenka, Introducing A New Broad-Based Index Of Financial Development. International Monetary Fund, 2016.
[8]   W. Bagehot, "Lombard Street. Homewood Il: Richard D Irwin, 1962 Edition", 1873.
[9]   I. Fisher, The Purchasing Power Of Money: Its' Determination And Relation To Credit Interest And Crises. Cosimo, Inc., 2006.
[10]   M. Friedman, The Optimum Quantity Of Money. Routledge, 2017.
[11]   R. E. Lucas Jr, "Expectations And The Neutrality Of Money", Journal Of Economic Theory, Vol. 4, Nº 2, P. 103–124, 1972.
[12]   J. M. Keynes, Teoria Geral Do Emprego, Do Juro E Da Moeda. Saraiva Educação Sa, 2017.
[13]   A. Schumpter, "A Theory Of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, And The Business Cycle, Originally Published 1911, Reprinted In 1934 By Harvard University Press", 1934.
[14]   R. G. King E R. Levine, "Finance And Growth: Schumpeter Might Be Right", The Quarterly Journal Of Economics, Vol. 108, Nº 3, P. 717–737, 1993.
[15]   R. Levine, "Financial Development And Economic Growth: Views And Agenda", Journal Of Economic Literature, Vol. 35, Nº 2, P. 688–726, 1997.
[16]   J. E. Stiglitz, Freefall: America, Free Markets, And The Sinking Of The World Economy. Ww Norton & Company, 2010.
[17]   M. Chen, "Rethinking The Informal Economy: Linkages With The Formal Economy And The Formal Regulatory Environment", United Nations, Department Of Economics And Social Affairs, 2007.
[18]   M. Castells E A. Portes, "World Underneath: The Origins, Dynamics, And Effects Of The Informal Economy, The Informal Economy: Studies In Advanced And Less Developed Countries", John Hopkins Up, 1989.
[19]   E. L. Feige, "Defining And Estimating Underground And Informal Economies: The New Institutional Economics Approach", World Development, Vol. 18, Nº 7, P. 989–1002, 1990.
[20]   M. A. Chen, R. Jhabvala, E F. Lund, Supporting Workers In The Informal Economy: A Policy Framework. International Labour Office Geneva, 2002.
[21]   A. Trebilcock, Decent Work And The Informal Economy, Nº 2005/04. Wider Discussion Paper, 2005.
[22]   F. Schneider E D. H. Enste, "Shadow Economies: Size, Causes, And Consequences", Journal Of Economic Literature, Vol. 38, Nº 1, P. 77–114, 2000.
[23]   O. P. Ardic, M. Heimann, E N. Mylenko, "Access To Financial Services And The Financial Inclusion Agenda Around The World: A Cross-Country Analysis With A New Data Set", World Bank Policy Research Working Paper, Nº 5537, 2011.
[24]   I. Fisher, "The Debt-Deflation Theory Of Great Depressions", Econometrica: Journal Of The Econometric Society, P. 337–357, 1933.
[25]   F. S. Mishkin, The Economics Of Money, Banking, And Financial Markets. Pearson Education, 2007.
[26]   H. Minsky, "Stabilizing An Unstable Economy (New Haven And London, Yale University Press)", 1986.
[27]   H. P. Minsky, "A Theory Of Systemic Fragility", Financial Crises: Institutions And Markets In A Fragile Environment, P. 138–152, 1977.
[28]   F. Allen E A. M. Santomero, "The Theory Of Financial Intermediation", Journal Of Banking & Finance, Vol. 21, Nº 11–12, P. 1461–1485, 1997.
[29]   A. Demirgüç-Kunt, L. F. Klapper, D. Singer, E P. Van Oudheusden, "The Global Findex Database 2014: Measuring Financial Inclusion Around The World", World Bank Policy Research Working Paper, Nº 7255, 2015.
[30]   A. Demirgüç-Kunt E D. Singer, "Financial Inclusion And Inclusive Growth: A Review Of Recent Empirical Evidence", World Bank Policy Research Working Paper, Nº 8040, 2017.
[31]   World Bank, "Informal Economy Database". 2021. Acesso Em: 5 De Junho De 2023. [Online]. Disponível Em:
         Https://Www.Worldbank.Org/En/Research/Brief/Informal-Economy-Database
[32]   C. Elgin, A. Kose, F. Ohnsorge, E S. Yu, "Understanding Informality", Cepr Discussion Papers, 2021.
[33]   B. C. Do B. Bacen, "Sgs-Sistema Gerenciador De Séries Temporais". 2023. Acesso Em: 10 De Junho De 2023. [Online]. Disponível Em: Https://Www3.Bcb.Gov.Br/Sgspub/Localizarseries/Localizarseries.Do?Method=Prepararttelalocalizarseries
[34]   P. Kennedy, A Guide To Econometrics. John Wiley & Sons, 2008.
[35]   J. M. Wooldridge, Introductory Econometrics: A Modern Approach. Cengage Learning, 2015.
[36]   W. Newey E K. West, "A Simple, Positive Semi-Definite, Heteroscedasticity And Autocorrelation Consistent Covariance Matrix", Applied Econometrics, Vol. 33, Nº 1, P. 125–132, 2014.