CRYPTOCURRENCIES IN HYPERINFLATIONARY VENEZUELA

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Abstract

This literature review covers hyperinflation in Venezuela, from the 1980s to the present. Particular emphasis is placed on the role of cryptocurrency in the country and how the Venezuelan government has been using crypto, specifically the Petro, as a means to avoid further blunders with hyperinflation. From Hugo Chávez and "Socialism of the 21st Century" to the current regime of Nicolás Maduro, Chávez' successor, the printing of money in Venezuela has sky-rocketed to the point of the government needing cryptocurrency, such as Bitcoin, as a means of circumventing inflation to fund the government's ambitious social projects. A key element in its success, however, will be whether the Venezuelan people will opt to use the government-backed Petro, or whether they will opt to use a different, decentralized alternative digital currency to avoid the perils of hyperinflation. The paper will examine this issue from several diverse points of view: specifically, the Austrian School (Echarte Fernández, Hernández, & Zambrano, 2018), the neo-Keynesian school (Pagliacci & Barráez, 2010), and public policy and institutional perspective (Corrales, 1999). The use of cryptocurrencies by governments, in particular socialist governments, is a new occurrence and merits much attention for the future of public and monetary policy in those countries.

Keywords: Venezuela, Hyperinflation, Cryptocurrencies, Socialism, Monetary Policy

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1. INTRODUCTION

Hyperinflation of the Bolivar currency in Venezuela has caused many of those least well-off to turn to alternative currencies. One such alternative is the cryptocurrency Bitcoin, which has become increasingly more popular in the South American country for purchasing everyday necessities. President Nicolás Maduro's government caught on and decided to use cryptocurrency technology to its advantage although time will tell if Venezuelans will continue to use it. In this paper, we will compare and contrast ten research papers on the role of money and cryptocurrencies in Venezuela from several diverse points of view: specifically the Austrian School (Echarte Fernández, Hernández, & Zambrano, 2018), the neo-Keynesian school (Pagliacci & Barráez, 2010), and public policy and institutional perspective (Corrales, 1999; Bjørnland, 2005; Albert & Jude, 2016; Anchustegui & Hunter, 2018; Musialkowska, Kliber, Świerczyńska, & Marszałek, 2020), among others. This contribution is unique because rarely have the three monetary policy perspectives been applied to cryptocurrencies in one analysis. We will also examine how the country's mismanaged monetary policy has affected both civilians and its government. The effect of the country's inflationary macro-economic policies, over-regulation, and socialist command economy will be studied in relation to the use of cryptocurrencies, including Bitcoin and the state-sponsored Petro. The purpose of this paper

is to map out the terrain of the subject as well as expose some holes in the current literature. The paper will wrap up with some ideas on how the existing literature can be expanded, ranging on issues from policy change to popular trends on different cryptocurrencies within the population at large.

The structure of this paper is as follows: Section 2 reviews the relevant literature, with subsections on the Austrian School, neo-Keynesian School, and the institutional perspective, Section 3 covers the methodology, Section 4 explores avenues for future research, Section 5 is the conclusion.

2. LITERATURE REVIEW

The literature review will be broken into three parts: the neo-Keynesian School, the Austrian School, and a public policy and institutional approach. From these diverse perspectives, we can arrive at a better understanding of how and why cryptocurrencies were introduced in Venezuela and how they are being used currently. This analysis has important insights into how to craft public policy and monetary policy moving forward.

2.1. Neo-Keynesian School

This subsection will cover the literature on cryptocurrency and Venezuelan monetary policy from a neo-Keynesian perspective.

The paper by Pagliacci and Barráez (2010) presents a statistical approach. As the abstract of the paper states, "In this paper, [the authors] analyze the dynamic of inflation in Venezuela, during the last eighteen years, through a Markov-switching estimation of a New Keynesian Phillips curve. Estimation is carried out using the EM [expectation-maximization] algorithm" (p. 25). What this paper points out is that using statistical and Keynesian analysis, Venezuela has historically seen on average greater increases in the supply of money during contractions in the economy. The paper analyzes how expectations of inflation change during the course of two decades depending on the regime and in particular, focuses on two types of uncertainty: a "normal or backward looking" regime and a "rational expectations" regime. In the first case, individuals base their expectations on what the regime has done in the past, such as the gap in output, creating new money, and currency depreciation. In the second case, "agents model their expectations mainly based on the subjective information available on the future growth of the economy, supporting the empirically observed notion that, in Venezuela, situations of economic contraction are, on average, associated with episodes of higher inflation" (Pagliacci & Barráez, 2010, p. 41). The question that this analysis helps answer is what causes switching between regimes. The purpose of their research is to uncover what "factors govern the inflationary dynamics". The authors use an expectation-maximization (EM) algorithm in their model because there is missing information: what information causes economic actors to change their behavior. What they found was that in the "rational expectations" regime, there emerged two channels from which the high level of uncertainty emerged: "the conditions that anticipate the collapse of non-floating exchange rate systems, and the conditions that signal vulnerability of the economy to external (oil) shocks" (Pagliacci & Barráez, 2010, p. 41). The authors want to know what specific information will form the expectations of economic agents in Venezuela, given the regimes' propensity to increase the supply of money during downturns of the economy that are primarily self-caused. The unanswered question that this paper leaves is where this information that leads to changes in behavior comes from, which could be the subject of future research. This paper (Pagliacci & Barráez, 2010) differs from the papers by Musialkowska et al. (2020) and Chohan (2018) in that it approaches the subject using a statistical model to prove changes in expectations with regard to inflation over a number of years.

2.2. The Austrian School

In this subsection, we consider paper from the heterodox perspective, Austrian School of Economics. This analysis provides a unique perspective on cryptocurrency and monetary policy in Venezuela. By incorporating a minority view, a balanced and well-rounded understanding of the situation may come to light.

In their paper, Echarte Fernández et al. (2018) use the lens of the Austrian School to describe the economic and humanitarian crisis in Venezuela. The paper uses the example of milk; the government sets a price ceiling in an attempt to make the product more affordable to children; however this has the unintended consequence of farmers stopping production of milk because the price ceiling will make them operate at a loss and they go out of business. Citing Hayek (1978), Hazlitt (1946), Mises (2011, 2008), and Huerta de Soto (1992, 2000, 2004, 2008, 2011), the authors describe the rapid increase in the supply of money and price controls causes desperately needed goods and services to disappear just as rapidly, as incentives to produce are severely distorted. They compare the South American country to the failed socialist nations of Asia and central Europe, which collapsed due to hyperinflation and low productivity. The Austrian view is that the centralized system is unsustainable, with run-away inflation as just one symptom of a severe economic illness. The authors conclude that only a return to free markets will bring the prosperity that Venezuela needs in order to recover — an approach similar to that expressed earlier by Musialkowska et al. (2020).

2.3. Public policy and institutional approach

This subsection covers various papers from a public policy and institutional approach. As we will see, the prescriptions for ameliorating the situation differ but the common theme is that run-away inflation adversely impacts the Venezuelan government as much as it does civilians.

Musialkowska et al. (2020) demonstrate that gold is a strong safe haven for Venezuela whereas Bitcoin and other cryptocurrencies are a weak safe haven. Both, however, are still safer in absolute terms compared to the hyperinflated Bolivar which

was discarded by many Venezuelan civilians in favor of U.S. dollars which had an official exchange rate and a black market rate. Because energy costs in the mid-2010s were so low, many Venezuelans could afford to mine Bitcoin, in stark contrast to much of the rest of the world, and soon turned to Bitcoin as the reserve currency. The legal status of Bitcoin mining was uncertain for the longest time with the government observing how the people were using the decentralized currency and mining Bitcoin was, at one point, banned. However, Venezuelans were still able to trade it electronically. The authors find that using Bitcoin was effective as a means of diversifying assets, but that during the most inflationary period (2017–2018) holding gold was the most precious asset. In contrast to Chohan (2018), the approach here is different in that Musialkowska et al. (2020) are taking a long-term perspective to asset-holding by ordinary Venezuelans as opposed to the government-facing approach to alternative currency voiced by Chohan (2018). We will soon see another paper (Echarte Fernández et al., 2018) that will echo Musialkowska et al. (2020) on free market reform as the only answer to Venezuela's economic woes.

The next paper reviewed is the study by Chohan (2018). In this paper, the author explores how the cryptocurrency Petro came about. Hyperinflation and relying on oil reserves that were unsustainable caused the Venezuelan government under President Nicolás Maduro to look for alternatives. The Petro is a cryptocurrency that is tied to barrels of oil, making it a digital money substitute and synthetic commodity money. However, the Venezuelan national legislature has the ultimate authority on monetary policy and is still debating the adoption of the Petro for official use. Chohan (2018) also mentions that the Petro has the potential to be backed up, not only by oil and gas, but also by diamonds, gold, and other precious metals. The government knows that it cannot force the population to accept a new currency that has no backing, so it has taken recourse to "real assets" to back up the first-ever government-run cryptocurrency. We will see in the following paragraphs how the Venezuelan public's reception of alternative currencies has paved the way for a new future of monetary reform.

In the paper by Corrales (1999), the claim is disputed that economic crises often lead to reform, and in fact, lead to more of the same. He uses the examples of Venezuela and Argentina in the 1990s. Corrales (1999) shows that presidents needed the support of the ruling party to help push through unpopular economic reforms. When presidents do not have this support, economic reform is rendered nearly impossible. In the case of Venezuela, when the legislature opposed President Maduro's sweeping economic reforms, he declared the National Assembly to be "unconstitutional"[1]. This paper also takes a different approach from the previous paper (Echarte Fernández et al., 2018) in that Corrales (1999) is exploring inflation from a policy approach as opposed to an institutional approach, as with the Austrian School lens.

Anchustegui and Hunter (2018) show that there are some problems with the government-run Petro cryptocurrency. First, that the Petro was arbitrarily set to US$60 by the Venezuelan government, but then "fixed" or "pegged" to the going price of crude oil, depending on whether it was selling a favorable price. In effect, the Venezuelan government reserves the right to change the "commodity value" of the Petro at any given time. This is problematic because there is no monetary stability in the country; it is essentially based on the whims of those in President Maduro's inner circle, of which corruption and favoritism are rampant. Second, adding to the first problem is the fact that Maduro's regime can switch the "commodity value" of the Petro from oil to any number of other commodities the Maduro's regime has selected, including jewelry. The authors also illuminate that Venezuela is a debtor nation, with an international rating of selective default (SD) from Standard and Poor's, using the Petro to trade with other nations that also have been sanctioned by the West, namely Iran and Russia. This use of the Petro is Venezuela's way of avoiding the use of U.S. dollars in international trade with the added benefit of secrecy inherent in cryptocurrency technology. The U.S. and other nations have since stepped up their use of intelligence agencies in trying to intercept these transactions. This paper puts the others in perspective with the introduction of the illustration of Venezuela's international credit rating, something that the other papers (Corrales, 1999; Echarte Fernández et al., 2018; Pagliacci & Barráez, 2010; Musialkowska et al., 2020; Chohan, 2018) do not consider.

In the paper by Albert and Jude (2016), it is asserted that President Maduro persists in his interventionist policies of hyperinflation and price controls, further aggravating the situation and making market liberalization harder. The authors analyze the (un)sustainability of the Venezuelan growth model, with its hyperinflation as a key indicator of its eventual collapse. For example, they note that in 2015, national gross domestic product (GDP) fell by 6.2% and inflation rose to 181% by the end of the year, with much of revenue growth from nationalized oil production. Such a situation is unsustainable. By comparing the price of Venezuelan oil to GDP, the authors demonstrate that the national economy is subject to unstable shocks that is not the same as GDP in the non-oil-producing sectors. This dependency on oil revenue, they say, only prolongs the pain. Venezuela needs to diversify its revenue stream in order to get back on a stable footing. The fact that the Maduro's regime has continued its money-printing has only worsened the situation. The country's public debt has ballooned while its money supply has exponentiated; the collapse is only a matter of time. Albert and Jude (2016) take a similar approach to the paper by Anchustegui and Hunter (2018) in that they both analyze Venezuela's poor credit and status as a debtor nation in relation to its productivity, hyperinflation, and price controls. But, as we will see in the paragraphs below, Venezuelans take recourse in other monetary assets aside from the Bolivar and the U.S. dollar to preserve the value of their money against the effects of hyperinflation.

[1] Many of the world's leaders responded by not recognizing President Maduro as the legitimate head of state.

The next paper reviewed is the study by Cifuentes (2019), which explains various problems with Venezuela's monetary and macroeconomic policy. To start, Venezuela should not rely almost exclusively on oil for its exports. The fact that the country nationalized the oil industry in the 1980s made a bad decision even worse because of the terrible mismanagement, corruption, and inefficiency of its socialist leaders, and the subsequent eroding of democracy to keep those governments in check. Cifuentes (2019) cites depressed oil prices as a key factor in the Bolivar's collapse and the government's resort to more and more inflation until the money supply had increased by over 10,000% in 2018 alone, leading to the government-backed Petro. Because Bitcoin was more valuable than the government's fiat currency, many Venezuelans traded their Bolivars for Bitcoin as a way to preserve their wealth or used Bitcoin to exchange for U.S. dollars, the world's reserve currency. Either way, Bitcoin was used as a medium of exchange and became for many Venezuelans the new "money". The government eventually caught on and made plans to roll out the world's first government-run cryptocurrency, the Petro. Unlike other cryptocurrencies, such as Bitcoin, the Petro is run and operated by the Venezuelan government, meaning that the government can track and trace all transactions using the Petro. The paper by Cifuentes (2019) expands upon the work done by Albert and Jude (2016) and Corrales (1999); whereas Albert and Jude (2016) and Corrales (1999) focused on the unsustainability and political aspect of continuing hyperinflationary policies, here Cifuentes (2019) shows that instead it is the government's efforts in pioneering blockchain technology for commerce that should be the focus of future research for continuing Bolivarian "Socialism of the 21st Century".

Vera (2017) identifies monetary mismanagement as one of the key causes of the nation's economic illness and explores how the nation might recover through various proposals on altering monetary and fiscal policy. He identifies the foreign exchange constraint as one of the key inhibitions to growth as well as a liquidity problem. Relaxing the exchange constraint alone would go a long way to providing economic stability. Vera (2017) outlines that the country's problems are manifold and interrelated: bad and unstable governance coupled with poor monetary policy, hyperinflation, a humanitarian crisis, and "brain drain" as the country's youngest and brightest seek better opportunities in other countries. According to Vera (2017), the Maduro's regime's command economy policies have created distortions in the incentive-based process: "since the model has moved the economy beyond market mechanisms for setting prices and regulating production and distribution of many goods, key incentives for domestic production have also disappeared" (p. 10). In this paper, Vera (2017) seeks to navigate a way for Venezuela to return to low inflation, get rid of excess demand, and loosen state regulations. In this way, Vera (2017) is providing support to the Cifuente's (2019) paper discussed earlier; both analyze Venezuela's hyperinflation from a monetary policy perspective, as opposed to the commodity standard approach shown by Anchustegui and Hunter (2018).

The last analysed paper is the research by Bjørnland (2005). In this paper, the author explores the relationship between foreign exchange rates and interest rates from the 1980s and 1990s in Venezuela and how the inflation experienced in this period caused great instability for most Venezuelans. She studies the demand for money amidst a continuously depreciating value of the Bolivar compared to the U.S. dollar and how the choices of ordinary Venezuelans between holding domestic or foreign assets affect the domestic economy. Not surprisingly, Bjørnland (2005) found that most Venezuelans prefer to hold foreign assets because their value is greater than domestic assets, which has a circular effect of holding their economy back from realizing its full potential. The Venezuelan government, in turn, sees this as a reason to intervene in the domestic economy further, making matters worse. She examines how the policy changes of the Venezuelan government in the 1980s and 1990s, when the Bolivarian revolution was set into motion, affected citizens' choices of which assets to hold and which to sell in the short run versus the long run amid the severe banking crisis of the 1990s. Bjørnland (2005) compares the real demand for money with the excess supply of money in relation to the real GDP over the two decades. This finding is important because it demonstrates the magnitude of the damage that the Chávez' and Maduro's regimes have done to the Venezuelan economy and why major course reversal and a return to sound money, whether synthetic or crypto, is necessary for economic improvement. This paper by Bjørnland (2005) sets a stark contrast with the paper by Chohan (2018) discussed earlier in that it focuses on the "real assets" of ordinary Venezuelans as opposed to transitioning to new, synthetic commodity money, and the implications that have for future Venezuelan monetary policy.

3. METHODOLOGY

Because the research aims are exploratory in nature, qualitative analysis is used. That is, the methodology involves collecting papers on the use of cryptocurrencies in Venezuela and weaving a common narrative. Through the use of comparative analysis, this paper attempts to show holes in the existing literature and highlight areas for future research.

Alternative methods could include collecting data, where possible, on Venezuelans' use of both Bitcoin and the Petro to measure, or at least convey some idea of, how common each one is and to interview Venezuelans' on how much they trust either currency or cryptocurrencies in general.

The source of these papers was EconLit and further searches from Google Scholar. The search criteria used was finding papers that directly related to Venezuela's monetary policy and the use of cryptocurrencies in that country.

4. FUTURE RESEARCH

Next, we will consider what future research can be done to shed more light on Venezuela's sticky situation and some of the important policies they will need to address, given the country's rapidly evolving economic and political environment. First, as political events unfold and the opposition re-organizes itself to effectively put an end to President Maduro's time in office and the failed Bolivarian Revolution and restore some semblance of free markets, some research might be done on the rate and sustainability of entrepreneurship, particularly in the major cities such as Caracas, Maracaibo, and Valencia. For example, how many new businesses were formed per year and how long, on average, they have remained in operation. Second, more research could be done on what new cryptocurrencies regular Venezuelans are turning to as Bitcoin runs its course. Of course, people will still be using Bitcoin since it has become a household name and thus, one of, if not the most, trusted cryptocurrencies in existence even if increasingly more people are moving onto newer ones with different advantages (otherwise why switch?). Here, undoubtedly, we will witness the network effects of one currency as compared to another, such as Dogecoin. Third, some more research could be done on what additional steps the U.S. and other Western allies have taken in monitoring and reacting to Venezuela's policies going forward. For example, suppose that Juan Guiadó, the main opposition leader, is able to install his transition government and implement alternative monetary policies. Many European countries have stopped supporting Guiadó after an attempted military uprising in 2019. Should Guiadó be successful, how will the U.S. and its allies react? And will they maintain sanctions against the country if Guiado's new government does not reverse course as fast as they would like? These are just a few of the unanswered questions that stand out from this literature review.

However, the real question is what role cryptocurrencies will continue to play in this continuously adapting post-socialist government. That Venezuela will eventually make a transition to a market-based economy is more of a "when", not "if", as the Maduro's regime is poised to collapse, perhaps from within if not from outside. Too many shortages of everyday necessities have caused drastic emigration of everyday Venezuelans to neighboring countries and beyond. Strengthened sanctions on the part of the U.S. and its allies make the government's hold on the economy highly unsustainable. Once Venezuela is liberated, what role will cryptocurrencies play? Will they continue to be a means to obtain everyday necessities as the black market is, for the most, brought above board? Or will its use by ordinary Venezuelans become similar to its use by everyday Americans? How well a reformed currency will be adapted in Venezuela under a new administration remains to be seen, as well as whether the new administration reforms the Bolivar or discontinues its use altogether and only uses the Petro or decides to implement an entirely new currency. The introduction of a new currency will undoubtedly be pegged to the U.S. dollar to provide a safety feature of returning to stability.

5. CONCLUSION

This literature review has noted the failure of the Venezuelan government since the 1980s to achieve a durable currency or stable monetary policy (Bjørnland, 2005; Vera, 2017; Cifuente, 2019). From hyperinflation of the Bolivar to the world's first government-run cryptocurrency, the Petro, to the vision of a post-capitalist, money-less, higher level barter system, "Socialism of the 21st Century" has failed ordinary Venezuelans, the very people it was meant to benefit (Chohan, 2018; Musialkowska et al., 2020; Anchustegui & Hunter, 2018). This paper explored how the use of the Petro has impacted the Venezuelan government's ability to trade with its allies abroad and how the U.S. government and its Western allies have responded to the first government-run cryptocurrency (Chohan, 2018; Anchustegui & Hunter, 2018). Also explored were the effects of supply and demand of oil on the Bolivar, the implications of regime change, and what the future of money may look like in Venezuela (Chohan, 2018; Vera, 2017; Cifuente, 2019). This paper also explored some ideas for future research on this topic, particularly as the economic and political situation in Venezuela continues to change (Anchustegui & Hunter, 2018; Musialkowska et al., 2020). Future research could examine how effective the Petro has been to alleviate the pains caused by hyperinflation and over-regulation, as well as what alternative cryptocurrencies everyday Venezuelans have adopted as a means of acquiring everyday necessities.

These findings are important because they demonstrate the power of cryptocurrencies to provide relative economic stability to civilians amid a civil war. The central government has repeatedly demonstrated incompetence at maintaining a stable money supply and has taken a market cue that the Petro currency backed by oil reserves and other assets is preferable to further inflation. However, civilians are opting to use Bitcoin and other electronic currencies instead that are decentralized to maintain economic stability independent of Caracas. As mentioned in Section 2, some limitations in the paper include the lack of quantitative analysis. Future empirical studies could attempt to measure how much trust Venezuelans have in Bitcoin as opposed to the Petro, or any other electronic currency. Because the country is currently experiencing a civil war, time will tell which currency proves to be the most useful.

REFERENCES

1. Albert, M., & Jude, C. (2016). Venezuela: L'insoutenabilite du modele de croissance, source de tous les risques [Venezuela: The unsustainability of the growth model, source of all risks]. *Revue d'Economie Financiere*, *124*, 201–222. https://doi.org/10.3917/ecofi.124.0201
2. Anchustegui, I. H., & Hunter, T. (2018). *Oil as currency: Venezuela's Petro, a new 'oil pattern'?* https://doi.org/10.2139/ssrn.3291272

3. Bjørnland, H. C. (2005). A stable demand for money despite financial crisis: The case of Venezuela. *Applied Economics*, *37*(4), 375–385. https://doi.org/10.1080/00036840412331315015
4. Chohan, U. W. (2018). *Cryptocurrencies as asset-backed instruments: The Venezuelan Petro* (University of New South Wales Discussion Paper). https://doi.org/10.2139/ssrn.3119606
5. Cifuentes, A. F. (2019). Bitcoin in troubled economies: The potential of cryptocurrencies in Argentina and Venezuela. *Latin American Law Review*, *3*, 99–116. https://doi.org/10.29263/lar03.2019.05
6. Corrales, J. (1999). ¿Contribuyen las crisis económicas a la implementación de reformas de mercado? La Argentina y Venezuela en los '90. *Desarrollo Económico, 39*(153), 3–29. https://doi.org/10.2307/3467218
7. Echarte Fernández, M. A., Hernández, M. M., & Zambrano, O. (2018). Un análisis de la crisis económica de Venezuela desde los postulados de La Escuela Austríaca de Economía [An analyis of Venezuela's economic crisis from the postulates of the Austrian School of Economics]. *Revista Lasallista de Investigación*, *15*(2), 68–82. https://doi.org/10.22507/rli.v15n2a5
8. Hayek, F. A. (1978). *La desnacionalización del dinero*. Barcelona, Spain: Folio.
9. Hayek, F. A. (2013). *El nacionalismo monetario y la estabilidad internacional*. Madrid, Spain: Aosta, S.A.
10. Hazlitt, H. (1946). *Economics in one lesson*. New York, NY: Harper & Brothers.
11. Huerta de Soto, J. (1992). *Socialismo, cálculo económico y función empresarial*. Madrid, Spain: Unión Editorial. Retrieved from https://riosmauricio.com/wp-content/uploads/2016/01/Huerta_socialismocalculo.pdf
12. Huerta de Soto, J. (2000). *La escuela austríaca: Mercado y creatividad empresarial*. Madrid, Spain: Editorial Síntesis.
13. Huerta de Soto, J. (2004). *Estudios de economía política* (2nd ed.). Madrid, Spain: Unión Editorial.
14. Huerta de Soto, J. (2008). *Lecturas de economía política* (Vol. 2). Madrid, Spain: Unión Editorial.
15. Huerta de Soto, J. (2011). *Dinero, crédito bancario y ciclos económicos* (5th ed.). Madrid, Spain: Unión Editorial.
16. Musialkowska, I., Kliber, A., Świerczyńska, K., & Marszałek, P. (2020). Looking for a safe-haven in a crisis-driven Venezuela: The Caracas stock exchange vs gold, oil and bitcoin. *Transforming Government: People, Process and Policy*, *14*(3), 475–494. https://doi.org/10.1108/TG-01-2020-0009
17. Pagliacci, C., & Barráez, D. (2010). A Markov-switching model of inflation: Looking at the future during uncertain times. *Análisis Económico, 25*(59), 25–46. Retrieved from https://www.redalyc.org/pdf/413/41315994005.pdf
18. Vera, L. (2017). In search of stabilization and recovery: Macro policy and reforms in Venezuela. *Journal of Post Keynesian Economics*, *40*(1), 9–26. https://doi.org/10.1080/01603477.2016.1273069
19. von Mises, L. (2008). *Planning for freedom: Let the market system work. A collection of essays and addresses.* Indianapolis, IN: Liberty Fund. Retrieved from https://oll.libertyfund.org/title/greaves-planning-for-freedom-let-the-market-system-work-a-collection-of-essays-and-addresses
20. von Mises, L. (2011). *La acción humana*. Madrid, Spain: Unión Editorial. Retrieved from https://tucontribuyes.com/wp-content/uploads/2021/02/Mises-Accio%CC%81n-Humana.pdf